

midwestflyer.com

Thank You For Another Successful and Exciting Year!



Happy Holidays



Our airports and operations in 2022

Airlake (LVN) 38,268 • Anoka County-Blaine (ANE) 65,688 Crystal (MIC) 42,592 • Flying Cloud (FCM) 122,281 Lake Elmo (21D) 32,189 • St. Paul Downtown (STP) 41,118 Scan for more about our airports



Please visit metroairports.org for information about MAC general aviation airports.



Being a member of AOPA is more than a huge list of pilot benefits. It's more than the aviation experts waiting to answer your questions and all the safety and training resources. Joining AOPA empowers general aviation with a louder voice, keeping skies safer and open to pilots everywhere.

Amplify your power to fly. Join AOPA today.

AOPA.org/Join



Contents

ON THE COVER: An American Eagle A1 Biplane at the Midwest Antique Airplane Club (MAAC) Annual Fly-In in Brodhead, Wisconsin. The aircraft is owned by Frank Pavliga of Atwater, Ohio. Complete story on the fly-in beginning on page 66.

Photo & Story by Skot Weidemann.

ISSN: 0194-5068

HEADLINES

EAA Statement On The Death of Apollo 8 Commander Frank Borman	31
Tom Haines Honored At NBAA For Lifetime Achievement In Journalism	37
MAC CEO Brian Ryks Earns Airport Industry Leadership Award	38
GAMA Statement On Nomination of Mike Whitaker As FAA Administrator	48
Oshkosh Resident Fred Stadler Becomes First Pilot To Fly 10,000 Kids	
In EAA Young Eagles Program	49

COLUMNS

Ask Pete: Landing On Ice & Snow-Covered Runways - by Pete Schoeninger	15
Aviation Law - On Your Side: Are You Moving & Changing Your Address?	
Better Let The FAA Know - by Gregory J. Reigel, Esq	7
Destinations: Solar Eclipses: See them, Experience them! - by Yasmina Platt	22
Dialogue: Working One-On-One With Your Favorite Mechanic - by Dave Weiman	5
Flight Experiences: Quitting While You Are Ahead - by Dean Zakos	18
From AOPA Headquarters: Passing it On - by Mark Baker	25
High On Health: Sunglasses - by Dr. Bill Blank, MD	17
Instrument Flight: Flying An Autopilot With Flight Envelope Protection	
The Garmin ESP-X - by Michael J. "Mick" Kaufman	10
Minnesota Aeronautics Bulletin: All About Airport Pavement Markings -	
by Nate Sievert	56
Pilot Proficiency: Why don't we know how to use carburetor heat? -	
by Richard Morey	12

FEATURES

EATURES	
AOPA's Richard McSpadden Lived In The Present, But Cherished The Past -	
by Dave Weiman	26
Aviation Photojournalist Don Winkler Remembered - by Dave Weiman	28
The Borman Collection At EAA - by Dave Weiman	33
What's NASAO? - by Jim Bildilli	64
GA Industry Announces "Climbing. Fast. Campaign" - by Eric Blinderman	65
Midwest Antique Airplane Club Grassroots Fly-In 2023 - by Skot Weidemann	66
Midwest LSA Expo 2023 - by Jim Bildilli	69
Indiana Seaplane Pilots Association Celebrates 21st Anniversary	
With Splash-In & Wedding - by Randy Strebig	70

SECTIONS

ECHONS			
Aircraft	73	Calendar	72
At Our Airports	50	Classifieds	74
Aviation Business News	55	Fly-Ins	66
Aviation Conferences		•	26









26



33



49



Working One-On-One With Your Favorite Mechanic

by Dave Weiman

've always been a believer in working one-on-one with my aircraft mechanic when doing our annual inspection. I'm there if my mechanic has a question, I can point out what might be wrong with my airplane, it is an opportunity to learn something about my airplane that might be helpful as its sole pilot, and it frees up my mechanic to focus on maintenance items of major importance.



I can assist in removing and reinstalling inspection plates, various parts such as the tail cone, wheel pants, and the seats, and in small shops, I can provide the extra pair of hands needed for some tasks, such as compression checks.

It is important that the owner does not get in the way of his or her mechanic or ask too many questions which can distract him/her and add time to the clock.

Speaking of the clock, saving money can also be a consideration, so long as the owner weighs all factors, such as time away from one's regular job, and travel time from home

to the FBO. If saving money is your only reason to participate in the annual inspection, it might not be reason enough.

Whether or not you participate in your annual inspection, it is important to establish a relationship with one mechanic and maintain good communications with that person throughout the year. And by having one mechanic responsible for the maintenance of your airplane, that person will know your airplane's needs the best and will reduce the time needed to research your logbooks.

I will never forget when we were considering having a graphic artist at our printer design and layout the magazine. We met with that person for several hours, gave him previous issues of the magazine, and a folder with specifications, so he would know the basic layout. Even though we were on his schedule, on the spur of the moment, he decided to take a vacation. In response, the printer said, "No problem... We have other graphic artists who can fill in." That would be the same as if you had an appointment with your primary physician for your annual physical and that person decides at the last minute to take a vacation and left you with a physician you had never met or who never reviewed your medical records. It would be better to reschedule your appointment. The same would be true for your annual inspection.



Serving The Midwest Aviation Community Since 1978

EDITOR/PUBLISHER

Dave Weiman

PRODUCTION DIRECTOR

Peggy Weiman

WEB DIRECTOR

Stacy Wilk

PHOTO JOURNALISTS

Chris Bildilli Nick Moore **Brad Thornberg** Skot Weidemann

CONTRIBUTING EDITORS & PHOTOGRAPHERS

Mark Baker Gregory J Reigel Jim Bildilli Richard Saint-Eric Blinderman George Pete Schoeninger Dr. Bill Blank Katie Clark Nate Sievert Michael Kaufman **Daniel Stanley** Dick Knapinski Randy Strebig Richard Morev Skot Weidemann Yasmina Platt Dean Zakos

ADVERTISING & EDITORIAL

Call: 608-772-1776

Email: dave@midwestflyer.com

ISSUE CLOSING DATES

DEADLINE	ISSUE
October 15	December - January
December 15	February - March
February 15	April - May
April 15	June - July
June 15	August - September
August 15	October - November

COPYRIGHTS

MIDWEST FLYER MAGAZINE is published bimonthly by Flyer Publications, Inc. Copyright 2024 by Flyer Publications, Inc. All rights reserved. Nothing in whole or in part may be reproduced without the written permission of the publisher.

READERSHIP

Each issue is published online at MidwestFlyer.com and available to readers FREE OF 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, and government agencies.

> MIDWEST FLYER MAGAZINE 6031 Lawry Court Oregon, WI 53575-2617 USA

www.midwestflver.com



Index To Advertisers

Academy College 5
Aero Fabricators, Inc78
Air Charter74, 75 & 78
Air Charter74, 75 & 78 Aircraft Avionics Sales & Service75
Aircraft Fuel Cells30
Aircraft Fuel Sales 75 & 78
Aircraft Hangar Doors15
Aircraft Hangars For Rent41 & 74
Aircraft Interiors
Aircraft Maintenance47, 74, 75 & 78
Aircraft Owners & Pilots Association (AOPA). 3
Aircraft Propellers (Sales & Maintenance)43
Aircraft Rental 75 & 78
Aircraft Sales75 & 78
Aircraft Sheet Metal Repair78
Aircraft Towbars78
Airlake Airport 2
Airport Engineers & Consultants
9, 21, 24, 36 & 42
Airport Fuel Systems37
Airport Restaurants20
AIR-PROS.com74
Anoka County - Blaine Airport 2
Avfuel Corporation75
Aviation Colleges & Universities 5
Aviation Insurance11 & 74
Aviation Insurance Resources74
Bolduc Aviation Specialized Services 47 & 55
Bolton & Menk, Inc24
Brackett Aircraft Co., Inc78
Canada Fishing Fly-Out74 & 77
Cape Air 5
Cirrus FBO55
Commut Air5
Cooper Engineering36
Crystal Airport 2
Eagle Fuel Cells30
Flight Training
Flying Cloud Airport

Fuhrman & Dodge S.C. (Attorneys at Law)74
Garmin75
Go Jet Airlines 5
Horizon Aircraft Engine Services, Inc 47 & 55
Jet Room20
Lake Elmo Airport2
Maxwell Aircraft Service43
Mead & Hunt
Metropolitan Airports Commission 2
Mid-Continent Aircraft Corp74
Midwest Flyer Magazine 8 & 78
Miminiska Lodge, Ontario, Canada 74 & 77
Minneapolis-St. Paul International Airport 2
Minnesota Aviation Trades Ass'n (MATA)55
Minnesota DOT Office of Aeronautics
56, 57 & 58
Minnesota Petroleum Service37
Mooney Aircraft Spatial Interior Upgrades75
Morey Airplane Company74
North Central Aviation55
Oasis Aero55
Red Wing Aviation (RWA) 5
St. Paul Downtown Airport 2
Schweiss Doors
Short Elliott Hendrickson Inc. (SEH)9
SkvWest Airlines5
Southern Wisconsin Regional Airport74
Spring City Aviation74
Thunderbird Aviation 5 & 78
Titan Aviation Fuels78
Tricor Insurance11
United Express 5
Westwood PS42
Wilderness North74 & 77
Wiley Properties41
Wipaire55
Wisconsin Aviation, Inc74 & 75
Worthington, Bob (One Pilot's Story)40
- · · · · · · · · · · · · · · · · · · ·

ACT NOW.... FREE SUBSCRIPTION OFFER!

Please encourage your friends, colleagues and employees to sign up for a FREE SUBSCRIPTION at MidwestFlyer.com. Click SUBSCRIBE NOW! We also accept "group" subscription requests from flying clubs, flight schools, fixed base operators and EAA Chapters. For additional information, email dave@midwestflyer.com

If Your Business Is Not Listed Above Call 608-772-1776 Or Email dave@midwestflver.com www.midwestflyer.com

DISCLAIMER: Midwest Flyer Magazine is a publication of Flyer Publications, Inc. Midwest Flyer Magazine endeavors to only accept reliable advertisements from legitimate businesses and organizations, but shall not be responsible for the reliability of advertisements, their contents, nor the businesses and organizations they represent. The publishers reserve the right to decline or discontinue any advertisement without explanation. Furthermore, the information provided may be the expressed opinion of the authors only, and readers are advised to seek the advice of their personal flight instructor and others, and refer to the Federal Aviation Regulations, FAA Aeronautical Information Manual and other publications and materials regarding any flight or other procedures discussed herein. Use of any information contained herein is at the reader's own risk and discretion.

Are You Moving & Changing Your Address? Better Let The FAA Know

by Gregory J. Reigel, Esq. © Copyright 2023. All rights reserved!

re you in the process of moving and changing your address? Or have you recently moved? If so, you need to let the FAA know.

Why? Aside from the obvious compliance and enforcement reasons, the FAA also wants to keep airmen informed of seminars (e.g., Wings Greg Reigel programs, etc.), to request input from airmen regarding local issues (e.g., airspace design, airport closure, etc.), and to provide airmen with any other aviation safety information it feels is beneficial or necessary. And, more importantly, because it is required by the Federal Aviation Regulations ("FAR").



The Regulation

FAR §61.60 requires that airmen keep the FAA informed of their permanent mailing address. (A similar regulation applying to airmen other than flight crewmembers is found at FAR §65.21). Specifically, FAR §61.60 prohibits an airman from exercising the privileges of his or her certificates if the airman has failed to provide the FAA's Airman Certification Branch with a new permanent mailing address within 30 days of changing his or her permanent mailing address.

The change of permanent mailing address may be reported to the FAA via U.S. Mail or via the internet. If via mail, the notification must be sent to FAA, Airman Certification Branch, P.O. Box 25082, Oklahoma City, OK 73125. If via the internet, airmen should go to the FAA's website, where a form may be completed to notify the FAA of a change in permanent mailing address.

When an airman cannot provide a permanent residence address (e.g., where the person resides in a motor home or is in the process of moving), it is permissible for the airman to use his or her parent's or friend's permanent address as the airman's permanent address. This is frequently the case with newly hired airline pilots who are domiciled out of a different city from the city in which they will ultimately reside when they acquire enough seniority to hold the appropriate

Some airmen attempt to simplify compliance with this regulation by disclosing a post office box as the permanent mailing address. That way, so the argument goes, the airman can move as much as he or she wants without having to provide notice to the FAA with each move. This is a nice idea, in theory. Unfortunately, the regulation accounts for

this scenario and requires airman to also provide his or her current residential address if a post office box is disclosed as the permanent mailing address.

FAR §61.60 does not specifically ask for the airman's "residence" or where he or she lives, except when the airman is disclosing a post office box for a permanent mailing address. Also, the regulations do not define "permanent mailing address," or "residential address" for that matter. However, a reasonable implication of FAR \$61.60's requirement is that the FAA wants an address where it knows that information mailed to that address will be received by the airman. For most airmen, this address is where they live.

Consequences of Non-Compliance

A failure to comply with FAR §61.60 usually arises in one of two situations. The situation may come to light during the course of a ramp check or check-ride conducted by an FAA inspector/examiner when he or she compares the addresses on an individual's airman and medical certificates and the driver's license or other government identification, which airmen are required to carry when flying. Inconsistent addresses on the documents may lead to a request to confirm the address on file with the FAA so the inspector/examiner can determine which address was current and whether it matched the FAA's records. If the airman's current permanent mailing address does not match the FAA's records, the airman is technically in violation of FAR §61.60.

This situation may also appear in enforcement actions arising from unrelated FAR violations. Many airmen have suffered suspensions and revocations for unrelated FAR violations without the benefit of a hearing or appeal as a direct result of their failure to comply with FAR §61.60. How does this happen?

Well, in order to initiate an enforcement action against an airman, the FAA must serve the airman with a "notice of proposed certificate action" ("NPCA") or "notice of proposed civil penalty" ("NPCP"). This NPCA/NPCP offers an airman several alternatives for responding to the NPCA/NPCP and the airman must choose and pursue one of the alternatives within the period of time specified by the regulations. If the FAA does not receive a timely response from the airman (in this case because the airman was unaware of the NPCA/ NPCP because it went to the airman's address of record with the FAA which was no longer current), then the FAA will simply issue an order imposing the sanction sought in the NPCA/NPCP.

When the FAA mails an order of suspension, revocation, or civil penalty to an airman via certified mail, service is effective on the date of the mailing. An airman must appeal an order within a specified period of time (20 days for a

Visit the "Archives" section at MidwestFlyer.com for back issues of the magazine from 2006 to present, or check out hundreds of articles by Columns, Features, Headlines and Sections. Also, search by name or topic using the "Search Box" on the home page.



2023

PDF Verison October/November 2023

PDF Version August/September 2023

PDF Version June/July 2023

PDF Version April/May 2023

PDF Version Feb/Mar 2023

2022

PDF Version Dec/Jan 2023

PDF Version Oct/Nov 2022

PDF Version Aug/Sept 2022

PDF Version June/July 2022

PDF Version April/May 2022

PDF Version Feb/Mar 2022

2021

PDF Version Dec/Jan 2022

PDF Version Oct/Nov 2021

PDF Version Aug/Sept 2021

PDF Version June/July 2021

PDF Version April/May 2021

PDF Version Feb/Mar 2020

2020

PDF Version Dec/Jan 2021

PDF Version Oct/Nov 2020

PDF Version Aug/Sept 2020

PDF Version June/July 2020

PDF Version April/May 2020

PDF Version Feb/Mar 2020

2019

PDF Version Dec/Jan 2020

PDF Version Oct/Nov 2019

PDF Version Aug/Sept 2019

PDF Version Jun/Jul 2019

PDF Version Apr/May 2019

PDF Version Feb/March 2019

2018

PDF Version Dec/Jan 2019

PDF Version Oct/Nov 2018

PDF Version Aug/Sept 2018

PDF Version June/July 2018

PDF Version Apr/May 2018

PDF Version Feb/March 2018

2017

PDF Version December/January 2018

PDF Version October/November 2017

PDF Version August/September 2017

PDF Version June/July 2017

PDF Version Apr/May 2017

PDF Version Feb/March 2017

2016

PDF Version December/January 2017

PDF Version October/November 2016

PDF Version August/September 2016

PDF Version June/July 2016

PDF Version April/May 2016

PDF Version Feb/March 2016

2015

PDF Version December January 2016

PDF Version October November 2015

PDF Version August September 2015

PDF Version June July 2015

PDF Version April May 2015

PDF Version February March 2015

PDF Version December January 2015

2014

2012

PDF Version October November 2014

PDF Version August September 2014

PDF Version June July 2014

PDF Version April May 2014

PDF Version February March 2014

PDF Version December January 2014 **2013**

PDF Version August September 2013

PDF Version June July 2013

PDF Version April May 2013

PDF Version February March 2013

PDF Version December January 2013

PDF Version October November 2012

PDF Version August September 2012

PDF Version June July 2012

PDF Version April May 2012

PDF Version February March 2012

PDF Version December January 2012

2011

PDF Version October November 2011

PDF Version August September 2011

PDF Version June July 2011

PDF Version April May 2011

PDF Version February March 2011

PDF Version December January 2011

2010

PDF Version October November 2010

PDF Version August September 2010

PDF Version June July 2010

PDF Version April May 2010

PDF Version February March 2010

PDF Version December January 2010 **2009**

PDF Version October November 2009

PDF Version August September 2009

PDF Version June July 2009

PDF Version April May 2009

PDF Version February March 2009

PDF Version December January 2009

2008

PDF Version October November 2008

PDF Version August September 2008

PDF Version June July 2008

PDF Version April May 2008

PDF Version February March 2008

PDF Version December January 2008 **2007**

PDF Version October November 2007

PDF Version August September 2007

PDF Version June July 2007

PDF Version April May 2007

PDF Version February March 2007

PDF Version December January 2007 **2006**

PDF Version October November 2006

PDF Version August September 2006

PDF Version June July 2006

PDF Version April May 2006

PDF Version February March 2006

PDF Version December January 2006

non-emergency order, 10 days for an emergency order, or 2 days for appeal of emergency determination), otherwise the order becomes final and unappealable. (Of course, if the airman did not receive the NPCA/NPCP because of the incorrect address, more often than not the airman will not receive the order either.)

If an airman later learns of the FAA's order and attempts to appeal the order, unless unusual circumstances are present, the airman's appeal will likely be denied. The National Transportation Safety Board (NTSB) precedent holds that when the FAA mails the order to the airman's permanent address on file with the Airman Certification Branch, the use of such address constitutes constructive notice. As a result, if the FAA has provided constructive notice to an airman, the NTSB deems that the airman has received notice, whether the airman has actually received the NPCA/ NPCP order or not.

If the airman failed to keep the FAA informed of a change of his or her permanent mailing address, the airman will not be able to argue on appeal that he or she never received proper service. According to the NTSB, "[c]ertificate holders must ensure that they keep their official records, to include a permanent address of record at which they may receive official correspondence regarding their certificates, current."

Further, failure to receive an order that was sent to the most current permanent mailing address contained in the FAA's record does not constitute "good cause" that would excuse the untimely filing of an appeal. The NTSB has rejected, and continues to reject, arguments of "good cause" based upon an airman's failure to receive the mail when his or her permanent mailing address differs from the one contained in the FAA's records.

This isn't to say that the FAA will not or cannot pursue a separate enforcement action for a violation of FAR \$61.60. However, it is unclear what sanction the FAA may seek to impose for a violation of FAR \$61.60, if any. A review of the Sanction Guidance

Table in FAA Order 2150.3C does not disclose a specific reference to FAR §61.60. Further, a quick search of National Transportation Safety Board reported cases does not reveal any reported cases in which the FAA has pursued enforcement action against an airman for violation of FAR §61.60.

Conclusion

Like it or not, airmen need to make sure the FAA knows where it can reach them. Not only does FAR §61.60 requires it, but it also makes good sense. The FAA does, on occasion, send airmen aviation safety information that is beneficial and unrelated to compliance and enforcement.

And, if you are involved in an enforcement investigation, you probably want to make sure the FAA sends things to an address where you know you will receive them so you can preserve your rights and respond in a timely manner. After all, if the FAA wants to pursue an action against you and it uses the current address it has in its records, it can do so whether you actually receive its order or not.

EDITOR'S NOTE: Greg Reigel is an attorney with Shackelford, Bowen, McKinley & Norton, LLP, and represents clients throughout the country in aviation and business law matters. He has more than two decades of experience working with airlines, charter companies, fixed base operators, airports, repair stations, pilots, mechanics, and other aviation businesses in aircraft purchase and sales transactions, regulatory compliance including hazmat and drug and alcohol testing, contract negotiations, airport grant assurances, airport leasing, aircraft-related agreements, wet leasing, dry leasing, and FAA certificate and civil penalty actions. For assistance, call 214-780-1482, email: greigel@shackelford.law,
Twitter @reigellaw (www.shackelford.law)



Flying An Autopilot With Flight Envelope Protection... The Garmin ESP-X

by Michael J. "Mick" Kaufman © Copyright 2023. All rights reserved!



Michael J. Kaufman

t has been a busy summer flight training and finishing up three new instrument-rated pilots.

Congratulations to Andrew Marso of Franklin, Wisconsin; Eli Judge of Whitefish, Montana; and Kevin Ermis of Conover, Wisconsin. I have two more students to finish yet this year. Along with the instrument ratings, there were numerous flight reviews and instrument

proficiency checks, and several BPT flight clinics. During this training, I also learned a lot, especially, about using the latest state-of-the-art avionics, which is the center topic of this issue's column.

It seems like it would take an entire volume of encyclopedias to document all the different combinations of avionics, which I have seen in the last several decades, so I will highlight one of my most recent encounters. I have addressed this topic before, and I will mention it again. If you have avionics in your airplane that are modern enough to handle WAAS GPS approaches and it works well, *don't upgrade!!!!!!* I am talking about the Garmin 430/530 generation of avionics. In evaluating real-world IFR flying in this generation of avionics, there are only two practical applications in these boxes, which I consider missing... the capability to insert airways into your flight plan and the capability to create nonpublished holds when assigned by ATC. Everything else is just fluff.

Sadly, there are aircraft owners whose airplanes have been sitting in a shop for as long as two years trying to get avionics installed and working properly. As for glass displays, they are cool and work well if the pilot does not clutter the display with too much information. Real pilots fly steam gauges, tailwheel airplanes and gliders. As for touchscreen displays, they are great and easy to program in smooth air, but it is different to try and program one in heavy turbulence.

Now for the other side of me, I am a geek and I enjoy the challenge of helping pilots learn what their avionics package can do. One day we spent over 1.5 AMUs (aviation monetary units) or \$1,500.00 in fuel to find out why sometimes the autopilot captured the glideslope and sometimes, it did not. It would be too lengthy in this column to discuss every incident I have experienced. Over the years, I have helped many pilots who read my column, troubleshoot their avionics, so if you have an issue, please let me know. Once I had a call 10 DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE

from a pilot in Argentina who read one of my articles in *Midwest Flyer Magazine*, and we were able to help him solve his avionics problem. Proof positive that this magazine's new "digital" format is now able to reach a lot of people who were not previously reached with its original print format.

For this issue, I have picked a recent training situation I encountered while flying with a pilot at the Fresno, California BPT Flight Clinic, which I am presenting as follows:

Aircraft = V-tail Bonanza.

Avionics = the following:

- (1) Garmin GTN-750 GPS Navigator
- (2) Garmin G-3X Display
- (3) Garmin GFC-500 Autopilot with Garmin ESP-X and air data computer.

Using the above avionics, we were able to determine that some flight features have changed dramatically with this combination of equipment due to envelope protection with the Garmin autopilot, which Garmin refers to as "ESP-X." In previous installations, if the approach could not be completed and the pilot decided to do a missed approach, he/ she followed this procedure: Power UP, Pitch UP, Gear UP while pushing the GO-AROUND button. The flight director gave the pilot a pitch command of about 7 degrees (Bonanza) and disconnected all the autopilot functions, except the flight director command bars. The pilot was now hand flying the flight director command bars in pitch mode. If this approach was other than a GPS approach, the pilot needed to select GPS mode on the navigator, re-engage the autopilot, select the NAV mode, and turn the autopilot back on. If the aircraft was equipped with GPS steering, it was selected instead of the NAV mode for more accurate tracking of the missed approach course.

One last step was necessary after flying the first part of the missed approach... that was to unsuspend the navigator to proceed to the missed approach/holding fix. The reason for disconnecting the autopilot functions on the missed approach was to keep the aircraft from stalling on the climb-out if the pilot should fail to power up and clean up the aircraft.

So, what did our aircraft do in a similar situation with the above Garmin equipment? On the missed approach as the pilot pushed the "Go-Around Button," the navigator switched to GPS mode for the-3X missed approach, the flight director pitched up, the autopilot went to roll mode, the servos stayed engaged, and the autopilot stayed on. The pilot needed to engage the NAV function on the autopilot and unsuspend the navigator to fly the published missed approach.

In the situation with our training, the missed approach was complex with several turns as the aircraft reached certain

altitudes, finally leveling off at the altitude, which we set in the preselect window, all provided by an air data computer. The envelope protection Garmin ESP-X protected the aircraft from a stall in the case the pilot did not apply power and clean up the aircraft.

While training this pilot, I found several items I would consider a firmware glitch that pilots should be aware of with this or similar equipment.

During the ILS approach with GPS assist, the autopilot would disconnect when switching from GPS to VLOC mode and the aircraft appeared to go into autopilot roll mode. This was the normal procedure if you had a legacy King KFC 225 autopilot connected to a Garmin 430/530 navigator, and it was necessary to reengage the approach mode on the autopilot and it caught many pilots off guard.

Another glitch we found was that the vertical NAV function did not work on ILS approaches but did on GPS approaches. We did not have a chance to further test this function by using the NAV mode instead of the approach mode on the autopilot.

It is sometimes difficult to work through items that do not do what is expected when flying different avionics. For what happens with a Garmin GI-275, does not happen on a Garmin G3X or different firmware in any of the other boxes.

I found flying the Garmin GFC 500 autopilot with envelope protection a great experience and would like to share some more of its features.

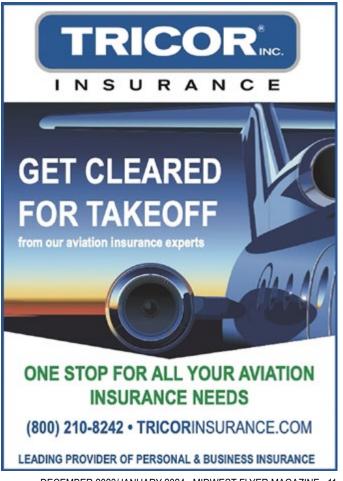
The Garmin GFC 500 with ESP-X goes beyond providing pitch-and-bank envelope protection to also offer high and low-airspeed protection. In a high-airspeed situation while hand-flying the aircraft, ESP-X engages the autopilot servos to increase your pitch attitude, while built-in parameters further prevent the aircraft from exceeding G-limit load factors. In low-airspeed situations while hand-flying the aircraft, ESP-X engages to provide a gentle pitch-down force to reduce the likelihood of a stall. Both over-speed and under-speed protection also work while the autopilot is engaged should an aircraft performance limitation be reached from a pilotprovided autopilot command.

For example, if the pilot sets an aggressive climb, the aircraft cannot perform, and under-speed protection will limit the pitch attitude to help prevent a stall from occurring. In addition, pitch, roll and airspeed envelope protection parameters are all customizable, and for flight training or aerobatics, you can easily inhibit ESP-X within the automatic flight control system menu of G3X Touch, or with an optional switch in the panel. And in emergency engine power loss situations, the autopilot also supports the Smart Glide engine-out navigation capabilities offered by G3X Touch flight displays or any of the GTN Xi navigators. You may also find it interesting to read more about Garmin's ESP-X flight envelope protection system, as I have only scratched the surface in its capability.

Fly safe, fly often, and learn what your aircraft equipment can do before flying in IMC.

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. He conducts pilot clinics and specialized instruction throughout the U.S. in many makes and models of aircraft, which are equipped with a variety of avionics. Mick is based in Richland Center (93C) and Eagle River, Wisconsin (KEGV). He was named "FAA's Safety Team Representative of the Year" for Wisconsin in 2008. Readers are encouraged to email questions to captmick@me.com, or call 817-988-0174.

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



Why don't we know how to use carburetor heat?

by Richard Morey
© Copyright 2023. All rights reserved!

have been flying a long time. I do not look at this as an accomplishment, but rather as a side effect of being born into an aviation family, catching the flying bug, and then stubbornly pursuing my dream of operating the family flight school. Emphasis on stubborn. When I started



Richard Morey

logging time back in 1974, all the training aircraft had carburetors and most of the Cessnas I was training in had Continental engines.

My flight instruction took place in Cessna 150s. Their Continental 0-200 engines were very prone to carburetor ice. Those of you who learned on similar equipment will remember religiously applying carburetor heat whenever the throttle was reduced below normal operating range, that is Rotations Per Minute (RPM), were less than the green arc range on the tachometer.

My First Encounter

My first real encounter with carburetor ice occurred in the spring of 1974. I was a student pilot. My father, Field Morey, and I were returning from Madison in a Cessna 150. The temperature was in the 40's with low ceilings and rain. The strong winds out of the east indicated a low-pressure area south of us. We always referred to this pattern as a "snow wind." Perfect conditions for carburetor ice to form.

As we approached our airport from the east, I noticed that I was 100 feet below our pattern altitude. Looking at the tachometer I noted that the RPM was less than I had set for cruise. I pointed this out to dad and wondered aloud if the throttle had slipped? I should have suspected something when he just smiled. I added power and climbed back to pattern altitude. As I entered the downwind leg to Runway 12 at Morey Airport (C29), I noticed that I was 100 feet low again and that the RPM was again lower than I had set. I pointed this out to dad again, and this time, in good flight instructor fashion, he asked, "What could be causing this?" The lightbulb came on as I realized that it was probably carburetor ice.

My hand was a blur as I reached for the carburetor heat control and yanked it into the on position. This resulted in the engine running very rough, then quitting altogether! This had my full attention! Dad immediately stated, "My airplane" and turned towards the airport. This lined us up with our turf Runway 18. About this time, the engine came back to 12 DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE

life. "Your airplane," said dad, and I reentered downwind for Runway 12. I landed without incident, but with a better appreciation for the perils of carburetor ice! Lessons like that stay with you for life.

Why does carburetor ice form?

Air gets to the carburetor, either from being drawn through the air filter, or from a shroud surrounding an exhaust pipe. The source of air is determined by the position of a valve in the carburetor air box. With carburetor heat OFF, the valve allows air from the air filter to be drawn into the carburetor. When the carburetor heat control is in the ON position, the valve closes the airway from the filter and opens the airway from the carburetor heat shroud.

Air from the filter is at the surrounding air temperature. Air from the carburetor heat shroud is not filtered and is heated by the exhaust pipe. As air is drawn through the carburetor on its way to the cylinders, the air is cooled by two processes – pressure drop and evaporative cooling.

The pressure drop (low pressure) is created by pulling the intake air through a restriction in the carburetor called a "venturi." Air moving through a venturi increases in velocity which decreases the pressure. A drop in air pressure reduces the air temperature. The low-pressure area draws fuel from the carburetor fuel bowl through the carburetor's nozzle and into the intake airstream. The fuel nozzle is located at the point of lowest pressure inside the venture. The second cooling process takes place when the fuel, which has been drawn into the low-pressure area, is vaporized. It takes energy, in the form of heat, to change a liquid to a gas.

If you have ever been swimming on a windy day, you have experienced evaporative cooling. When you climb out of the water, you will feel far colder than the temperature would indicate. This is because the water on your body is being evaporated by the wind and your body heat.

Ice Formation

If there is relatively high humidity in the atmosphere, and the temperature is between 20 and 70 degrees Fahrenheit, it is possible that the temperature of the air passing through the carburetor will drop below freezing. This could result in carburetor ice. The freezing water vapor will collect on the venturi surface and the carburetor valve. Ice buildup on these areas restricts the flow of air into the engine, which results in a loss of power, much like reducing the throttle. Applying carburetor heat moves the air box valve closing the intake air from the air filter (cold air) and opening the intake from the carburetor heat shroud (hot air). This heated air will

melt any ice formed in the carburetor. Since heated air is less dense than colder air, the heated intake air has less oxygen per volume to burn.

Applying carburetor heat will result in a loss of power created by the engine, resulting in a loss of RPM. Less oxygen per volume of air also results in enrichening the mixture. The amount of fuel going into the engine remains the same while the amount of oxygen is reduced. During normal engine runup, the over-rich fuel air mixture caused by applying carburetor heat will cause the engine RPMs to drop.

History

Bear with me for a moment as I recount some relevant aviation history.

In the post-World War II era, Piper used Lycoming engines almost exclusively and Cessna used Continental engines. Cessna switched the C172 from the Continental 0-300 engine to Lycoming 0-320s in 1968. My understanding is that Continental was having labor problems and could not reliably supply Cessna with the engines it needed. In 1977, Cessna redesigned the C150, switching to a Lycoming 0-235 engine and reducing flap range from 40 degrees in the C150 to 30 degrees in the C152. Both of these modifications made sense from Cessna's perspective. Limiting the flaps to 30 degrees made it far more likely that a student pilot could execute a go-around successfully with flaps stuck at full. Switching to the Lycoming engine made carburetor ice far less likely (I will go into the reason for this later in the article).

In 1986, Cessna officially ceased manufacturing single-engine piston aircraft at least in part because of outdated manufacturer's liability laws. By 1996, Congress addressed Cessna's concerns and passed the General Aviation Revitalization Act (GARA). GARA limited the liability of aircraft manufacturers for General Aviation aircraft to 18 years. No longer was Cessna legally liable in infinitum because old aircraft were not built to modern standards. Cessna re-started the single-engine production line, beginning with C172s. These new C172s, and later C182s and C206s, have Lycoming fuel-injected engines. The choice of fuel-injected engines was undoubtedly based on avoiding carburetor ice and the resulting potential liability. Fuel-injected engines are not subject to carburetor ice.

There is not enough temperature drop generated in the venturi alone to cause ice to form in the fuel injector's throttle body. What this means is that pilots who have trained in Lycoming-powered aircraft, especially fuel-injected aircraft, have no real experience with carburetor ice. Carburetor ice can form in Lycoming engines, but it is far less likely to do so.

Continental versus Lycoming carburetor placement.

Lycoming mounts their carburetors under the oil pan of their engines. Continental mounts their carburetors on the intake manifolds of their engines. This results in the Lycoming carburetors being heated by the engine oil pan and the Continental carburetors being cooled, literally by hanging in the breeze. Lycoming engines are made in Williamsport, Pennsylvania... Continental engines are made in Mobile, Alabama. I speculate that the average temperatures of Lycoming's and Continental's locations may have had something to do with why the two manufacturers chose different carburetor locations.

The training fleet in the United States is almost exclusively made up of either Lycoming-carbureted or Lycoming fuelinjected engine powered aircraft. As an example, my flight school has two C152s, three carbureted C172s, and three fuel-injected C172s. All have Lycoming engines. The aviation universities are almost all using aircraft powered by Lycoming fuel-injected engines. Many of the big flight schools and universities hire their graduates as flight instructors. So now not only do the students not have actual experience with carburetor ice, or even carbureted engines, but their instructors do not have that experience.

Why does Piper recommend NOT using carburetor heat during normal operations?

Cessna's air filters and intakes are mounted on the aircraft cowling. The temperature of this intake air is whatever the surrounding air temperature is. Modern Pipers have their air filters and intakes in the engine compartment on the back baffle. The intake air on Pipers is heated by flowing over the cylinders. As a result, a Cherokee's normal operating range, or green arc on the tachometer, may go as low as 500 RPM. A Cessna's low end of normal operating range is generally about 2100 RPM. When operating outside of the normal operating range, or below the green arc, Cessna requires carburetor heat to be on. On the Cherokee, the Piper manual says only to operate carburetor heat if the engine is running rough.

Textbook versus Reality

In reviewing the FAA knowledge test questions on carburetor ice, I find a disconnect between what is taught and what actually happens. The FAA answer to what is the first sign of carburetor ice in a fixed-pitch propeller powered aircraft is technically correct, but in practice it is wrong. The FAA answer is that the first sign of carburetor ice is loss of RPM. The reality is pilots will notice the result of lower RPM before they notice the RPM loss. Lower RPM results in loss of altitude. As in my first encounter with carburetor ice, the pilot will notice the loss of altitude first, then notice that the RPM has decreased. Loss of altitude is not a choice on the knowledge test questions, but it is a very useful in practice.

The second question which is technically accurate, but practically misleading, is the FAA answer to "what happens when you apply carburetor heat if there is carburetor ice?" The FAA's answer is that the RPM will decrease when you

apply carburetor heat, then increase, and increase further when you take off carburetor heat. What is not mentioned is that you should expect the engine to not only lose power, but to run rough when carburetor heat is applied during carburetor icing.

Pilots, and even flight instructors, who only have book knowledge of carburetor ice, have crashed aircraft unnecessarily because they did not expect the engine to run rough. The engine runs rough as the ice melts and water goes through the engine. This has resulted in inexperienced pilots turning the carburetor heat back off in a vain attempt to solve the roughness. Turning carburetor heat off during carburetor icing will result in the carburetor continuing to ice up, possibly to the point that the engine ether dies or loses enough power to no longer sustain flight.

The correct procedure to remedy carburetor ice is to turn the carburetor heat on and leave it on. You will know that there was carburetor ice if, as the FAA says, the engine RPMs are reduced (with possible roughness associated), then the engine smooths out and RPMs increase.

Pilots experiencing carburetor ice should consider landing as soon as possible. If this is not possible and you need to operate with carburetor heat on, then lean the mixture. You should get a slight rise in RPM as you lean. Remember, heated air is less dense. Applying carburetor heat will enrichen the air fuel mixture of the intake air going into the engine. By leaning an engine with carburetor heat on, an increase in performance should result.

In summary, unless you have experience flying Continental-powered, carbureted engines, you probably have not experienced carburetor ice.

The textbook answers on what to expect during carburetor ice are technically correct, but do not mention the engine

roughness that will often occur as the ice in the carburetor melts and passes through the engine. Cessnas and Pipers have different air intake locations, and because of this, they have different carburetor heat techniques.

Lycoming mounts their carburetors on the oil pan... Continental on the intake manifold, making it far more likely that carburetor ice will form. If you are lucky enough to be flying an older Cessna, be it a C150, a pre-1968 C172, a carbureted C182 or C206, be aware of the likelihood of carburetor ice forming.

Older Continental-powered aircraft are a delight to fly! Knowing that carburetor ice is not only possible, but likely, and knowing how to deal with the inevitable carburetor icing, makes flying them safe and far more pleasurable!

EDITOR'S NOTE: Richard Morey was born into an aviation family. He is the third generation to operate the family FBO and flight school, Morey Airplane Company at Middleton Municipal Airport - Morey Field (C29). Among Richard's diverse roles include charter pilot, flight instructor, and airport manager. He holds an ATP, CFII, MEII, and is an Airframe and Powerplant Mechanic (A&P) with Inspection Authorization (IA). Richard has been an active flight instructor since 1991 with over 15,000 hours instructing, and more than 20,000 hours total time. Of his many roles, flight instruction is by far his favorite! Comments are welcomed via email at Rich@moreyairport.com or by telephone at 608-836-1711.

DISCLAIMER: The information contained in this column is the expressed opinion of the author only. Readers are advised

(www.MoreyAirport.com).

to seek the advice of their personal flight instructor, aircraft technician, and others, and refer to the Federal Aviation Regulations, FAA Aeronautical Information Manual, and instructional materials concerning any procedures discussed herein.

Wisconsin DOT sites to checkout in relation to AVIATION

SCHOLARSHIPS IN REGARD TO AVIATION

https://wisconsindot.gov/Pages/doing-bus/aeronautics/education/aved-scholar.aspx

DEGREE PROGRAMS IN AVIATION

https://wisconsindot.gov/Pages/doing-bus/aeronautics/education/aved-degree.aspx

YOUTH AVIATION PROGRAMS

https://wisconsindot.gov/Pages/doing-bus/aeronautics/education/aved-youth.aspx

Landing On Ice & Snow-Covered Runways

by Pete Schoeninger
© Copyright 2023. All rights reserved!

- **Q)** How thick should ice be on a frozen lake before it is safe to land on with my Cessna 172? Are skis better than wheels for frozen lake operations?
- **A)** A few comments on frozen lake operations before I answer. BEWARE of being the first on any frozen lake, whether on foot, or driving a snowmobile, truck, or flying an airplane. If possible, always try and get an accurate report on ice conditions before proceeding. Beware



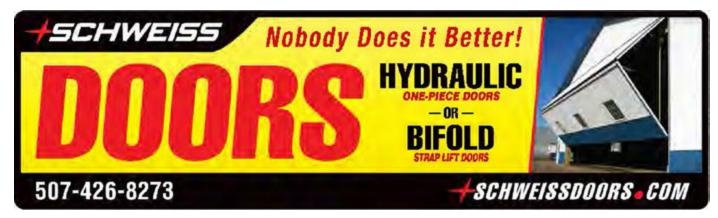
Pete Schoeninger

too that some municipalities have ordinances prohibiting airplanes landing or taking off on their lakes. If you land on a prohibited lake, you could not only get pinched by the law, but you might also have to take the airplane apart and move it to an airport, a significant expense. That said, many pilots advise 6-8 inches of good ice should be okay. Another good sign would be the presence of cars or trucks. Snowmobiles can go on thinner ice, because they are lighter and their weight is spread out on a big tread and skis, so their presence is not a good indication of safe ice. Overall, I prefer skis, but wheels are okay with minimal or no snow coverage. If you're on Facebook, look for "Midwest Ski Planes" for more information.

- **Q)** A friend told me landing on a snow-covered runway can be hazardous. Your comments?
- **A)** Yes, it can be hazardous, especially if you do not have a recent conditions report (NOTAM or from a pilot ahead of you). How thick is the snow? Is it soft and fluffy, and if an inch or two, you should be okay. But if it is wet and thick, you could nose over. Did snow fall on a cold, dry runway or on a runway which had a temperature around or just above

freezing? I saw a Lear Jet slide off a runway that had one inch of wet snow on the top. But overnight, there was a bit of freezing rain before snow fell. With a small amount of wet snow on top of pavement that had a thin coat of ice, the traction was almost nil to the pilot's surprise and dismay.

- **Q)** You mentioned a couple of items in the October/ November 2023 issue of *Midwest Flyer Magazine* which I would like to follow up with, to wit:
- 1) You said that August was the second slowest month in aircraft sales. What is generally the slowest month?
 - A) January.
- 2) What possible problems have you encountered delaying your landing at a destination that were not expected. (This is a follow-up question to your statement that the FAR 91.151 half-hour fuel requirement is often not enough.)
- A) I've been delayed in landing unexpectedly by a pilot landing ahead of me who landed gear up, closing the only runway. Several deer on a runway have caused me more than one go-around. If snow removal is in progress at a rural airport, you may have to circle until the runway has been plowed or divert to another airport. Strong, unexpected crosswinds may make landing unsafe at an airport with only one runway, which could require that you divert to another airport. Any of these scenarios, and for many other reasons, reinforce my statement (in my opinion anyway) that a half hour of planned fuel reserve is usually not enough.
- **Q)** You've occasionally mentioned LA-4-200 Lake Buccaneer amphibian aircraft. Is there anything odd about them from your experience? How did you end up flying them?
- **A)** All amphibians are slower than other airplanes with the same powerplant. Amphibious capability is only gained thru amphibious (heavy) floats, or a boat shaped hull on the bottom of the fuselage. (I worked for a year at the Lake



4 delivery center in Houston. The airplanes were made in Sanford, Maine, and ferried to Houston for final prep, avionics installations, etc.) The LA-4s I flew were about 20 mph slower than the more common Piper Arrow with the same 200 hp engine. And because the airplane is heavier because of its water capability, useful load is often less than a land-based competitor. Many LA-4 airplanes had optional 54 gallons of fuel, but some only have the standard 40-gallon tank. Forty gallons of fuel is not a lot for a 200 hp engine. Because the engine is right above your head, engine and prop noise is pretty loud. Flaps were either up or down, nothing in between. Flaps were ALWAYS used for takeoffs and landings.

Q) A friend suggested my search for a floatplane be limited to airplanes WITHOUT fuel-injected engines. His reasoning was that hot fuel-injected engines are sometimes hard to start, which can be a serious problem on a floatplane that has just pushed away from a pier, especially on a river. Is that true?

A) Yes, hot fuel-injected engines can be difficult to start, and that can produce more problems on water than on land. A few things pilots can do... get some extensive instruction on hot starts from a person with lots of experience starting engines, and/or get an aftermarket electric system to replace one or both magnetos. Let me add a "Dumb Me" quick story. In the early 1980s, as a salesman for a Cessna dealer in Milwaukee, I flew a new Cessna Hawk XP to a customer in an attempt to sell the airplane. He was also considering a new Cessna 182 Skylane which arrived at the same time as the Hawk XP. I felt I had the edge on the C182 salesman, as the XP could do almost everything the C182 could and was a few dollars less. Just after I landed at the customer's airport, he asked me to show him a hot start. Well, I muffed it. It took me a couple of minutes of futzing to get the XP engine running with a very hot start. The new C182, with an old-fashioned carburetor, had the same challenge, but started easily, and was sold that day, leaving poor Pete to fly home without a sale.

Q) Name one thing pilots should check that is probably not on their pre-takeoff checklist.

A) Seat security. It's very important that the pilot's seat be secure and will not slide back when power is applied on takeoff. (Thanks CFI Martha Norman for this reminder.) Further, be sure the height of your seat is right for you, especially after maintenance, when a technician might have to adjust the seat for his/her accessibility.

Q) Please settle a bet. Everyone knows Mooney made four-seat airplanes for many decades. My friend insists that Mooney made a two-seat airplane and I have disagreed with him, to the tune of a steak dinner. Who's buying?

A) You are! Mooney made a two-seat airplane called a "Mooney Cadet," model M-10, producing about 60 in total in 1969 and 1970. They were in effect an Alon (which has

roots with the Ercoupe) with a Mooney tail. Fifty years ago, I flew one from the factory in Kerrville, Texas to a Mooney dealer in St. Louis. I don't remember anything remarkable about them, except fit and finish was below average. Cruising speed was 90-95 mph with 90 hp engine.

Q) I am going to buy my recently passed friend's Cessna 182 from his estate for \$125,000. I will need to borrow about \$25,000 to make the purchase. My lender (my local bank) is insisting I have full hull coverage with a loss payable clause to them. In other words, I am going to have to pay for full hull coverage (estimated \$2500/year) just to protect the bank's \$25,000 risk to me. How can I beat this?

A) First of all, full coverage will also protect your \$100,000 at risk should you have a major crunch. If you own real property like your home, you probably already have full insurance coverage on your home, so a home equity line of credit might be a way to raise \$25K. Your home will be the collateral for the loan, but you already probably have insurance on it. But get going, as it takes a while for a home equity loan to be processed, as a title search and property appraisal might be required. I recently opened a home equity line of credit...it took about 10 days from application to approval. But now I can buy anything within reason with borrowed cash without having to insure it! (My wife says I am nuts, and she is probably right....)

Q) I've heard the old story "I used to fly Cubs for \$10 an hour and bought one for a thousand bucks" some 50 years ago. Do you remember figures from those days?

A) As a teenager I used to rent Cubs for \$7 an hour, a Piper Super Cruiser and Cessna 140 and a new Piper Colt for \$10 an hour. A C172 brought \$15 an hour, but I couldn't afford that on my teenage/line-boy wage of \$1 per hour. And car gas back then was about 30 cents a gallon, and 87 Octane aviation fuel was about 45 cents a gallon. I remember worn out Cubs from our flight school (needing cover and engine overhaul soon) selling for \$600-800, and a nice one with recent cover and recent engine overhaul bringing \$1,800 or so.

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. Pete welcomes questions and comments about aircraft ownership via email at PeterSchoeningerLLC@gmail.com

DISCLAIMER: The information contained in this column is the expressed opinion of the author. Readers are urged to seek the advice of others, including flight instructors, licensed aircraft technicians, airport managers, fixed base operators, and state and federal officials. Neither the author, Midwest Flyer Magazine, Flyer Publications, Inc., or their staffs, employees or advertisers assume any liability for the accuracy or content of this column or any other column or article in this publication.

Sunglasses

by Dr. Bill Blank, MD Senior Aviation Medical Examiner © Copyright 2023. All rights reserved!



Dr. Bill Blank

ecently the Federal Air Surgeon,
Dr. Susan Northrup, released on YouTube, an "AME Minute" entitled "What are Some Safety Considerations Regarding Sunglasses." Here are her thoughts along with some of mine.

Sunglasses can protect your eyes from UV radiation, decrease glare, and improve vision during periods of bright light. Pilots are encouraged to wear sunglasses during these conditions. Here are some safety considerations when choosing the type of sunglasses to wear.

Under low light conditions, sunglasses compromise vision. How much can depend upon the color of the tint. Gray reduces overall brightness with the least color distortion. Photosensitive lenses are unsuitable for aviation purposes because they respond too slowly to changes in light intensity. In the faded state, they might not be clear enough when flying in cloud cover or at night.

Lenses that block blue light can distort aviation lights and displays. Polarized lenses are not recommended, because they interfere with the visibility of instruments with anti-glare filters. Polarized glasses and wind screens don't mix. They interfere with each other.

There are color vision correcting lenses. They may be worn, but not for the purpose of improving color vision. Go figure! Sunglasses are not acceptable as the only means of correcting visual acuity, but may be used as a backup, if they provide the necessary correction. It is also recommended that you have a non-tinted pair of spare lenses.

Sunglasses sometimes offer UV protection. It's necessary to research the lenses you are considering. You can't tell by looking at them. Some very dark brown lenses offer none. You want sunglasses labeled UV 400 which protect wavelengths up to 400 nanometers. This includes 75% to 90% of the visible light from the sun and includes UVA and UVB. UV protection is thought to protect against the formation of cataracts and the development of macular degeneration. I think a more realistic approach is to hope they help delay the onset and slow the progression. The major risk



factor for both conditions is age.

I hope this article will help you choose the best sunglasses for your purposes. Happy flying!

EDITOR'S NOTE: Columnist 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 6000 hours. He is a Certified Flight Instructor – Instrument (CFII) and has given over 1200 hours of aerobatic instruction. In addition, Dr. Blank was an airshow performer through the 2014 season and has held a Statement of Aerobatic Competency (SAC) since 1987. He was inducted into the Wisconsin Aviation Hall of Fame in 2021.

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, including their own AME, and refer to the Federal Aviation Regulations and FAA Aeronautical Information Manual for additional information and clarification.



Quitting While You Are Ahead

by Dean Zakos
© Copyright 2023. All Rights Reserved!
(Excerpted from Laughing with the Wind)

"It is time I stepped aside for a less experienced and less able man." - Scott Elledge

Scenario:

You are alone about 10 miles out from your intended destination. It is a non-towered airport you have visited hundreds of times. You need to tune-in the AWOS and CTAF frequencies and announce your position and intentions. But you can't. You can't because, at that moment, you can't remember the airport name and where you are going.

You had a gear up landing a year ago. You told everyone at the time that it was due to a "distraction." You know that wasn't true. You thought you had run your GUMP check, but you simply forgot to put the gear down. You are worried it will happen again.

The last time you flew your friend's J-3 Cub, you lost control of the landing and almost ground-looped. Quartering headwind of seven knots gusting to eleven. You used to be able to land the Cub in stronger crosswinds in your sleep.

There comes a time in every pilot's life when he or she will no longer be an active pilot. That time is not necessarily age-based, but it is skills-based. Sometimes the pilot knows when it is time, sometimes not. Often, other pilot/friends recognize signs of skills deterioration before the pilot does.

Not only is this subject difficult to deal with, but it is also difficult to talk about.

No one who truly loves flying ever wants to stop. However, time and infirmities catch up with us all. To 18 DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE remain safe, as pilots we need to ask ourselves some very hard questions – and we may not like the answers. If we have a friend who is a pilot and who is getting older or has experienced deteriorating physical or mental skills, we need to do the right thing and be honest in our evaluation and advice.

There is scant information available to assist us. Over the years, at different airports where I have based, I have witnessed three common events that dictate when a pilot stops flying.

The first is having an incident or accident. It can be a clear signal to cease flying, but it is a cruel and impersonal warning that often arrives too late.

The second is losing a medical. This may be an easier situation to deal with, as the FAA has intervened officially to end the pilot's flying. Often, the decision is accepted graciously by the pilot and that is the end of it.

The third event, however, is subtle and pernicious. There are GA pilots who can check the right boxes on the forms and pass a third class medical, or who are flying under BasicMed or Light Sport, and who are not subject to continuous medical scrutiny. Nevertheless, they know they are beginning to struggle, or their pilot/friends recognize they are starting to decline. Should these pilots stop flying? What is the right decision?

14 CFR Part 61.53 states that if a pilot "knows or has reason to know of any medical condition that would make the person unable to operate the aircraft in a safe manner," it would be a violation to do so. Hence, any honest decision to act as PIC is subject to the pilot's responsibility to continuously assess his/her physical and mental condition. This is the minimum standard for compliance. Simply put, if a pilot does not think he or she can fly safely, he or she cannot

and should not fly.

This is an "honor" system. If, as pilots, we fail to comply, we are failing the system, our fellow pilots, and ourselves.

How do you evaluate and resolve questions of fitness to fly and when to walk away? Here are my thoughts:

First. Recognition. Every pilot has a "bad day" now and then – a day when he or she is competent but just isn't sharp. That may not be evidence of a serious problem. Sub-par performance can be due to lack of currency or proficiency, fatigue, or distractions. However, if a pilot has strings of bad days, with continuous, significant lapses in skills, inability to follow standard procedures, or substantial errors in judgment, it may represent a clear signal that an assessment may be in order.

Some loss of physical senses or skills deterioration over time is to be expected. Vision changes and hearing impairments are common. Muscle strength, coordination, and reflexes eventually erode. Less apparent signs are significantly slower response times, confusion, or failing to recall procedures or information.

What distinguishes a rare "bad day" from real skills deterioration? The answer: if you, or your pilot/friends, notice dangerous errors or repeated patterns or signs of problems.

Also, if you are experiencing concerns about your flying, you may be consciously (or unconsciously) "pulling back" from some aspects of flying, even though you still desire to fly. You may no longer keep up on new flying regulations, stop attending safety seminars, limit your flying to trips "around the patch," or stay within a short flying radius of your home airport. You may start to fear your next flight review - or even your next flight. Your annual flying hours may have diminished substantially compared with past years.

Second. Seeking Opinions. If your flying has grown more erratic or less careful, or if your ability to retain critical information is slipping, or your hours and proficiency are declining, chances are your pilot friends have noticed it too. You, or they, may hesitate to bring the matter up as there is a natural tendency to want to avoid any discussion because of where it may lead. It is a discussion, however, that needs to take place.

If you are the pilot experiencing problems, you should seek out a trusted pilot friend to talk with. If you are the pilot friend, and become aware of issues, you need to seek out the struggling pilot. Plan on having a pre-arranged, confidential, and interruption-free discussion. As the pilot friend, there is no need to initiate the conversation with a dire warning like "You have to quit flying right now. You're going to kill yourself or someone else!" That is neither necessary nor helpful. Keep in mind that if the pilot friend has noticed problems, it is likely the struggling pilot has as well.

You may want to start the discussion with an observation. For example, "I noticed you have been having trouble with your landings. How do you think your flying is going?" Another open-ended question could be: "Are you finding it more challenging to fly?" If you are the struggling pilot, you could

initiate the conversation by expressing similar observations about your own flying. The key is to allow an expression of concerns in a back-and-forth, non-judgmental style of discussion.

Psychologists use a technique known as "reflective listening." This technique involves first listening, and then reflecting back what you are hearing. By rephrasing what you are hearing, it signals understanding, provides encouragement, and may allow the struggling pilot to gain a better perspective on his or her flying and potential problems. Either the struggling pilot or the pilot/friend eventually needs to ask the question "What should be done?"

Third. Assessment. If you have recognized patterns or signs of problems in your flying, or a pilot friend has discussed seeing signs of problems in your flying, it is time to do two things immediately: (1) ground yourself and make the decision to stop flying (at least temporarily); and (2) make an appointment for an assessment.

You may want to arrange for a flight with a capable CFI you trust and who knows your flying. Explain the circumstances and ask for a truthful evaluation. Allow the CFI's opinion to be determinative.

You should also schedule an appointment with an AME or your treating physician if you are experiencing serious physical or mental issues. Afterall, these issues may affect not only your flying, but your overall health. If you require treatment for a serious medical condition, that takes precedence over your flying.

With an AME or your treating physician, it is imperative to be open and truthful with your answers. This is not the time to play games or be evasive. Answer questions honestly and list all medications you take and symptoms you experience. A physician may be able to determine if medications currently prescribed for you, or over-the-counter drugs you are using, have side-effects that are causing problems. There may be alternatives.

Fourth. Making the decision. After evaluation, a CFI may believe you are still a safe pilot (within limitations) but, for example, it may be time to step down from the high-performance or complex aircraft you are currently flying, or time to take on less-challenging conditions when you fly. If the CFI determines you should not fly as PIC at all, in any aircraft, then you will need to comply with his or her opinion.

After consulting with an AME or your treating physician, a physical examination, tests, or use of necessary prescribed medications may confirm that you are experiencing, and will continue to experience, issues that may end your flying. As difficult as that may be, you will need to accept it.

Ideally, based on your own evaluation of your flying, you can recognize when it is time voluntarily to stop acting as PIC and walk away on your own terms.

When I flew out of Batten Field (KRAC) in Racine, Wisconsin, there was a pilot a few doors down from my T-hangar who owned a gorgeous black-over-red Beechcraft Staggerwing. I think he told me it was serial number 003 off the line in Wichita. He was in his mid-to-late 70s when I knew him. He was flying the Staggerwing on an irregular basis. He had been a pilot for many years and he and his family were well known on the airport and within aviation circles in the area.

One day, while chatting with the line guy at the FBO, I learned that the pilot had ground-looped his Staggerwing a few days earlier while landing in benign conditions. The pilot was unhurt, but the aircraft's wingtips and landing gear were damaged. The line guy said that, while waiting with the pilot for assistance on the runway, the pilot told him that he was putting the aircraft up for sale immediately and he would stop flying. The Staggerwing pilot was good at his word. That is exactly what he did. I admired him for making the decision, as I knew how much he loved the Staggerwing, and loved flying.

Richard Collins, former Flying magazine editor, 20,000hour pilot, and author, wrote in his book, "The Next Hour," about his father's last time in the left seat. He explained that his father (75 years old and an accomplished editor, pilot, and writer in his own right) completed a flight, exited the runway onto the taxiway and then mistakenly retracted the landing gear while taxing. Collins candidly admitted he did not want his own "last flight" to end like his father's. Instead, he made the decision, when he began to recognize that his skills and proficiency were leaving him, that his last flight would be a good one.

How did he know it was time? He thought hours flown, and the decrease in hours flown over time, was a fair measure. In his prime, he flew 500 hours or more a year. As he grew older, the hours decreased each year. When he was flying only a small fraction of the annual hours he once flew, he realized that he no longer retained the same skills, proficiency, and weather knowledge that he once had. Collins flew his last flight as PIC in a Columbia 400 departing from and returning to Batavia, Ohio, in 2008. He walked away with a valid third class medical in his wallet. He said it was a "wellflown trip."

There will come a time when many pilots will face their own version of the same decision. If you asked the Staggerwing pilot or Richard Collins' father, I suspect each would have admitted he waited at least one flight too long. When my time comes, I hope I can see things clearly and objectively, get the timing right, and make the voluntary decision to step back on my own after one last well-flown trip.

Fifth. Mitigation Strategies. Because a pilot is experiencing some problems, it does not mean that he or she can no longer fly at all - if still medically cleared to fly. For example, if it is a night vision problem, it may be possible to limit flying to day VFR or, if a minor reaction time issue, it may be possible to establish more restrictive personal minimums regarding crosswinds and runways. If the pilot operates a high-performance or complex airplane, it may be possible to transition to a slower, easier-to-fly aircraft. Of course, these are not permanent solutions, but only temporary ones that may allow a few more months or years in the left seat, depending on circumstances.

If you determine on your own, or if it is determined for you, that you can no longer act as PIC, it does not need to be an end to your flying. You have two options: (1) If you want to sit in the pilot seat, do not fly without a qualified, certificated, and rated in category and class, safety pilot who acts as PIC; or (2) you may still enjoy flying as much (if not more) from the right seat (non-PIC) or as a passenger. It certainly is not the same as feeling the yoke or stick in your hand and the rudder pedals under your feet, but the views out of the cockpit windows are still spectacular and the sensations of pitch, bank, and yaw remain the same.

No longer active pilots should continue to be included in flying activities. If you know of a pilot who has lost a medical, or who has voluntarily stopped flying as PIC, offer that pilot an empty seat in the airplane you fly when you can. I know it will be appreciated. Make it a habit to tell the pilot when the next flying seminar is, take the time to converse with him or her about flying, or just share the news about fellow pilots and what is going on at the airport.

You can also support him or her in re-channeling flying interests to things that may be suitable substitutes, such as assisting in building or restoring an aircraft, taking a more active role in EAA Chapter or airport activities, or using the pilot's knowledge and experience to make a difference in someone else's life who may harbor a desire to fly or to obtain additional ratings.

Of course, there may be some pilots who, when they can no longer log PIC time, simply choose to walk away from aviation entirely. If so, respect that pilot's wishes. I have known a few pilots like that. It is a personal decision; each pilot must decide.

I have many good memories of my time in the air. I hope



(and pray) that I will continue to have the means, opportunity, and ability to make many more. Even so, we all must recognize that our flying is only partially within our own control. It has always been that way. As we grow older, we can begin to see the hard reality of that much more clearly. None of us can know what the future will bring and how many more hours each of us will experience and record as pilot-in-command.

Gently wheeling among rising cumulus tinged with the late afternoon's grays, golds, and pinks; breaking out on top into the morning sunlight after a climb through wet, featureless clag; exploring an undisturbed valley surrounded by jagged, snow-dusted ridges; sailing serenely above a blanket of stratus such a brilliant white you need sunglasses; watching the cold moon through high, thin clouds while sitting in the dim glow of a night cockpit; or laughing and sharing stories in cruise on a homeward heading; these are just some of the kinds of memories we have made, and may, if we are fortunate, continue to make.

We will always have good memories of our time as pilots to recall and to share. Those memories should remain long after we shut down the engine and turn off the master switches for the last time. However, if we are candid with ourselves, we always knew our hours in the air were only instants in time just fleeting moments – to be enjoyed, and that our ability to continue to make memories as pilots would, eventually and inescapably, come to an end. We cannot change that.

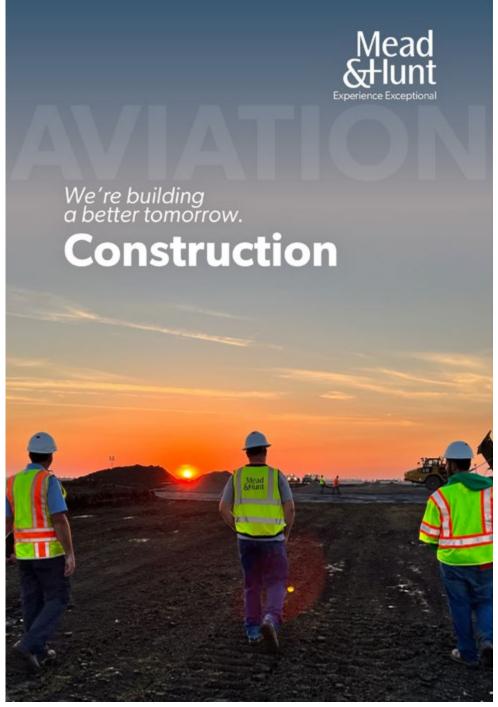
Fly so long as you are able, but no longer. Make good memories.



Dean Zakos

EDITOR'S NOTE: Dean Zakos (Private Pilot ASEL, Instrument) of Madison, Wisconsin, is the author of "Laughing with the Wind, Practical Advice and Personal Stories from a General Aviation Pilot." Mr. Zakos has also written numerous short stories and flying articles for Midwest Flyer Magazine and other aviation publications.

DISCLAIMER: Mr. Zakos' articles involve creative writing, and therefore the information presented may be fictional in nature, and should not be used for flight, or misconstrued as instructional material. Readers are urged to always consult with their personal flight instructor and others about anything discussed herein.





Solar Eclipses: See them, Experience them!

by Yasmina Platt

he (total) solar eclipse of 2017 was one of those memorable life experiences one remembers forever. A total solar eclipse happens when the Moon passes between the Sun and Earth, completely blocking the face of the Sun. The sky darkens as if it were dawn or dusk. A couple of girlfriends of mine and I flew from Denver, Colorado to Alliance, Nebraska for this special event. I landed the Cessna 172 we were flying, parked it on the side of a (fairly full) taxiway, and watched the eclipse right by the airplane. It was wicked! In a short time, we went from a calm day to a light windy day and from day light to an eerie dusk and... back.

But we were not the only ones who thought it was bizarre and cool at the same time. The airport beacon turned on during totality. And, did you know that, when a solar eclipse reaches totality, nocturnal wildlife sometimes wake up thinking that it is nighttime, and they think it's time to sleep?

Guess who else was there? John and Martha King, ladies, and gentlemen! They had the same great idea we did!

When I learned that two more eclipses were going through the U.S., I immediately made plans to view and experience both of them. There was an annular solar eclipse on October 14, 2023, and there will be another total solar eclipse on April 8, 2024.

We watched the annular eclipse, also referred to as "ring of fire," from Balloon Fiesta in Albuquerque since the dates matched. Two for one! Double the coolness factor, although, unfortunately, we didn't watch the eclipse from a balloon, but rather from the ground! The annular eclipse lasted a lot longer than the total eclipse; it was really cool to watch the slow movement of the Moon across the Sun and the perfect ring at the top of the



John King, Yasmina Platt and Martha King.



The (total) solar eclipse of 2017 at Alliance, Nebraska, where we landed and parked our aircraft on the side of a (fairly full) taxiway, and watched it happen right by our airplane.



(LEFT) Annular Solar Eclipse, October 14, 2023.

(RIGHT) Total Solar Eclipse, April 8, 2024.

NASA's Scientific Visualization Studio

eclipse. I can't choose one eclipse over the other, to be honest; they are both very cool, very different, and equally impressive.

The 2024 total eclipse, like the one I witnessed in 2017, will cross the U.S. from Texas to Maine, passing over Mexico and Canada as well. Have YOU made plans yet? The next total solar eclipse that will be able to be seen from the contiguous U.S., won't be until August 23, 2044, so it's time to plan for the 2024 one!

Will it be going over you or will you have to fly somewhere to see it? We'll be watching it from our cabin in Leakey, Texas (49R is the airport identifier). Maybe we'll see you there!

Remember to use special eye protection (eclipse glasses or a specialized solar filter) to view eclipses. However, with the total eclipse, the protection can be removed during its peak.

Can't view it in person? Live coverage is often available on NASA TV and the agency's website, FMI, visit https://solarsystem.nasa.gov/eclipses. Plan ahead!

Fly safe and fly often!



Yasmina Platt

ABOUT THE AUTHOR: Yasmina Platt's full-time job has her planning the future of aviation infrastructure for Joby's electric Vertical Takeoff and Landing (VTOL) aircraft. 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 "Yasmina" in the search box, or by going to the "Archives" section, then "Columns," then "Destinations."

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



Photo by Skot Weidemann



"Passing it On"

by Mark Baker AOPA President & CEO

he weather may be getting a little nippy in much of the country and July weather may be a faint memory for most of us, but as the current month is all about giving, my mind keeps wandering back to our favorite middle-of-the-summer holiday.



Mark Baker

Every Fourth of July for the past, well many, years, I have kept up a tradition of taking kids up for an airplane ride, many for the first time. Those days in Minnesota and northern Wisconsin are among the most vivid images of my long flying life. I've taken hundreds of kids, grandkids, nephews, and their friends and neighbors aloft – even the kids of those I gave rides to! Brings me back to when I got my first rides.

This past Fourth of July, I gave rides to a bunch of kids in my Cessna 185. What a day that was!

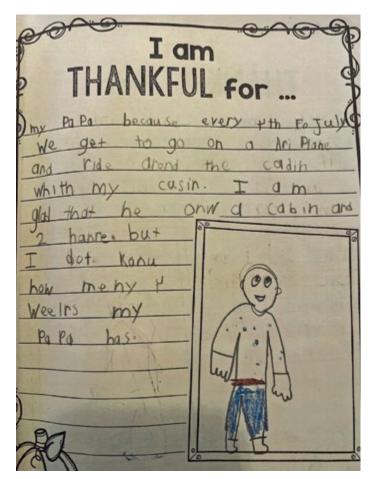
So why am I recalling this summertime fun while some of us already have snow on the ground, and many of us are vigorously incorporating cabin heat? Because it's how I have tried to give back to general aviation and our community, and this month is all about giving back and giving thanks.

There is a lot to be thankful for, and if you'll allow me a moment of grandfatherly brag, there's someone very special joining me in giving thanks. The amazing (yes, amazing!) drawing on this page was created by my granddaughter Evelyn. Evelyn gives thanks for the airplane rides she has enjoyed with her cousins. And what an amazing portrait of me, wouldn't you say!

Evelyn's words couldn't ring truer, and we can all learn a lesson from this precious child.

We all should feel blessed that we have been given an opportunity to pursue a unique passion and one that can only truly be experienced here in this great country of ours. I am grateful that I have been able to give so many young people a taste of our freedom (and excitement!) to fly. Some have even taken this passion to a professional level. I have one nephew who is now flying for Delta, and a neighbor who's now flying for Sun Country. Isn't that one of the goals of taking someone new up for an airplane ride – to inspire them to become part of our community and get their pilot's certificate, and more?

Pilots are a benevolent group, and we try to give back to something that has given all of us so much. I know so much was given to me—and I am appreciative of that every day. I'm also extremely grateful this season to the people I am lucky enough to call my colleagues. Our team at AOPA



makes my job and life that much easier. While people may thank me for protecting our freedom to fly—and introducing them to this wonderful passion we all share—the thanks should be given to those I stand shoulder-to-shoulder with every day. Aviation is a team sport, and I am thankful for having the best team around.

A big part of the full AOPA team, and folks to whom I and all of general aviation owe a debt of gratitude, are the donors who support the AOPA Foundation, and in turn the important programs it sustains. These include our You Can Fly initiative and the Air Safety Institute. Much like my airplane rides in Minnesota do, You Can Fly works to introduce, broaden, and sustain the pilot population—and keep it safe. During this year, alone, 20,000 students are part of our You Can Fly High School initiative, in more than 500 schools across the country. Since the program began, more than 60 percent of our total 65,000 program graduates say they are pursuing an aviation career. That is music to my ears, and again, thanks to those benevolent supporters for helping to make it happen.

As you read this, I am sure that many are making plans to spend the holiday season with friends and family. I want to wish you and yours a great holiday with lots of cheer and laughter and, of course, *Blue Skies!*

AOPA's Richard McSpadden Lived In The Present, But Cherished The Past



Richard McSpadden

by Dave Weiman

"Where our minds linger is a choice, and I choose the present." *Richard McSpadden*

Thunderbird Commander Richard McSpadden, 63, who flew supersonic fighters, would be killed in a small general aviation aircraft. But such was the case October 1, 2023, when Richard was riding right seat in a Cessna Cardinal 177RG that experienced an emergency shortly after takeoff in Lake Placid, New York. The terrain limited their options, and they turned back toward the airport, but failed to make the runway. The left-seat occupant of the aircraft was former NFL player and longtime pilot, Russ Francis, 70, who also died in the accident.

Inspired by his father who is also a pilot, Richard "Dick" McSpadden, Sr., Richard began flying while in college and went on to log more than 5,000 hours in a variety of civilian and military aircraft. After a 20-year career with the Air Force, he spent more than a decade in the information technology industry at Hewlett Packard Enterprise. He became executive director of the AOPA Air Safety Institute in 2017, then senior

vice president in 2020.

Under Richard's leadership, the Air Safety Institute created the Focused Flight Review program that includes tailored lesson plans like mountain flying, IFR proficiency, positive aircraft control, and others that focus on specific training goals to make flight reviews more effective. The engaging program also includes profiles for helicopter and seaplane operations to strengthen performance in other types of aircraft. The institute also transitioned its online courses created on a platform that had become obsolete to modern formats with a goal of meeting pilots wherever and however they consume information. Richard also championed the effort to transition the legacy Joseph T. Nall Report from print to an interactive format with near real-time data, and introduced popular new series, including the There I Was podcast and the Beyond Proficient, Reality Check, and most notably, Early Analysis videos.

The video series is focused on improving the general aviation safety record and expanding the knowledge and skills of pilots. His approach centered on five principles of safety: Take knowledgeable people; train them well; keep them proficient; put them in reliable, modern equipment; and surround them in a culture that supports good decision



Richard McSpadden with his Super Cub.

making. Air Safety Institute material is now accessed 10 million times annually.

Many AOPA members grew to know Richard through his monthly column in *AOPA Pilot* magazine, where he modeled self-reflection and humility with stories from his personal and professional flying career. In one article, readers saw his methodical dedication as he recounts spending hours-long sessions at home wearing a heavy helmet while studying or reading, to acclimate to the discomforts of the cockpit and improve his performance in the competitive Air Force Undergraduate Pilot Training program. In other articles, he revels in the joys of GA flying, a pastime he shared with his family. His father and brother are pilots, and he taught his children to fly. Many of his most lyrical descriptions are from experiences in his Super Cub.

"Flying has brought so much to my life—in many ways has been my life," he wrote in his January 2022 column. "The feeling of gratitude to the many people who've boosted me here comes back frequently. In ways it seems unfair that I was exposed to aviation and given opportunities few have. I feel a growing urge to give back, cast a wider net, and expose more people to this splendid experience that can change the trajectory of a life." McSpadden closed every column with a call to action: "Go fly!"

Across the nation, Richard McSpadden influenced pilots and aviation groups through speaking engagements and involvement in safety initiatives, including serving on the board of the Seaplane Pilots Association and as the industry chair for the General Aviation Joint Safety Committee. He was passionate about backcountry flying and met each summer with state aviation officials, pilot groups, and backcountry subject matter experts to explore backcountry safety and stewardship. The National Air Traffic Controllers Association recently recognized Richard with the "James L. Oberstar Sentinel of Safety Award."

I first contacted Richard before and after I reviewed AOPA's Rusty Pilot Course, which is excellent, by the way.



(L/R) Richard McSpadden and AOPA President Mark Baker at EAA AirVenture Oshkosh 2022.

Midwest Flyer Magazine Photo by Dave Weiman

We made contact again just two weeks prior to his accident when I solicited his assistance in getting one of our readers back in the cockpit through the program. That reader was impressed that a senior executive at AOPA, who was a former commander of the Thunderbirds, was willing to help him any way he could. That's how committed Richard was to flight safety and nurturing pilots.

AOPA President & CEO Mark Baker commented: "AOPA has lost a great colleague in Richard McSpadden, and I have lost a great friend. Richard represented everything you ever wanted in a leader, teammate, and mentor. I spent many hours flying all over the country with Richard, and spent even more hours with him and Judy as great friends. My heart aches for Judy, Grant, Annabel, and Richard's entire family."

In Richard's memory, AOPA hosted a celebration of life for staff and members at AOPA headquarters in Frederick, Md., October 14, and established the "*Richard McSpadden Scholarship for Advanced Pilot Training.*" Donations may be sent to the fund c/o AOPA, 421 Aviation Way, Frederick, Maryland 21701.

EDITOR'S NOTE: Special thanks to Sarah Deener, Senior Director of Publications at AOPA, for much of the information used to create this article. Photos, except where noted, are thanks to AOPA and its chief photographer, David Tulis.



Don Winkler

Aviation Photojournalist Don Winkler Remembered March 30, 1931 - October 20, 2023

by Dave Weiman

ather, husband, friend, pilot and aviation photojournalist, Donald (Don) P. Winkler, 92, of Madison, Wisconsin, passed away at his home October 20, 2023. He was born March 30, 1931, in Milwaukee, Wisconsin, the son of Paul Winkler and Caroline (Goelz) Winkler. He graduated from Wauwatosa High School in Wisconsin, and in his youth, was a drummer in a swing band and worked as a caddy at Blue Mounds Country Club.

Don developed his love of photography working for the Milwaukee Journal/Sentinel as a copy boy. He served in the U.S. Air Force from 1951-1955 during the Korean War. After Don was discharged from the service, he moved to Madison and became an air traffic controller with the Civil Aeronautics Administration (CAA) at Truax Field (now Dane County Regional Airport).

A natural salesman and leader, Don worked at Sears department store in both sales and management until his retirement in 1993. It was in retirement that Don finally found his dream job in public affairs and photojournalism 28 DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE

at Wisconsin Aviation. There, Don introduced children to aviation by taking them on tours of the airport, air traffic control tower, and fixed base operation, just as he did with his own children as they were growing up.

On October 26, 1990, Don married Carol (Tormey) Winkler, and they lived in Madison – near the airport, of course!

When not at the airport, Don operated a photography business called "Air Vue." He was a member of the Experimental Aircraft Association, Aircraft Owners & Pilots Association, Wisconsin Wing of the Civil Air Patrol, and Wisconsin Aviation Hall of Fame (he was inducted in 2018). Don was the recipient of the "Carl E. Guell Aviation Education Award," sponsored by the Wisconsin DOT Bureau of Aeronautics, for his work with children in aviation education, tours of the airport, and promoting aviation careers. Additionally, Don is the recipient of the Wisconsin Airport Management Association (WAMA) Lifetime Service Award for dedicated service to the aviation community.

Don's greatest love was for his family. He was always a source of supportive wisdom, encouragement, and



Don Winkler with a North American Aviation T-6 Texan trainer aircraft he flew while serving in the U.S. Air Force from 1951-55.

unconditional love. He would keep in touch with everyone in his family, if not in person, via text and video chat. Never one to sit still, when not taking photos for Wisconsin Aviation or Midwest Flyer Magazine, Don posted stories on his personal blog "Another Vue."

Don was a special friend to all who had the pleasure of knowing him and was always there if we needed help with the magazine. Likewise, we like to think we were always there for him.

I first met Don at a Civil Air Patrol meeting at Milwaukee General Mitchell International Airport in 1979. Not a bit bashful, Don came up to me, introduced himself, and offered his assistance as a photographer.

In 1983, Don accompanied me when I had the pleasure of hosting Bill Lear's widow, Moya Lear, of Lear Jet and Lear Fan corporations, as the guest speaker for the Wisconsin Aviation Trades Association (WATA) Convention at the Pioneer Inn on Lake Winnebago in Oshkosh, Wisconsin. Thanks to EAA Founder Paul Poberezny, who graciously gave Moya



Don Winkler (center) with friends following brunch on July 31, 2023, at the "Jet Room" restaurant in the Wisconsin Aviation terminal, Dane County Regional Airport, Madison,

People In The News



(L/R) Don Winkler and Dave Weiman enjoying the February 1983 issue of Midwest Flyer Magazine featuring a Piper Aerostar 700P. In 1983, the Aerostar was the fastest growing production twin-engine piston aircraft in the world. Midwest Flver Magazine Photo



Don Winkler with the U.S. Air Force Reserve KC-135 Stratotanker he rode on as a member of the press. Midwest Flyer Magazine Photo by Dave Weiman

a personal tour of the museum, Don and I chauffeured her around town in one of EAA's limos, a limo once used by Vice President Spiro Agnew. In a letter to me, Don recalled the occasion: "She autographed a picture of the Lear Fan as we talked about Bill and her CAP days, and about her father's comedy team, Olson and Johnson. They (Bill and Moya Lear) knew my friend Johansson, the world renown harpsichord player."

On another occasion Wisconsin Aviation hosted the B-17 Flying Fortress used in the motion picture "Memphis Belle" (1990), and Don introduced me to the pilot of the original Memphis Belle, Maj. Robert Morgan.

In 2002, as members of the press, Don and I were invited to fly on a U.S. Air Force Reserve KC-135 Stratotanker on a refueling mission out of Volk Field Air National Guard Base at Camp Douglas, Wisconsin. Don enjoyed taking photos of the F-16s as they flew up to the tail of the aircraft to refuel. On the way back to Madison, Don remarked that it was a great day and a wonderful experience, and I would have to agree.



And of course, who could forget Don's participation at EAA AirVenture Oshkosh, especially the staff at EAA press headquarters. Don was able to get more press privileges than his publisher, a memory Don took great pleasure in reminding me each year.

More recently, Don enjoyed getting together with a few of his old friends at the "Jet Room" restaurant in the Wisconsin Aviation terminal at Dane County Regional Airport in Madison.

It wasn't the people Don met, but the people Don helped over the years that meant the most to him. I will especially remember Don often making a point of telling his family and friends that he loved them, something we should all do more often.

Don is survived by his wife, Carol; daughters, Jo Anne (Dale) Winkler-Bley, Kathi (Bob) O'Brien and Lisa (Adam) Gagas; sons, Jeff (Brenda) Winkler, Bob (Pam) Winkler, Greg (Korrine) Winkler, and Jeff (Christi) Simpson; granddaughters, Sarah Taplin, Lyndsey Bley, Nikki Winkler, Emma O'Brien, Noelle Timm, Courtney Gagas and Claire Gagas; grandsons, Zachary Winkler and Ben O'Brien; greatgrandchildren, Cora and Archer Taplin; Tobias, Sophia and Stella Timm; and nephew, Scott Winkler. Don was preceded in death by his parents; brother, Paul (Jean) Winkler; and niece, Michelle Winkler.

Memorials may be made to the Carl E. Guell Memorial Scholarship for the education of young pilots, c/o Wisconsin Aviation Hall of Fame Scholarship Fund (https://www.wahf.org/scholarships/), or to Agrace Hospice Care (https://www.agrace.org/donate/).

Online condolences may be made at www.gundersonfh.com.

EAA Statement On The Death of Apollo 8 Commander Frank Borman



Frank Borman cuts the ribbon to the new "Frank Borman Collection" exhibit on December 7, 2018. He is assisted by Jack Pelton (left) and Rick Larsen (right) of EAA.



EAA member and Apollo 8 astronaut, Frank Borman, with his personal collection of photos and artifacts. EAA Photo

EAA AVIATION CENTER, OSHKOSH, Wisconsin — (November 9, 2023) — Statement by Jack J. Pelton, CEO and Chairman of the Board of the Experimental Aircraft Association, on the death of Apollo 8 commander and longtime EAA member Frank Borman on November 7, 2023:

"As one of the major players within the Apollo astronaut corps in the 1960s, Frank Borman was a person who seemed larger than life as we followed America's efforts toward a lunar landing. Frank's accomplishments, especially the unforgettable moments during the Apollo 8 mission during Christmas time in 1968, puts him among the key figures in our nation's spaceflight history.

"We at EAA came to know him for more than 30 years as an enthusiastic aviator and supporter of programs that would build on the legacy of Mercury, Gemini, and Apollo. We were honored in 2018 when Frank donated his personal archives to EAA, which are now on display at the EAA Aviation Museum, and always welcomed him back to Oshkosh when he could join us here. We express our condolences to Frank's family and many friends, and say to Frank, godspeed and thank vou."

Borman made frequent visits to Oshkosh over the past 30 years, including as part of the Salute to Apollo at the 1994 EAA Fly-In Convention and the Apollo astronaut reunion during EAA AirVenture Oshkosh 2017. In addition, he was the special guest speaker at the EAA Aviation Museum's Space Day in 2016, and at the December 2018 Wright Brothers Memorial Banquet following the donation of his personal archives to EAA.



(L/R) The crew of Apollo 8 – James Lovell, William Anders, and Frank Borman – who in December 1968, comprised the first manned mission to orbit the moon (NASA Photo).



Frank Borman

The Borman Collection At EAA

"Exploration is really the essence of the human spirit." Frank Borman

by Dave Weiman

he EAA Aviation Museum in Oshkosh, Wis., features "The Borman Collection: An EAA Member's Space Odyssey," an exhibit that features the personal archives and memorabilia of astronaut Frank Borman, who was on the leading edge of America's space program through the 1960s. The new exhibit was formally opened with a ribbon cutting by Borman himself on December 7, 2018, just prior to EAA's annual Wright Brothers Memorial Banquet at which Borman was the featured speaker.

Borman's personal archives contain hundreds of artifacts, including items carried aboard space capsules, awards received for his accomplishments, and correspondence with world leaders, celebrities, and other notable figures. "The Borman Collection" also highlights Borman's aviation career, which included U.S. Air Force service prior to NASA.

"I have a long relationship with EAA and have the greatest respect for what they do," said Borman, when asked why he chose to donate his collection to the EAA Museum.

"I believe they are responsible for preserving general aviation and our ability to fly. It means so much to me for this collection to be here and that others will enjoy it."

Borman is best known as the commander of the famed Apollo 8 mission, which in December 1968 was the first manned spacecraft to orbit the Moon. The three astronauts aboard – Borman, Jim Lovell, and William Anders – orbited the Moon not once, but 10 times, and made hundreds of observations and notations that became the foundation for the Apollo Moon landings that followed. The memorable flight was noted for unforgettable moments, such as the famed "Earthrise" photo and the crew reading from the Book of Genesis while orbiting the Moon on Christmas Eve.

Frank Borman was born on March 14, 1928, in Gary, Indiana. Because he suffered from numerous sinus problems, his father moved the family to Tucson, Arizona, which Borman considers his hometown. His interest in aviation started by building model airplanes. Also, when he was a kid, he got a ride in a Waco out of a farmer's field for \$10.00 and started flying at the age of 15. He went on to become a fighter

People In The News

pilot, test pilot, an educator, an astronaut, and eventually an executive with Eastern Air Lines.

Borman graduated from the United States Military Academy at West Point in 1950 with a Bachelor of Science Degree. Upon graduation, he became a career Air Force officer. He received his pilot wings in 1951 and was a fighter pilot with the 44th Fighter Bomber Squadron in the Philippine Islands from 1951 to 1953, and as an operational pilot and flight instructor in various squadrons in the U.S. from 1953 until 1956. Most of his flying was in the F-80, F-84, swept wing F-84F and T-33. His flight commander was Charles E. McGee, who was a Tuskegee Airman during World War II.

Borman received his Master of Science Degree in Aeronautical Engineering from the California Institute of Technology in 1957.

From 1957 to 1960, Borman became an assistant professor of thermodynamics and fluid mechanics at West Point at the request of his superiors, but he never lost his desire to fly. From 1960 to 1962, he became a test pilot engaged in organizing and administering special projects for the Air Force Aerospace Research Pilot School and went to work for Chuck Yeager at Edwards Air Force Base flying the F-104. When Yeager attempted to fly higher than 90,000 feet, Yeager crashed and that was the end of that program.

Borman was selected by NASA for its second astronaut group in 1962. He was backup command pilot for Gemini 4 and was chosen as the command pilot for Gemini 7, which launched in December 1965 with pilot James Lovell. This was a long-endurance flight which set a 14-day/330-hour record, and also acted as the target vehicle in the first space rendezvous performed by Gemini 6A. The two spacecraft came within one foot of each other, and they took turns flying around each other.

Borman was selected in late 1966 to command the third manned Apollo mission, planned as an elliptical medium Earth orbit test of the second manned Lunar Module (LM) on the first manned launch of the Saturn V lunar rocket in 1967 or early 1968. However, in January 1967, the crew of the first manned Apollo mission (Apollo 1) was killed in a fire aboard their Command Module on the launch pad, delaying the Apollo program. Borman was the only astronaut to serve on the review board of that accident and was able to convince Congress that Apollo would be safe again.

Borman was then reassigned to his LM test mission, planned to fly as Apollo 9 in early 1969 after a first low Earth orbit flight commanded by James McDivitt in December 1968. But the LM was not ready, leading NASA to replace Borman's mission with a lunar orbit flight using just the Command/Service Module as Apollo 8 in December, making McDivitt's flight of Apollo 9 taking place in March 1969.

Borman's Lunar Module pilot and spacecraft systems engineer was William Anders. The Command Module pilot and navigator, Michael Collins, needed to have back surgery and was replaced by his backup, James Lovell, reuniting

Borman with his Gemini 7 crewmember. Apollo 8 went into lunar orbit on December 24, 1968, and made 10 orbits of the Moon in 20 hours before returning to Earth.

In the years that followed, Borman served as a special presidential ambassador on trips throughout the Far East and Europe. In 1970, he undertook another special presidential mission, a worldwide tour to seek support for the release of American prisoners of war held by North Vietnam. He completed the Harvard Business School's Advanced Management program that same year, which laid the foundation for his future in business.

Following his career with NASA, Borman became a special advisor to Eastern Air Lines in 1969, and after retiring as a colonel in the Air Force in 1970, he became the senior vice president of operations for the airline. He was promoted to the position of executive vice president-general operations manager, elected to the board of directors in 1974, and president and chief operating officer in 1975. He became chairman of the board in 1976 and retired from Eastern Air Lines in 1986, at which time he and his wife, Susan, moved to Las Cruces, New Mexico. The Bormans have two sons, Frederick and Edwin, and four grandchildren.

During the press conference immediately following the ribbon cutting ceremony to "The Borman Collection," I asked Col. Borman what it was like sitting in the Command/ Service Module as Apollo 8 readied for takeoff with the engines rumbling, knowing that it would be a two-week journey to the Moon and back.

"All I thought about was the mission," said Borman. "I didn't want to make a mistake on our first mission (to the Moon). Our mission was to make 10 orbits and come home!"

When asked if he would have rather been an airline pilot than an airline executive, Borman said he liked being the President and CEO of Eastern Air Lines, and not once flew an airliner during the 17 years he worked there.

When asked if he had any general aviation flying experience, other than taking flying lessons as a teenager, he said "My wife and I restored several antique airplanes over the years. We flew a P-51 Mustang for many years in airshows. I much prefer airplanes to spacecraft." Borman's P-51 and P-63 once won Grand Champion at EAA AirVenture Oshkosh.

When asked by another reporter what he thought of plans to colonize Mars one day, Borman remarked that he doesn't think that's practical...that conditions on Mars make it uninhabitable. He would rather see man return to the Moon and establish a research station, there.

Among the people Borman admires the most is former astronaut and Wisconsin native, Deke Slayton, one of the original NASA Mercury Seven astronauts, who became NASA's first Chief of the Astronaut Office when he was grounded for medical reasons. Borman also has great respect for fellow astronaut James Lovell, and James Edwin Webb. Webb served as the second administrator of NASA from February 14, 1961, to October 7, 1968. "Jim (Webb) helped us get to the Moon because he held off Congress from

investigating the fire incident. The Russians were right behind us, so NASA moved up the missions to beat them."

EAA Director and retired NASA astronaut, Colonel Charlie Precourt, interviewed Borman at the banquet. Astronaut James Lovell had also planned to participate, but had to cancel at the last minute due to health concerns. Precourt flew four missions with the Space Shuttle program. Precourt also built a VariEze for his personal enjoyment.

The 2018 banquet not only celebrated the 115th anniversary of the Wright brothers' first successful flight that occurred at Kitty Hawk, North Carolina in 1903, but also the 50th anniversary of the Apollo 8 mission. The Wright

brothers forever changed how we look at the sky; the Apollo 8 mission forever changed how we look at what was beyond.

"The Borman Collection" is located on the EAA Aviation Museum's main floor, near the iconic Wright Flyer replica.

The EAA Aviation Museum is located next to Wittman Regional Airport (KOSH), and Interstate 41 at the Highway 44 exit in Oshkosh, Wisconsin. It is open daily from 10:00 a.m. to 5:00 p.m. EAA members receive free museum admission year-round. For more information, call the EAA Aviation Museum at (920) 426-6108 or visit www.eaa.org/museum.

Airshow Performer Robert Sidney Hosking

March 27, 1932 — September 3, 2023

BOUNTIFUL, UTAH – Robert Sidney Hosking – the talented helicopter pilot of "Otto The Helicopter Clown," and many other roles, passed away peacefully in his home September 3, 2023. Born on March 27, 1932, Bob was the only child of Josephine Wilson and Sidney Russell Hosking. The family spent much of Bob's young life in mining towns near Boise, Idaho. At his father's passing when he was only 12 years old, Bob learned from a young age to work hard and fix almost anything that needed fixing. He rebuilt cars, cooked meals, and dutifully delivered groceries at the nearby market.

Considered a master of many things, Bob was more legend than man. He wrestled in college at Utah State University, served a mission for The Church of Jesus Christ of Latter-day Saints in England, fought honorably in the Korean and Vietnam Wars, built his own helicopter company from the ground up, and traveled the country as an airshow performer. Bob was also an accomplished carpenter who built handcrafted gifts for family, a chef who made gourmet meals, and a daredevil who rode his Harley-Davidson motorcycle well into his 80s, just to name a few of his exploits.

But the highlight of his life was when Bob married Carma Annette Black in the Salt Lake City Temple on August 26, 1954. The couple raised three boys – Scott, Craig, and Kenneth – who grew up fishing, flying, and traveling. He passed on the lessons of hard work he had learned at a young age to his own boys – a value that continues to be instilled in the next generation.

Bob's incredible work ethic, unwavering bravery, and unparalleled precision in everything he did earned him admiration from all who knew him. Annette said it best, "Everybody needs a BOB like ours!"

Bob is preceded in death by his wife, Annette, and great-grandson, Kayson Shelton. He is survived by his sons Scott (Kim), Craig (Becky), and Ken (Rolayne).

Services were streamed here: https://www.russonmortuary.com/obituaries/robert-hosking



EDITOR'S NOTE: I had the pleasure of presenting Bob and Annette Hosking with the "Bill Barber Award For Showmanship" at EAA AirVenture Oshkosh in 1994, an award selected by past recipients that included other all-time airshow greats. I also had the opportunity of working with them – and their son, Craig – at airshows around the country. Those were fun times, memorable times. The airshow entertainment industry is a close-knit family. Fellow performers WERE family, and we shared the joys of our lives, and the sorrows, especially when a fellow performer was killed doing what they loved to do, or passed away from natural causes, as was the case with Bob and Annette Hosking. Always blue skies, Bob, and belated blue skies to you, Annette "Mom" Hosking!

(Remembrance by Dave Weiman)



Photo by Skot Weidemann



Tom Haines Honored At NBAA For Lifetime Achievement In Journalism



Aviation journalist, Tom Haines.



Tom Haines flying his RV-12.

LAS VEGAS – National Business Aviation Association (NBAA) President and CEO Ed Bolen presented longtime AOPA media leader, Tom Haines, with the *David W. Ewald Platinum Wing Award* for his lifetime achievement in journalism. Ewald created *Flight Training* magazine.

"Tom Haines is a remarkable individual and a remarkable human being," said Bolen. "At 16, he got his pilot's license and for the rest of his career, he has been able to share with us his passion and his joy for aviation."

The award was presented October 17, 2023, during the NBAA Business Aviation Convention and Exhibition, which Haines was assigned to cover for AOPA. The honor was kept a secret from Haines until the presentation.

In accepting the award, Haines said that Dave Ewald was someone he knew when he started at *Professional Pilot* magazine, "was one of the ones who welcomed me into the industry," Haines said. "I've gotten to fly general aviation airplanes all over the world. And hopefully told a few stories and maybe helped some people along the way to being a little bit safer and maybe to inspire them a little bit to go out and fly an airplane a little bit more. But, really, for me it's been a

thrill and I've been inspired by so many people in this room and in other parts of aviation."

Haines earned a degree in journalism from Indiana University of Pennsylvania in Indiana, Pennsylvania, and was a broadcaster at a local television station, there.

He was first hired by AOPA in 1988 as an associate editor of *AOPA Pilot* magazine, then editor in chief, and then senior vice president of publications and media. Haines was key to establishing and widening AOPA's digital coverage, including *AOPA ePilot* and *Flight Training* digital weekly newsletters aimed at both AOPA's core audience and those subscribing to *AOPA Pilot's* sister publication, *Flight Training*. He was key to expanding *AOPA Pilot's* Turbine Pilot section into a monthly special edition, and initiated a program of video coverage to accompany stories that appeared in print and established a weekly online webcast – *AOPA Live This Week* – with Melissa Rudinger and more recently Alyssa Cobb. Haines retired from AOPA in early 2022, and now does special assignments as needed.

Congratulations Tom!



MAC CEO Brian Ryks Earns Airport Industry Leadership Award

The Excellence in Visionary Leadership Award is the highest honor given to an active airport CEO/Director.



(L/R) ACI-NA President and CEO Kevin M. Burke presented MAC Executive Director and CEO Brian Ryks with the ACI-NA Excellence in Visionary Leadership Award on Oct. 2, 2023.

MINNEAPOLIS-ST. PAUL – Airports Council International – North America (ACI-NA) announced that Brian Ryks, executive director, and CEO of the Metropolitan Airports Commission (MAC), is the 2023 recipient of the "Excellence in Visionary Leadership Award." The award is the highest honor given to an active airport CEO/Director by ACI-NA, the trade association representing commercial service airports in the United States and Canada.

Ryks has led the MAC's seven-airport system in Minnesota since 2016, which includes Minneapolis-St. Paul International Airport (MSP) and six general aviation airports in the Twin Cities. MSP has received the Best Airport in North America Award through the Airports Council International (ACI) global Airport Service Quality (ASQ) program for six out of the past seven years.

"I'm honored to receive this incredible recognition on behalf of the Metropolitan Airports Commission and the talented people on my team in Minnesota," said Ryks. "I'm thankful for the many stakeholders and employees I've served who have supported a commitment to excellence, innovation, and customer service that builds community and global connections, drives economic growth, and fosters greater understanding of an airport's purpose within the community."

The Excellence in Visionary Leadership Award was announced on Oct. 3 during the 2023 ACI-NA Annual Conference and Exhibition in Long Beach, Calif.

"Over the course of his decades-long career in the airport industry, Brian Ryks has continually established himself as a dynamic and respected leader," said ACI-NA President and CEO Kevin M. Burke. "Because of Brian's diligent efforts, the 38 DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE

Metropolitan Airports Commission's system of airports has grown into one of the most efficient and best rated airport organizations in North America. We are thrilled to recognize his many contributions to the MSP region and the greater airport industry with our 2023 Excellence in Visionary Leadership Award."

"Brian has succeeded in every stop along his career. We're fortunate for his collaborative leadership, acute business sense, community engagement, and compassion for the strong and diverse workforce that supports the daily operations of our airports in the region," said MAC Chair Rick King. "He's assembled and led a rock-steady team that guided the organization through the many challenges of the pandemic while exceeding in the highest levels of service through the ongoing recovery."

The award honors Ryks' 37 years in the airport industry, where he has served at every level—a career that began at the MAC in 1986 as a noise technician. In his two decades in airport management, he was part of a team that developed Denver's new airport. He went on to manage airports in Aberdeen, SD; St. Cloud, MN; Duluth, MN; Grand Rapids, MI; and then back to Minneapolis, MN.

Ryks' leadership and vision have been integral for conceptualizing programs, such as MAC's 2023-2027 Enterprise Strategic Plan. This plan sets the MAC's future in motion—incorporating goals that recognize pandemic-led changes in the industry, while ensuring continued operational efficiency and growth. Ryks has led transformations in sustainability and consumer-focus, utilizing the insights of experts and demographic data that allow for holistic improvements to the airport experience. He is also a strong industry advocate for air travel accessibility. He recently testified on Capitol Hill about MSP's accessibility programs to the House Transportation and Infrastructure Subcommittee on Aviation urging lawmakers to support funding for infrastructure investments.

About The Metropolitan Airports Commission (MAC)

The Metropolitan Airports Commission (MAC) owns and operates one of the nation's largest airport systems, including Minneapolis-St Paul International (MSP) and six general aviation airports. The MAC's airports connect the region to the world and showcase Minnesota's extraordinary culture to millions of passengers from around the globe who arrive or depart through MAC airports each year. Though a public corporation of the State of Minnesota, the organization is not funded by income or property taxes. Instead, the MAC's operations are funded by rents and fees generated by users of its airports. For more information, visit

www.metroairports.org.

National Aeronautic Association Selects Amy Spowart As President And CEO

Spowart brings a record of achievement to the nation's most historic aviation association.

WASHINGTON, DC, March 22, 2023 — The Board of Directors of the National Aeronautic Association (NAA) is pleased to announce the appointment of Amy Spowart as its new President and CEO. Spowart brings considerable association leadership experience and a track-record of developing proactive initiatives.



Amy Spowart

"Amy comes to the NAA with a background of visionary

leadership and the ability to cultivate and strengthen strategic alliances. We have no doubt she will take the NAA to a new level of national relevance," said board chair Jim Albaugh.

In her most recent role as President and CEO of the National Aviation Hall of Fame (NAHF), Spowart successfully led the effort to significantly expand the reach of the not-for-profit from a regional focus to a national level. Over her seven years as the NAHF leader, Spowart brought the organization current by developing processes and policies, and providing agile change management. She oversaw the formation of critical partnerships, including with PBS, to develop the STEAM-based educational and workforce program, Discovering Flight with the National Aviation Hall of Fame.

"The opportunity to continue celebrating aviation's most impactful people and their accomplishments is really exciting," said Spowart. "I look forward to combining the

knowledge I gained at the hall of fame with the worthy mission of the nation's oldest and most historically relevant aviation association. The NAA is the established leader in celebrating aviation achievements. It's an honor to be chosen to ensure that the NAA remains the leading voice in recognizing the past and future of this innovative industry."

Spowart will replace Greg Principato, who has served as the NAA President and CEO since 2016. Principato announced his retirement from the association in early March and will vacate the position this fall. Spowart will serve as the 33rd President of the NAA and the first female in the position in the organization's history.

"Amy has already impressed the board's Executive Committee with her ideas and vision for the NAA. We are excited by her energy and have no doubt she will build on our current momentum as our new President and CEO", said Albaugh.

About the NAA – Since 1905 the NAA has been the formal recognition of aviation achievement in the United States. In 1922, the entity was incorporated with the mission of advancing the art, sport, and science of aviation and space flight by fostering opportunities to participate fully in aviation activities and by promoting public understanding of the importance of aviation and space flight to the United States. The NAA is the official record-keeper for United States aviation and the administrator of the nation's most prestigious aviation awards including the Collier Trophy and the Wright Brothers Memorial Trophy.

Ross Perot Jr. Receives 2023 Whitman Trophy

he National Aeronautic Association (NAA) has selected Ross Perot, Jr. to receive its "Bruce Whitman Memorial Trophy." Perot is being honored for his commitment to preserving, recognizing, and sharing the impact of America's military heroes for the inspiration of aviators to come.

A native of Dallas, Texas, graduate of Vanderbilt University, and former U.S. Air Force fighter pilot, Perot is also the first person to circumnavigate the world in a helicopter. Not long after his historic flight in 1982, he served as chair of the Air Force Memorial Foundation and led a 14-year effort to build the United States Air Force Memorial in Washington, DC. In addition, Perot is the dreamer and developer of Perot Field Fort Worth Alliance Airport, which is home to a vast array of flight services, and serves as the cornerstone of one of the nation's largest inland ports.

A passionate humanitarian and devoted public servant, Perot serves on several association boards, including the U.S. Chamber of Commerce, the Hoover Institution, and is an Emeritus Board member of the Smithsonian National Air and Space Museum.

Established in 2019 by the NAA Board of Directors, the Bruce Whitman Memorial Trophy honors outstanding individuals who have made significant contributions to aviation or aerospace in the United States, and who by working with museums and other institutions, have promoted an appreciation by students and the broader public of the sacrifices and legacy of members of the military service. Created in honor of the aerospace executive and philanthropist bearing its name, Bruce Whitman was posthumously named the first recipient of the trophy in 2019.

National Aeronautic Association Announces 2023 Recipients of the McDonald Award

he National Aeronautic Association (NAA) has announced that Gregory Feith, Wilson Leach, Jim Richmond, and Robert Stangarone are the 2023 Distinguished Statesmen of Aviation.

The NAA's Board of Directors established the "Wesley L. McDonald Distinguished Statesman and Stateswoman of Aviation Award" on October 16, 1954. The award honors outstanding living Americans who, through their efforts over an extended period of years, have made significant contributions to aeronautics and reflected credit upon America and themselves.

One Pilot's Story
Bob Worthington, Author of "The Left Seat"

Under Fire with ARVN Infantry
ARVN Infantry
Rener of Combat Advisor ARVN Infantry
Re

Previous recipients of this award include Chuck Yeager, Olive Ann Beech, Clay Lacy, and Majorie and Katherine Sinson.

"The history of aviation is marked by great people who have impacted the industry in extraordinary ways with their life's work," said Amy Spowart, President and CEO of NAA. "This award serves to recognize these remarkable people. This year's awardees represent excellence in vital industry sectors. From safety to leadership and beyond, this distinguished group is excellence personified, and we are honored to recognize them and their contributions to aviation."

The 2023 honorees are:

Gregory A. Feith for "his lifetime achievements as an aviation safety expert, champion of best practices, and advocacy elevating aviation safety awareness and training for the next generation."

Wilson Leach for "his extraordinary dedication to serving the aviation field over more than half a century and perseverance in nurturing AIN from a small publishing company into an industry leader."

Jim Richmond for "significant advancements in aviation, earning hundreds of aero sports awards, inspiring youth into aviation-related careers, and serving the U.S. as an aero sports competitor and in the military."

Robert Stangarone for "his nearly five decades of skilled leadership as a communicator, strategic thinker, journalist, and chronicler of aviation history.

The selection committee for the award includes:

Jim Albaugh, NAA Board Chair

J. Randolph Babbitt, former FAA Administrator

Cassandra Bosco, Stateswoman of Aviation (2021)

Peggy Chabrian, Stateswoman of Aviation (2016)

Julie Clark, Stateswoman of Aviation (2020)

David Franson, Statesman of Aviation (2020)

Jonathan Gaffney, Statesman of Aviation (2019)

William Garvey, Statesman of Aviation (2018)

Angela Gittens, Stateswoman of Aviation (2021)

Michael Huerta, former FAA Administrator

John King, Statesman of Aviation (2018)

Martha King, Stateswoman of Aviation (2018)

Richard Koenig, Statesman of Aviation (2012)

Jean Lydon-Rodgers, Stateswoman of Aviation (2021)

ryville of Constitution (202

William Shea, Statesman of Aviation (2022)

About the NAA

The National Aeronautic Association (NAA) is the oldest national aviation organization in the United States and is dedicated to advancing of the art, sport and science of aviation in the United States. The organization encompasses all areas of flight from skydiving and models to commercial airlines, military aircraft, and spaceflight.

NAA administers the nation's most prestigious aviation awards, including the Collier Trophy and the Wright Brothers Memorial Trophy. The Awards & Events Board oversees nominations and selections year-round.

The National Aviation Hall of Fame, Honoring Aerospace Legends To Inspire Future Leaders®

NASA's Ingenuity Mars Helicopter Team accepts the 2023 Milton Caniff Spirit of Flight Award.

DAYTON, OHIO - The National Aviation Hall of Fame (NAHF) Milton Caniff "Spirit of Flight" Award was created in 1981 to acknowledge significant contributions to aviation by a group or organization. It is named in honor of noted artist and aviation enthusiast, the late Milton Caniff, a longtime NAHF supporter. NASA's Ingenuity Mars Helicopter Team accepted the 2023 award at ceremonies September 28, 2023, in Dayton, Ohio, in recognition of their groundbreaking achievements in aerospace innovation and exploration. Among previous recipients of the award are Wings of Hope, Doolittle Raiders, Apollo Crewmen, Tuskegee Airmen, and Women Airforce Service Pilots.

Since its founding through an Act of Congress in 1964, the National Aviation Hall of Fame has confidently honored, celebrated, and shared the vision, innovation, skill, and courage of national heroes who lent their genius to further our nation's aerospace legacy. Two hundred sixty-two (262) of the nation's premier air and space pioneers have been inducted to date.

The NAHF's Heritage Hall and Education Center, located in Dayton, Ohio, welcomes nearly 400,000 visitors each year to share and celebrate enshrinees, their accomplishments, and their impact on developments in aviation, from early flight to space travel.

To help break down barriers and ensure that all children have equal access to quality aviation and aerospace education, the NAHF developed and launched a comprehensive STEAM-based education program, "Discovering Flight: Learning with the NAHF." With partners at ThinkTV/ PBS and support from The Ohio Department of Education, Cirrus Aircraft, Gulfstream, and others, the NAHF has launched the nation's only standards-aligned aviation and aerospace STEAM classroom curriculum for grades PreK-6. The program will reach more than 200,000 students by the end of 2023. (STEAM or Science, Technology, Engineering And Math.)

For more information on the National Aviation Hall of Fame, visit <u>nationalaviation.org</u>.

Read previous issues of Midwest Flyer Magazine, or a specific article at midwestflyer.com - Archives



Illinois Aviation Hall of Fame 2023



2023 inductees to the Illinois Aviation Hall of Fame (Back Row - Left to Right): James P. Johnson, Gary Eiff for Mona Marcec, Arthur Christopher Lawson (Chris), Chad Carlson (for EAA Chapter 461). (Front Row - Left to Right): Ken Rapier for Janet Harmon-Bragg, Luanne Wills-Merrell, Jacquelyn Hunt for Rufus A. Hunt Jr., Kimberly Bruce for Mary Ann Eiff, and Bob Werderich for the Illinois Aviation Academy.

n October 5, 2023, the Illinois Aviation Hall of Fame inducted seven people, and two organizations for the "Spirit of Flight Award."

The inductees for 2023 included Janet Harmon Bragg, Mary Ann Eiff, Rufus A. Hunt Jr., James P. Johnson, Authur Christopher Lawson, Mona Marcec and Luanne Wills-Merrell.

Recipients of the Spirit of Flight Awards were EAA Chapter 461 based at Clow International Airport, and the Illinois Aviation Academy based at DuPage County Airport in Bollingbrook and West Chicago, Illinois, respectively.

Held at the Hilton Garden Inn of West Chicago, there were approximately 190 attendees. Of the seven recipients, four were awarded posthumously with three present to receive their plaques. Representatives from EAA Chapter 461 and the Illinois Aviation Academy were also present to receive their

awards.

Although not currently posted, full biographies of each inductee and award recipient will be available on the Illinois Aviation Hall of Fame website: https://www.ilavhalloffame.org/

Information regarding the nomination and selection criteria for the "Spirit of Flight Award" will also be available on the website.

To be considered for induction, "the recipient must have given the time, experience and expertise to shepherd Illinois aviation from its earliest beginnings to a level where recreational, corporate and airline service is at the pinnacle of air transportation in the world."

The Illinois Aviation Hall of Fame was founded in 1970, but there was a hiatus of approximately 14 years before it was re-established.



Wisconsin Inducts 2023 Hall of Famers

OSHKOSH, WIS. - The Wisconsin Aviation Hall of Fame inducted Steve Krog, Tom Bouchard, Lynn Erickson, and Merton Baker at a ceremony held at the EAA Aviation Museum in Oshkosh, Wis. on October 14, 2023.

Steve Krog started flying in 1969, earning his commercial multi-engine, instrument, and instructor ratings. He began teaching tailwheel flying in the early '80s in Hartford, Wisconsin, flying nights and weekends for 15 years. In January 2000, Steve and his wife, Sharon, assumed management of The Cub Club, and in 2004, Steve left his day job to open Cub Air Flight, LLC. He trained students exclusively in Piper J-3 Cubs. He also served as president of the Midwest Antique Airplane Club for 13 years. EAA members can read Steve's columns in EAA Sport Aviation magazine.

Tom Bouchard, of Ashland, Wis., began flying for Midstate Airlines in 1966. During his 23-year career with the airline he accumulated nearly 5,000 hours in Beech 18s. He served as their check airman and chief pilot, training many pilots in Beech 99s, Fairchild Metroliners, and Fokker 27s. In 1995, he started flying Cessna Citations for CG Bretting Manufacturing Company, eventually logging 28,000 total hours in his 38-year career. Tom was appointed to the Wisconsin Council of Aeronautics by Governor Patrick Lucey in 1976. He was awarded the FAA's Wright Brothers Master Pilot Award in 2012. Tom continues to be active in Ashland's aviation scene.

Lynn Erickson, of Waunakee, Wis., has devoted the past 20 years to resurrecting airports and educating students. Using his 17,000 hours of flight experience as chief pilot for an international flight department, worldwide demonstration pilot for Cessna Citations and Caravans, and personal love of flight in his Cessna 182 and Great Lakes biplane, Lynn has

worked tirelessly in his retirement giving back to aviation. Since 2005, Lynn has participated in the construction of two hangar complexes with 14 hangars at the Waunakee Airport (P63) and installed a self-service fuel system at the Sauk Prairie Airport, which he owns and manages. Lynn's skill at developing and maintaining good relationships has resulted in active community involvements in events including annual picnics, airport/community breakfasts, safety programs, career days, and an outreach program touting the benefits of an airport. The National Business Aviation Association (NBAA) has honored Lynn with its 15,000 Hour Safety Award.

Born in Tomahawk in 1924, Merton Baker entered the U.S. Army Air Corps in 1943 and received his pilot wings a year later. As a B-24 pilot in Italy, he flew 35 missions and was reassigned to Fairfield Suisun Air Base in California flying C-54s in the Pacific Theater. When he left the service, Merton became a civilian flight instructor in North Carolina before being recalled to active service during the Korean War, flying T-33 and B-47 aircraft in Kansas. From 1957-62, Merton was a B-52 acceptance pilot, and later an Air Force plan representative for Cessna. During Vietnam, he flew 150 combat missions in the EB-66, receiving the Distinguished Flying Cross. He retired as a Major General in 1981 having logged 7,000 hours in 21 different aircraft. He passed away in 2000.

The Wisconsin Aviation Hall of Fame was founded in 1985 by Carl E. Guell of the Wisconsin DOT Bureau of Aeronautics. Since then, more than 140 men and women have been inducted, and dozens of aviation scholarships have been awarded. Inductee plaques are displayed at the EAA Aviation Museum in Oshkosh, Wisconsin, where the annual induction ceremony is held. For more information, visit www.WAHF.org or call WAHF President Kurt Stanich at 262-424-6747.



U.S. Senator Jerry Moran Named 2023 Wichita Aero Club Trophy Recipient

Trophy Gala to take place February 3, 2024

WICHITA, KAN. – At a special reception held November 8, 2023, the Wichita Aero Club (WAC) announced that United States Senator Jerry Moran is the recipient of the 2023 Wichita Aero Club Trophy. The Wichita Aero Club Trophy was created to recognize both contemporaneous accomplishment or a lifetime of achievement. WAC will celebrate Sen. Moran at its annual gala on February 3, 2024.

"Senator Moran has been a leading advocate for our region's aviation supply chain not only nationally, but on a global scale – making him an excellent selection for the Wichita Aero Club Trophy," said Ashley Bowen Cook, WAC Board Chair, Trophy Committee Chair and Greteman Group President.

The nomination included the following remarks:

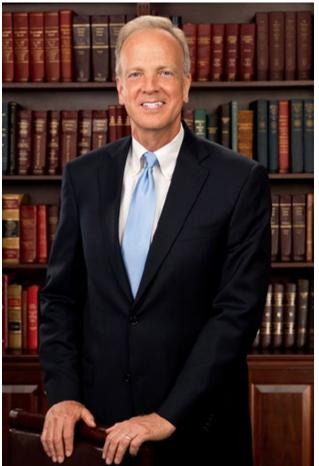
Senator Moran has transformed our regional aerospace community through his tireless championing of Wichita's assets on global stages. His efforts help us leverage our tradition and prepare us to lead the world in the future of aerospace.

Senator Moran works tirelessly on behalf of the Wichita region's aviation industry. He has increased opportunities for our local suppliers by hosting industry leaders such as Blue Origin, United Launch Alliance, SpaceX, and Lockheed Martin Space. He continues to support our community's successful attempts to secure large federal grants and has brought key members of the federal cabinet to Wichita, including the Secretary of Commerce, the Attorney General, the Secretary of Veterans Affairs, the NASA Administrator, the Secretary of the Air Force, and many more.

Senator Moran is a champion for aerospace, for Wichita, and for all of Kansas. His tireless efforts will impact generations, helping Wichita to remain now and forever, the Air Capital of the World.

About U.S. Senator Jerry Moran

Sen. Moran was first elected to the United States Senate in 2010. He serves as lead Republican on the Appropriations Subcommittee on Commerce, Justice, Science, and Related 44 DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE



U.S.Senator Jerry Moran

Agencies, which allows him to lead the funding decisions that impact men and women working at agencies like the Department of Justice, the FBI, NASA, the United States Trade Representative and the Department of Commerce, to name a few. Sen. Moran is a strong supporter of NASA's aeronautics programs, while also advocating for priorities that advance the effectiveness of our nation's scientists and medical researchers, and the competitiveness of our country and the economy.

Sen. Moran is also a member of the Defense Appropriations Subcommittee and serves as Ranking Member of the Commerce Subcommittee on Aviation Safety, Operations, and Innovation. Through his committee assignments, Sen. Moran advocates on behalf of Kansans regarding many issues vital to the state's economy,

including the aviation industry. Since joining the U.S. Senate, Sen. Moran has also been a leading advocate for issues related to entrepreneurship, job creation and innovation. He is committed to putting policies in place that foster a progrowth environment where businesses can succeed without government-imposed barriers.

Sen. Moran serves as a member of several caucuses that enhance his ability to represent Kansans' interests in the United States Senate, including co-chair of the Senate Army Caucus, the Senate Travel and Tourism Caucus, the Senate Aerospace Caucus and the Senate Defense Community Caucus.

About the Wichita Aero Club Trophy

The Wichita Aero Club Trophy is awarded annually to a living person, group, or organization with a strong relationship to the greater Wichita area on the basis of exemplary achievements in the field of aviation or aerospace accomplished during the past year or, as appropriate, over an extended period or career. The Trophy Selection Committee

includes members of the WAC Board of Directors and prominent members of the aviation community.

Prior WAC Trophy Recipients:

- 2022: Dr. John Tomblin, WSU Senior VP for Industry and Defense Programs; NIAR Executive Director
- 2021: Ron Ryan, Pilot, Airline Founder and Philanthropist
- 2020: No award due to COVID-19
- 2019: Clay Lacy, Legendary Pilot and Founder of Clay Lacy Aviation
- 2018: Jack Pelton, Experimental Aircraft Association CEO
- 2017: Lynn Nichols & Yingling Aviation
- 2016: Paul Bowen, Aviation Photographer
- 2015: Doc's Friends Restoration Team

- 2014: Al Higdon, Co-Founder of Sullivan Higdon & Sink Advertising
- 2013: Russell W. Meyer, Jr., Chairman Emeritus, Cessna Aircraft Company
- 2012: John O'Leary & Airbus Americas Engineering
- 2011: Jeff Turner, Spirit AeroSystems CEO
- 2010: Velma Wallace

About the Wichita Aero Club

The Wichita Aero Club was established in 2008 to foster and promote interest in aviation, to provide a forum that focuses on the industry's issues and achievements, and to bring together those with a passion for flight in an environment that expands and enhances professional relationships and furthers cooperation and understanding. Learn more at wichitaaero.club.

First Female Thunderbird Pilot Keynotes 2023 NBAA-BACE

WASHINGTON, DC – Col. Nicole Malachowski (USAF, retired) was the keynote speaker at the 2023 NBAA Business Aviation Convention & Exhibition (NBAA-BACE), October 17-19 in Las Vegas, Nev.

From the moment Malachowski first saw military jets fly overhead when she was 5 years old, she was determined to fly them one day. Undeterred



Col. Nicole Malachowski (USAF, retired)

by the fact that women were prohibited at that time from becoming fighter pilots, she joined the Civil Air Patrol in middle school. After soloing at age 16 and participating in Air Force Junior ROTC in high school, Malachowski was accepted as a cadet at the U.S. Air Force Academy. By the

time she graduated from undergraduate pilot training at Columbus Air Force Base, Malachowski was among the first women chosen to fly modern jet fighters.

A combat veteran who served as an F-15E flight commander, evaluator, instructor pilot and flight lead, Malachowski has more than 2,300 hours in six different Air Force aircraft. She has also served as a White House Fellow and was the executive director of a White House initiative for which she advised First Ladies Michelle Obama and Jill Biden on topics relating to service members, veterans, and military families.

Perhaps her greatest achievement was her selection as the first female Thunderbird pilot, and the first woman to fly on a Department of Defense military jet demonstration team.

Now retired from the Air Force, Malachowski works to ensure that the important work needed to encourage women to consider aviation careers is an ongoing, long-term strategic priority for the military and the aviation industry.

NBAA Announces Recipient of 2023 Cartwright Leadership Scholarship

WASHINGTON, DC – The National Business Aviation Association (NBAA) announced October 11, 2023, that Tara Adamson is the 2023 recipient of the "Jake Cartwright Leadership Scholarship," created to support candidates in the association's Certified Aviation Manager (CAM) program.

Adamson is a QAM with FlightWorks who helps ensure quality is at the forefront of her job and believes the CAM certification is the way to help her elevate her career in business aviation and showcase her breadth of knowledge across multiple areas. The scholarship, which is underwritten

by Solarius Aviation, funds a CAM candidate, paying for all certification costs, including application fees, study guides and the exam-registration fee.

The scholarship is named in honor of Solarius Vice Chairman Jake Cartwright, the highly respected industry veteran who has played a pivotal role in growing the company's domestic and international business. A former commercial pilot and Marine Corps aviator who served in Vietnam, Cartwright was president and CEO of TAG Aviation USA.

American Institute of Aeronautics and Astronautics Announces Class of 2024 Associate Fellows

RESTON, VA. – The American Institute of Aeronautics and Astronautics (AIAA) announced October 3, 2023, its newly elected Class of 2024 "Associate Fellows." AIAA will formally honor and induct the class at its Associate Fellows Induction Ceremony and Reception, January 10, 2024, at the Hyatt Regency Orlando, Orlando, Florida, during the 2024 AIAA SciTech Forum, January 8-12.

"Congratulations to each member of the Class of 2024 Associate Fellows," said AIAA President Laura McGill. "This distinguished group of professionals has made significant and lasting contributions to the aerospace profession. They exemplify expertise, passion, and dedication to advancing their specific disciplines. They are truly shaping the future of aerospace."

The grade of Associate Fellow recognizes individuals "who have accomplished or been in charge of important engineering or scientific work, or who have done original work of outstanding merit, or who have otherwise made outstanding contributions to the arts, sciences, or technology of aeronautics or astronautics." To be selected as an Associate Fellow, an individual must be an AIAA Senior Member in good standing, with at least 12 years of professional experience, and be recommended by three AIAA Associate Fellows.

"The AIAA Associate Fellows personify the innovation that drives our industry forward," said Dan Dumbacher, AIAA Executive Director. "The members of the Class of 2024 Associate Fellows embody the ingenuity and commitment that are crucial for developing solutions to the complex questions raised across the aerospace community. On behalf of the Institute, we recognize the families, friends, and colleagues who support the Associate Fellows as they contribute in such a meaningful way to the aerospace community."

For more information on the AIAA Honors Program or AIAA Associate Fellows, contact Patricia A. Carr at

patriciac@aiaa.org.

Class of 2024 AIAA Associate Fellows

Antonio Abad, Hispasat

Jaemyung Ahn,

Korea Advanced Institute of Science and Technology

Vineet Ahuja, Whisper Aero

James Akers, NASA Glenn Research Center

Douglas Allaire, Texas A&M University

Phillip Ansell, University of Illinois at Urbana-Champaign

Jonathan W. Arenberg,

Northrop Grumman Space Systems

Friedrich Bake,

Bundesanstalt für Materialforschung und -prüfung (BAM – Federal Institute for Materials Research

and Testing)

Bryan Barmore, NASA Langley Research Center

Mark Bateup, DSTO Brisbane

Moble Benedict, Texas A&M University

Ernesto Benini, University of Padova

Andreas Bernhard, Lockheed Martin Rotary and Mission Systems, Sikorsky

David Douglas Boyd Jr., NASA Langley Research Center

Johnathon Caldwell, Lockheed Martin Space

Scot Campbell, Airbus

John Carsten, Axient

Andrew Cary, Boeing Engineering Operations & Technology

Giuseppe Cataldo, NASA Goddard Space Flight Center

Nacer Chahat, NASA Jet Propulsion Laboratory

Matthew Chamberlain, NASA Langley Research Center

Kurt Chankaya, Lockheed Martin Aeronautics Amanda Chou, NASA Langley Research Center Souma Chowdhury, University at Buffalo Todd Citron, The Boeing Company Thomas Clancy, Aurora Flight Sciences, A Boeing Company Stephen F. Clark, Boeing Engineering Test & Technology Jon Paul Clauss, Lockheed Martin Aeronautics Matthew Cribb, Anduril Industries James Cutler, University of Michigan Alberto Da Silva Mello, Embry-Riddle Aeronautical University Steven Dam, SPEC Innovations Ashoke De, Indian Institute of Technology Kanpur Joshua David Deaton, Air Force Research Laboratory Joyce A. Dever, NASA Glenn Research Center Saikat Dey, U.S. Naval Research Laboratory Evan Dill, NASA Langley Research Center Andrew Driesman, Johns Hopkins University Applied Physics Laboratory

Soumyo Dutta, NÁSA Langley Résearch Center Atri Dutta, Wichita State University
Alaa Elmiligui, NASA Langley Research Center Debra Emmons, The Aerospace Corporation Gabriele Enea, MIT Lincoln Laboratory Cody Fleming, Iowa State University Ryan Fontaine, MIT Lincoln Laboratory Thomas Fortin, Aerojet Rocketdyne Brian Freno, Sandia National Laboratories Xinfeng Gao, Colorado State University Denis Gély, ONERA

Kevin W. Gilbert, NASA Goddard Space Flight Center Peter Grant, University of Toronto Justin Gray, NASA Glenn Research Center Lt. Col. James L. Gresham, U.S. Air Force Jason N. Gross, West Virginia University Sami Habchi, CFD Research Corporation Kentaro Hara, Stanford University William Hart, NASA Jet Propulsion Laboratory Robert Haynes, DEVCOM Aviation & Missile Center Richard Heisler, Johns Hopkins University

Applied Physics Laboratory Stephen M. Helland, NASA Headquarters Kenneth E. Hibbard, Johns Hopkins University

Applied Physics Laboratory

Ian Higgins, U.S. Navy

Stefanie Hirt, NASA Glenn Research Center Jimmy C. Ho, U.S. Army Combat Capabilities

Development Command Aviation & Missile Center

Kerianne Hobbs, Air Force Research Laboratory

Jacob Hochhalter, University of Utah

Jerrod W. Hofferth, Air Force Research Laboratory

Paul Hsu, Spectral Energies, LLC

Barbara Imhof, LIQUIFER Systems Group

Mark Karpenko, Naval Postgraduate School

Jeffrey L. Kauffman, University of Central Florida

Cetin Kiris, Volcano Platforms Inc.

Ryan Kobrick, Blue Origin, LLC

John Koelling, NASA Langley Research Center

Bernd Korn, DLR - German Aerospace Center

Ryan Leo, Leidos

Peter Liever, CFD Research Corporation

Justin Locke, Raytheon Technologies

Stefan Loehle, University of Stuttgart, Institute of Space Systems (IRS)

Ronald A. Madler, Embry-Riddle Aeronautical University

Jeff Marchetta, University of Memphis

Benjamin Marchionna, Electra.aero

Eric Hill Matlis, University of Notre Dame

Bryan Mesmer, University of Alabama in Huntsville

Scott Meyer, Purdue University

Kenji Miki, NASA Glenn Research Center Steven Miller, University of Florida Nicholas J. Morley, Air Force Research Laboratory Nicholas Mueschke, Southwest Research Institute Nathan Murray, University of Mississippi Yuri Muzychka, Memorial University of Newfoundland Sirish Namilae, Embry-Riddle Aeronautical University William P. Norby, Boeing Research and Technology Charles D. Norton, NASA Jet Propulsion Laboratory, California Institute of Technology Ann Over, ARNexGen, LLC Pedro Paredes, National Institute of Aerospace Bernard Parent, University of Arizona Michael Patterson, NASA Langley Research Center Jason Rabinovitch, Stevens Institute of Technology Ryan Reynolds, Lockheed Martin Aeronautics Sergio Ricci, Politecnico di Milano (Polytechnic University of Milan)

Jacob Rome, The Aerospace Corporation Michael Ross, Sandia National Laboratories Alejandro Salado, University of Arizona Ralph A. Sandfry, Lockheed Martin Corporation Michael Sangid, Purdue University George Satornino, Sierra Lobo, Inc. Vincent Schultz, NASA Langley Research Center Rajnikant Sharma, University of Cincinnati David J. Sharp, Jacobs Space Exploration Group Kevin Shinpaugh, Virginia Polytechnic Institute & State University Arvin Shmilovich, Boeing Research and Technology Jackelynne Silva-Martinez, NASA Johnson Space Center Matthew Snyder, U.S. Air Force Academy, HQ USAFA/DFEM

Weihua Su, University of Alabama Wenting Sun, Georgia Institute of Technology Erik Theunissen, Information Systems Delft David Thipphavong, NASA Ames Research Center Terri Lynn Brock Tramel,

NASA Marshall Space Flight Center, Arnold Engineering Development Center and Aerojet (retired)

Sedina Tsikata, Georgia Institute of Technology Steve Ulrich, Carleton University

Kyriakos G. Vamvoudakis, Georgia Institute of Technology Hemali Vyas, NASA Jet Propulsion Laboratory, California Institute of Technology

Haifeng Wang, Purdue University Kevin Weed, Ball Aerospace

John Whittenbury, Northrop Grumman Aeronautics Systems Douglas Wickert, U.S. Air Force

Ali Y. Tamijani, Embry-Riddle Aeronautical University Shashank Yellapantula, National Renewable Energy Laboratory

Chih Chieh Yen, Jacobs Technology Inc.

The American Institute of Aeronautics and Astronautics (AIAA) is the world's largest aerospace technical society. With nearly 30,000 individual members from 91 countries, and 100 corporate members, AIAA brings together industry, academia, and government to advance engineering and science in aviation, space, and defense. For more information, visit www.aiaa.org, and follow AIAA on Twitter, Facebook, LinkedIn, and Instagram.

Over 40 years of reliable maintenance!

Kevin Dunrud & Tim Hieb Owners

info@bolducaviation.com



Hours of Operation

Monday - Friday 8:00 AM - 4:30 PM

bolducaviation.com 763 - 780 - 1185

Specializing In Engine Overhaul & Repair

Services include (but are not limited to):

- Precision electronic engine component balancing
- Cylinder overhaul and repair
- Cylinder grinding .010, .015
- Continental starter adapter overhaul
- · Cleaning of all engine parts
- Magnaflux and zyglo inspection of parts
- Rebush and line boring of counterweight bushings
- · Reconditioning of connecting rods and rocker arms
- Overhaul and/or 500-hr inspection of magnetos, float type carburetors and turbo controllers
- Ultrasonic inspection of Continental crankshafts
- Reconditioning of crankcases and crankshafts
- · Engine inspections and test running









FAA Repair Station #YZ8R163C • Anoka County Airport • 8891 Airport Road • Box 8A • Blaine. MN 55449

GAMA Statement On Nomination of Mike Whitaker As FAA Administrator

WASHINGTON D.C. - General Aviation Manufacturers Association (GAMA) President and CEO, Pete Bunce, released the following statement regarding U.S. President Joe Biden's nomination of Michael G. Whitaker to be the Federal Aviation Administration (FAA) Administrator:

"The FAA, the civil aviation industry and the American flying-public deserve a leader with experience in managing large organizations and an aviation background to develop an aviation system that is safer, more efficient, and technologically advanced. We are pleased to see that the

Biden Administration has nominated Mike Whitaker, who we feel possesses the leadership skills, management experience



Michael G. Whitaker

and aviation knowledge needed to lead the FAA. Having worked with Mr. Whitaker in his previous role as FAA Deputy Administrator, we are confident that his intimate knowledge of how the agency functions and interfaces with the Department of Transportation, Congress and the industry will improve his ability to navigate the challenges now facing the FAA. We also believe that Mr. Whitaker and Katie Thomson, the recently appointed Deputy Administrator, will be a strong leadership team for the agency. GAMA supports the confirmation of Mr. Whitaker to provide needed stability and

direction for the FAA during this transformative time for aviation."

EAA Ray Aviation Scholarship Program Reaches 400 Pilots

OSHKOSH, WIS. – The EAA Ray Aviation Scholarship program continues to make a difference for young people pursuing aviation dreams, as 400 scholarship recipients have completed flight training. The scholarship program is funded by the Ray Foundation, managed by EAA, and administered through the EAA Chapter network. Through the program, EAA provides deserving youth up to \$11,000 to help cover

flight training expenses. EAA received \$1.8 million from the Ray Foundation for 2023.

Since the program's introduction in 2019, more than 730 scholarships have been provided to young people with a passion for aviation. The current pilot certificate completion rate for Ray Scholars is 81 percent, with approximately 240 more scholars currently in flight training



Read previous issues of

Midwest Flyer Magazine,

or a specific article at

midwestflyer.com - Archives

Oshkosh Resident Fred Stadler Becomes First Pilot To Fly 10,000 Kids In EAA Young Eagles Program

OSHKOSH, WIS. – Fred Stadler, a longtime EAA volunteer both year-round and at EAA AirVenture Oshkosh, has become the first pilot to fly 10,000 kids free of charge as part of the Experimental Aircraft Association's Young Eagles program. Stadler, who began flying kids as part of the program in 2000, reached the milestone on August 26, 2023, with a flight at the EAA Aviation Museum's Pioneer Airport.

The EAA Young Eagles program began in 1992 with EAA-member pilots volunteering their time to fly kids ages 8-17 to introduce them to the world of flight. Since the first flights at the 1992 EAA Fly-In Convention, more than 50,000 volunteer pilots have flown more than 2.3 million young people.

"Fred's remarkable accomplishment is indicative of the dedication of our Young Eagles volunteers to make a difference and build the future of flight," said Jack J. Pelton, EAA CEO and Chairman of the Board. "There are so many young pilots today who got their start when an EAA-member pilot provided that first flight, igniting a spark that became a career for many. Fred and all those EAA members have earned our congratulations and sincere thanks for their efforts, along with a call for other aviators to join us in flying Young Eagles."

Many of Fred Stadler's Young Eagles flights came as a volunteer pilot at the EAA Aviation Museum's Pioneer Airport, a seasonal operation that re-creates the feel of a 1930s airfield. Young visitors can receive a free Young Eagles flight (with parental permission) when they visit the museum during the Pioneer Airport season.

In addition to his Young Eagles flying, Fred Stadler is a dedicated EAA volunteer throughout the year. He has also flown Pioneer Airport's Travel Air and Swallow biplanes, becoming the de facto historian on those airplanes. In addition, he



Fred Stadler with one of 10,000 kids he has flown through EAA's Young Eagles program at EAA's "Two Millionth Young Eagles" celebration. *EAA Photo*

volunteers substantial time during AirVenture in the North 40 aircraft camping area and is highly active in EAA Chapter 252 in Oshkosh.

Stadler and his late wife, Carol, received EAA's "Henry Kimberly Spirit of Leadership Award" in 2006 for their volunteer efforts by Oshkosh-area residents.



Fred Stadler takes a Young Eagle for a flight in EAA's TravelAir.

EAA Photo by Dick Knapinski



Congratulations to the winners! Samuel Treffinger landed on the line twice! Matt Granzow landed just over the line at 3 feet. A.J. Henry landed just over the line at 14 feet.

Milwaukee County Airport Photos

Milwaukee Timmerman Airport Hosts Spot Landing Contest

xperienced and inexperienced pilots alike participated in this year's "Spot Landing Contest," September 9, 2023, at Milwaukee Lawrence J Timmerman Airport (KMWC). Milwaukee County, which owns and operates Timmerman Airport and Milwaukee General Mitchell International Airport (KMKE), provides a grand prize of \$200.00 and food and refreshments. The prize money adds to the fun, but it is the challenge of the competition that lures pilots to the annual event. The contest was sponsored by Spring City Aviation to promote safety and the airport.

Participants arrived at Timmerman by 10:00 a.m. for a mandatory safety briefing. The contest got underway at 10:15 a.m.

Each contestant was given two attempts to land on the white target line, or as close beyond the line as possible, and only the best landing counted. Any landing short of the line was not counted.

Pilots had their choice of executing a touch-and-go to reenter the pattern for their second attempt, or landing to a full stop, then taxiing back to takeoff again.

Power and flap adjustments could be used to make the most accurate landing, but flaps could not be raised unless executing a go-around.

Legitimate go-arounds were okay, as safety was the focus of the contest. But go-arounds were not to be used to cheat.

Jamming, slamming, or deliberately landing hard on the runway was not allowed. Only normal, descent landings counted. The judges adjusted scores for any such landings that resulted in bouncing, side-loads or porpoising.

Only three aircraft could be in the pattern at any one time, and the judges' decisions were final.

When it was their turn, pilots contacted Timmerman Ground Control and informed the controller they were participating in the contest and ready to taxi to the designated runway.

Pilots then taxied out in assigned groups of three to avoid congestion on the taxiway, but procedurally, there were no shortcuts. Pilots did their normal preflight checks and runups at the end of the runway.

The airport remained open during the competition, and participants got excellent cooperation from the tower. Transient aircraft were given the right-of-way, so as not to disrupt normal airport operations.

In addition to the "Spot Landing Contest" in September, Milwaukee County also sponsors a "Flour Drop Contest" in June.





DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE 51

St. Louis Downtown Airport Saw Continued Growth In Flight Operations During FY2023



St. Louis Downtown Airport

CAHOKIA HEIGHTS/SAUGET, ILL. – St. Louis Downtown Airport (KCPS) announced flight operations at the airport increased to a total of 104,156 during the fiscal year ending June 30, 2023. The data follows a positive trend in recent years of flight operations continuing to rebound from significant air travel impacts felt during the coronavirus pandemic. In fact, the operations are surpassing levels seen before the global pandemic began in 2020.

Flight operations reported in FY2023 represent a 2.4% increase over numbers reported in FY2022, and a 7% increase over pre-pandemic totals reported in FY2019. This marks the second consecutive year of growth at St. Louis Downtown Airport, which is in St. Clair County on 1,000 acres in Cahokia Heights and Sauget and is the busiest general aviation airport in Illinois, outside of Chicago.

"The trend in increased flight operations is a positive sign that air travel is returning to normal for private and business travel customers," said Mary Lamie, Executive Vice President of Multi Modal Enterprises for Bi-State Development, which owns and operates the airport. "The biggest increases in flight 52 DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE

operations were seen toward the end of our fiscal year, so we are optimistic that this upward trend will continue into the next year."

While flight operations have grown, charter flights in and out of the airport have remained steady with 274 reported in FY2023, up 2.6% from FY2019. Fuel sales in FY2023 surpassed those in FY2022, but still haven't reached the levels seen during the last pre-pandemic fiscal year. Data collected shows that 1,606,416 gallons of fuel were sold during FY2023, an increase of 9.8% over FY2022.

"Fuel sales have been climbing since the pandemic ended, which is encouraging," said Sandra Shore, Director of St. Louis Downtown Airport. "We are happy to see the overall positive trends as more aviation customers choose to fly in and out of St. Louis Downtown Airport. We continue to strengthen relationships with our tenants and partners who rely on the airport to accommodate their various needs."

Recent airport investments will support future growth. In mid-August, a \$5.4 million Ground Engine Run-Up and Compass Calibration Pad project was completed. It will

serve aircraft maintenance and manufacturing providers operating at the airport and support high-tech aerospace maintenance and trade skill jobs. The new areas were made possible through a \$5 million Rebuild Illinois grant and will help improve operational safety, boost airport businesses, and increase global competitiveness for the bi-state region.

The Ground Engine Run-Up portion of the project includes new airfield pavement with jet blast deflectors used to perform aircraft maintenance tests. Up to 500 high-power engine run-up tests are expected to be conducted annually by the aircraft maintenance tenants, such as Gulfstream Aerospace Corp. and West Star Aviation that will utilize this new area. The area will reduce aircraft engine run-up noise by more than 50%. The new Compass Calibration Pad enables the magnetic compasses in each aircraft to be regularly calibrated – free from any magnetic influencers – to help ensure the safety of the crew and passengers.

St. Louis Downtown Airport continues to be a significant contributor to the local and state economies. According to the most recent study conducted by the Illinois Department of Transportation (IDOT), St. Louis Downtown Airport helps generate more than \$422 million in economic impact for the region, including factors such as on-airport activity and visitor spending. The airport supports significant activity from recreational, charter and business flying, as well as

flight training at Saint Louis University's Oliver L. Parks Department of Aviation Science, the nation's oldest flight school still in operation, along with Ideal Aviation and St. Louis Flight Training. Additional activities supported by the airport include government operations, military training, real estate tours, medical transport, aerospace technology research, and glider flying. St. Louis Downtown Airport remains a major job center in the St. Louis area, providing 1,522 full-time and part-time jobs through airport tenants and operations.

To learn more about St. Louis Downtown Airport, visit www.stlouisdowntownairport.com.

About Bi-State Development

Bi-State Development (BSD) owns and operates St. Louis Downtown Airport and the Gateway Arch Riverboats, and operates the Gateway Arch Revenue Collections Center and Gateway Arch trams. BSD is the operator of the Metro public transportation system in eastern Missouri and southwestern Illinois, which includes the 87-vehicle, 46-mile MetroLink light rail system; a MetroBus vehicle fleet of approximately 18 battery electric vehicles and nearly 400 clean-burning diesel buses that operate on 59 MetroBus routes; and Metro Call-A-Ride, a paratransit fleet of 123 vans. BSD also operates the St. Louis Regional Freightway, the region's freight district.

Illinois Announces Its Airport & Heliport of the Year Awards For 2023

by Jim Bildilli

n keeping with its annual tradition, the Illinois Division of Aeronautics announced its 2023 picks for "Airport and Heliport of the Year." The presentations were made at the fall meeting of the Illinois Public Airports Association in Galena, Illinois.

The facilities are selected by Division of Illinois personnel based on the facility's record of outstanding maintenance, outstanding safety record, customer satisfaction, community service and the promotion of aviation education within Illinois.

For 2023, the recipients are as follows:

- Willard Airport, Champaign: Primary Airport of the Year
- Lewis University Airport, Romeoville: Reliever Airport of the Year
- Mount Vernon Outland Airport: Large General Aviation Airport of the Year
- Salem-Leckrone Field:
 Small General Aviation Airport of the Year

- Tri-County Airport, Yates City: Private Airport of the Year
- Vertiport Chicago: Heliport of the Year

According to the recently completed Illinois Airport System Plan, there are 100 public-use, public and privately-owned airports, and heliports in Illinois. It also reports nearly 3,000 aircraft registered with the FAA. However, that number could be higher since some aircraft located in Illinois are actually registered in other states. The Illinois Airport Economic Impact Study estimates that aviation in Illinois supports more than 492,000 jobs, which equates to an estimated annual payroll of \$21.9 billion and a total economic impact of \$95.4 billion.

If you'd like to learn more about aviation in Illinois, the Illinois Aviation System Plan and the economic impact of aviation in the state, visit https://www.ilaviation.com/

Arrowhead Eagles Celebrate 75 Years of Aviation In Cook County



(L/R) Kathy Finn, Airport Manager Rodney Roy, Eagles President Mike Raymond, and Ginger Berglund.

GRAND MARAIS, MINN. – The Arrowhead Eagles Aviation Organization held its annual fundraising event at Grand Marais/Cook County Airport September 16, 2023. The fly-in and drive-in pancake breakfast is a tradition that welcomes community members and pilots to an open house at the airport. It's a chance to see airplanes up close, talk with pilots and even take an airplane ride. Three local vintage aircraft were on display -- a 1940 Piper J-3 Cub, 1946 Taylorcraft (which won Grand Champion at EAA AirVenture Oshkosh), and 1958 Piper Tri-Pacer, along with numerous other aircraft, and a 1938 Stinson S-10 project.

At this year's event, the Eagles honored people who have had a major impact on aviation in Cook County. A commemorative plaque was created to honor Clarence Krotz and his family for their efforts in constructing and operating the first officially recognized airport in the county. The airport was dedicated in 1948 as part of the national airspace system and supported by the Minnesota Department of Transportation, Office of Aeronautics. Kathy (Krotz) Finn and Ginger (Krotz) Berglund accepted the plaque and shared memories of their father's efforts in building the "Devil Track Airport." Kathy's 1940 Piper Cub was on display, along with DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE

the announcement of an upcoming book sponsored by the Cook County Historical Society, which chronicles the flying life of Kathy and her J-3 Cub.

The original Cook County Airport Advisory Committee was also honored for their work in creating the new airport, located just "up the hill" from the Krotz airfield. The group was tasked with finding a location, seeking state and federal approvals, and financial support to construct the new Grand Marais/Cook County Airport. Dedicated in 1992 and designated KCKC, the airport is part of the airport system plan in Minnesota.

Members of the committee present to accept the award were Bruce Dahlman, Duane Ege, Darold Rosbacka and Dave Tuttle. Member John McClure was unable to attend, and three members are no longer alive – Irving Hansen, Wes Hedstrom and Ted Backstrom. All are recognized on a plaque commemorating their efforts. Karen Blackburn was also singled out for her ongoing contributions to the airport's financial recording and bookkeeping.

Both plaques will hang in the Arrival/Departure Building at the Grand Marais/Cook County Airport, located at 123 Airport Road in Grand Marais.

Cirrus Opens New Innovation Center In Duluth

DULUTH, MINN. – Cirrus Aircraft announced September 26, 2023, the grand opening of its Innovation Center located at its headquarters at Duluth International Airport (KDLH) in Minnesota. The Innovation Center is dedicated to the development of the next-generation innovation that supports Cirrus Aircraft's products and services, while preserving the mission it serves, making personal aviation more approachable.

Cirrus Aircraft has transformed its 189,000-square-foot building on 39 acres into its Innovation Center. Innovation Center capabilities include a larger and more capable Material and Processes Lab, a new Integration Test Lab, an upgraded Advanced Design & Development Lab, and new environmental equipment and testing capabilities, as well as a significant increase in floor space for development and testing. Additionally, the Innovation Center features flexible and collaborative workspaces and amenities to provide an optimal team environment.

Over 30 engineers and technicians have been added to the Duluth facility since 2022, now exceeding 300 people.

Hartzell Propeller Sold!

PIQUA, OHIO – Hartzell Propeller Inc. and its related companies have been sold to the private equity firm Arcline Investment Management. Arcline Investment Management, an \$8.9 billion private equity firm, has acquired Hartzell Aviation from Tailwind Technologies. The deal includes Hartzell's two business units, the propeller business, and Hartzell Engine Tech, which makes engine subsystems ranging from turbochargers to engine mounts.

With roots going back to 1860, the company evolved into the Hartzell Walnut Propeller Co., using walnut wood to create propellers at the encouragement of Orville Wright. In 1914, a relationship between Orville Wright and Robert Hartzell led to the manufacture of the first Hartzell airplane propeller in 1917. The company's founding principle of "Built on Honor" has been central to its corporate values from the very beginning.

Hartzell Propeller Inc. is headquartered in Piqua, Ohio. Arcline owns more than 20 companies, mostly based in the United States, with products varying from aerospace and defense to health and safety, medical technology, energy, and food and beverage.

Minnesota Aviation Trades Association Promoting & Protecting General Aviation!

Support your local aviation businesses, so they may remain strong to support you in flight training, aircraft maintenance, fuel sales, and hangar rental:

- Horizon Aircraft Engine Services, Blaine, Minnesota
- Cirrus FBO, Blaine, Minnesota
- North Central Aviation, St. Paul, Minnesota
- Oasis Aero, Willmar, Minnesota
- Wipaire, South St. Paul, Minnesota

Aviation businesses interested in becoming a member, and supporting an organization that promotes and protects the interests of general aviation, are urged to contact Nancy Olson at 952-851-0631 Ext. 322, or email ngo@thunderbirdaviation.com

In addition to government relations, MATA promotes aviation education through flight training scholarships. Learn more at https://www.mata-online.org/

MATA - The Voice of General Aviation Businesses In Minnesota Since 1945

AERONAUTICS BULLETIN



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

Ryan E. Gaug, Interim Director

Minnesota DOT Office of Aeronautics 395 John Ireland Blvd. • St. Paul, MN 55155-1800 651-296-3000

All About Airport Pavement Markings

by Nate Sievert

Airport Operations Program Administrator

MnDOT Aeronautics

avement markings at airports in the state of Minnesota are refreshed and maintained through FAA standards and guidelines in FAA advisory circular 150/5340-1M. This advisory circular encompasses an entire airfield's pavement, which includes specifications for runways, taxiways, and aprons. The Minnesota Department of Transportation holds Minnesota's local public airports to these requirements and recommendations. The regulations are described below (in part), along with information on how MnDOT helps keep markings up to code for reliable and safe surfaces at airports.

Pavement Markings

- Equipment can provide:
 - · If markings meet required reflective levels
 - · Green/Blue Good
 - · Orange/Red Below Standards
- · Imagery of:
 - Pavement
 - Markings
 - Airport Landscape



The State of Minnesota requires that markings at all state public airports meet the FAA's requirements and will refresh/repaint markings at those airports to meet minimum standards on a reoccurring basis.

The paint must be kept at minimal thickness for each application. If it exceeds a certain thickness over time, all layers will be removed and reapplied. The measurement of this thickness is referred to as a "mil." The number of mils is determined through a specified formula while applying paint (wet mil) and after the paint has dried (dry mil). If too many mils are applied on a surface, the marking(s) will start to crack and adhere poorly to the pavement.



Equipment used to measure reflectivity.



Another tooling to use to measure depth, reflectivity, and width/length of segment.

Airport pavement marking effectiveness has another important factor: marking reflectivity. To obtain reflectivity requirements, glass beads are dropped on paint markings during application and have a required amount during application to achieve initial reflectivity. The minimum requirement for reflectivity after application is lower due to expected wear and tear of a surface, yet must exceed a minimum level to meet airport safety specifications. If reflectivity drops below the specified level, it must be repainted to meet FAA requirements from Advisory Circular 150/5340-1M.

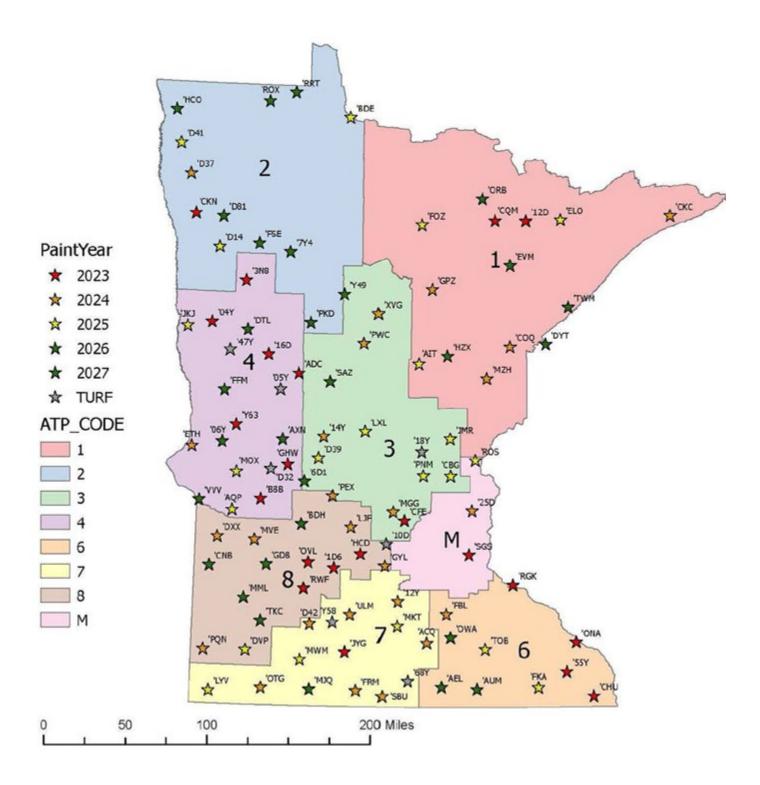


Example of threshold at the end of its useful life



Recently painted runway.

The Minnesota Department of Transportation tests the effectiveness of markings around the state through the use of reflectometers (reflectivity sensors) and aerial software. This testing aids MnDOT in making decisions on when airports need to be repainted, have a removal scheduled, and why paint is deteriorating. In addition to this, the state is taking measures to improve the process in which paint is applied and maintained at airports for safe operations.



There are many different types of pavement markings required on an airport's paved surfaces. The types of markings vary depending on the approach systems and design categories for any given airport. Specific markings may include threshold, aiming point and sideline markings. For example, a threshold marking is required at airports with a non-precision or precision approach, but is typically not required at an airport with a visual approach.

Paint requirements are also dependent on the runway design. For example, threshold markings are required on all runways with category C or D airplanes. Additional markings may be required in certain situations on taxiways or aprons as well, where a holding position marking, or a delineating precision obstacle-free zone (POFZ) marking may be needed. Marking elements vary from airport to airport. Pilots must understand the different markings, and which ones may be present at any location a pilot may visit.

Any questions or concerns about pavement markings at state airports may be directed to nathanial.sievert@state.mn.us.



Wisconsin Department of Transportation, Bureau of Aeronautics panel discussion. (From left to right):

Midwest Flyer Magazine Photo by Dave Weiman

Matt Messina, Airport Engineering Unit Supervisor, matthew.messina@dot.wi.gov, 608-267-7108; Matt Malicki, Airport Engineering Section Chief, matthew.malicki@dot.wi.gov, 608-267-5273; Tami Weaver, Airport Program Section Chief, tamera.weaver@dot.wi.gov, 608-267-4492; Max Platts, Aeronautical & Technical Services Section Chief, thomas.platts@dot.wi.gov, 608-266-1745; Lucas Ward, Airport Construction Standards Chief, lucas.ward@dot.wi.gov, 608-266-2729; and David Greene, Director, dot.wi.gov, 608-266-2789.

Wisconsin's 67th Annual Aviation Conference... Everything An Airport Manager Needs To Know & More!

APPLETON, WIS. - The 67th Wisconsin Aviation Conference was held September 20-22, 2023, at the Paper Valley Hotel in Appleton, Wisconsin. Conference attendees embarked on a journey celebrating aviation's future, including discussions of environmental issues, operations, funding, technological advancements, and sustainable practices. The lineup of speakers included experts who are at the forefront of aviation. Their insights and knowledge provided invaluable perspectives, inspired new ways of thinking, and equipped participants with the tools needed to navigate the everevolving aviation landscape beyond the conference sessions.

Leading the conference was Rachel Engeler, President of the Wisconsin Airport Management Association (WAMA), the sponsoring organization.

Appleton International Airport (ATW) was the host airport. According to a 2015 economic impact study conducted by the Wisconsin Bureau of Aeronautics, ATW provided \$676 million in economic output, and supported 3,200 jobs, to the local economy in Outagamie County.

ATW is home for Air Wisconsin Airlines, Gulfstream

Aerospace, MaxAir Charter, the Fox Valley Technical College Public Safety Training Center, and the Aircraft Rescue Fire Fighting (ARFF) Training Center.

It was announced at the conference that the Wisconsin Department of Transportation, Bureau of Aeronautics (BOA), has undertaken a new economic impact study for commercial and general aviation airports, selecting "Jviation," a Woolpert Company, to conduct the study. The staff working on the project has completed more than 30 similar studies for other states.

Jviation will collect information and report annual estimated economic impacts for airport management, airport business tenants, average annual capital investment, and general aviation visitor spending. They will report employment, payroll, spending, and total yearly economic activity results. The data will provide BOA, airports, aviation stakeholders, elected officials, communities, and others with important information on the economic contributions of each airport and statewide impacts.

The BOA economic impact study staff has completed the

initial step in the data collection process. This portion of the process included documenting the results of the first group of surveys from airports, business tenants, and visitors, along with a webinar. The next steps in the study will be to finish collecting data, analyze the direct impacts, and measure the annual economic activity of airports.

In late August, BOA held the first of three planned project webinars for airports to provide information on the study process, products, and schedule, and to share the preliminary results from the initial surveys. Some of the findings include 1.8 million visitors arriving annually on commercial airline flights and more than 400,000 on general aviation aircraft. Additionally, there were more than 300 business tenants at the studied airports.

The BOA wishes to thank Wisconsin airports for their participation in responding to the surveys and inquiries. These timely and thorough responses will give Wisconsin airports a more robust Economic Impact Study outcome. WisDOT expects the study to be completed in the spring of 2024.

The Bipartisan Infrastructure Law's (BIL) Airport Improvement Grant (AIG) program was discussed. This funding is available to each airport that is part of the National Plan of Integrated Airport Systems (NPIAS), which includes up to 79 Wisconsin non-primary airports. BIL AIG is like the annual non-primary entitlements, but what is dissimilar is how the funding is obtained compared to the Block Grant through the Airport Improvement Program (AIP). This presentation reviewed the funding available, how long it will be available, the differences in obtaining BIL versus AIP, and most importantly, emphasized the need to plan how to use BIL funding at airports. The speaker was Mark Graczykowski, PE, Airport Program Engineer, Wisconsin BOA.

Participants had the opportunity to meet with Wisconsin Bureau of Aeronautics staff and hear what's new at that office. The Bipartisan Infrastructure Law was a big part of those discussions.

While all airports are a little different, they face similar issues. The General Aviation Roundtable Forum allowed airport managers and county and city officials to discuss general aviation airport topics of interest and ask questions in a non-judgmental environment.

What is possible? How can we support each other? A round table discussion on current and exciting topics facing commercial service airports was held.

Being asked to serve on an airport board or commission is a great honor, but it can be a challenging task. This open roundtable with airport officials, board members, and commissioners was designed to address the issues they face and to celebrate the successes they have achieved.

For airports located in one of the more than 120 municipalities in the state with a stormwater district, stormwater runoff fees can have a major impact on their annual operating budget. There are a variety of credits available through most districts. Airport managers learned

strategies to minimize their fees and ways to alleviate the financial burden of rainfall and snowmelt. Howard "Buck" Barker, PE, of RVT Engineering Services, was the featured speaker.

All airports must deal with snow and ice to one degree or another for a large part of the year. This session provided insight for airport managers, operations/maintenance staff, and contractors on snow removal best practices, tips and tricks, and FAA regulations.

Speakers included Kurt Stanich of Waukesha County Airport, and Emily Whitt and David Sweeney of Milwaukee Mitchell International Airport.

Attendees learned what WAMA is doing to advocate for airports at the state and federal levels through WAMA's lobbying efforts. Brian Grefe, A.A.E., Airport Director, Central Wisconsin Airport, and Mark Wadium, Outagamie County Lobbyist, were featured speakers.

Other topics included runways as the lifeblood of an airport and why crosswind runways may not be eligible for AIP funding, even if they were built with AIP funds in the past. Ian Turner, A.A.E., Airport Director, La Crosse Regional Airport; Jim Schell, C.M., Airport Director, Wittman Regional Airport; and Evan Barrett, AICP, C.M., Manager, Midwest Aviation Planning, Mead & Hunt, covered this topic.

Many factors need to be considered when planning for non-aeronautical development at an airport. This presentation identified these factors and the options for implementing non-aeronautical land uses. As part of the planning process, the applicability of Section 163 also needs to be considered. This presentation provided an overview of Section 163 and how airports should coordinate with the FAA to receive a Section 163 determination when planning for non-aeronautical development. The speaker was Zachary Puchacz, C.M., ACE, Airport Planner, at Mead & Hunt.

The Wisconsin Bureau of Aeronautics conducted an "Airport Project Development 101 Session" in which airport managers learned how to get started on a project. Managers learned about the steps involved in planning, designing, and bidding, and why initial project planning well in advance is crucial to keep projects on schedule. Speakers included Lucas Ward, Airport Construction Standards Chief, Wisconsin BOA; Matt Messina, PE, Airport Engineering Section Unit Supervisor, Wisconsin BOA; and Matt Malicki, PE, Airport Engineering Section Chief, Wisconsin BOA.

In addition to Wisconsin Bureau of Aeronautics officials, airport division officials from the Federal Aviation Administration were also on hand briefing attendees on funding opportunities and challenges.

Airport managers had the opportunity to hold "plan-on-the-fly meetings" with both Wisconsin Bureau of Aeronautics staff, and FAA Chicago Airports District Office personnel about issues specific to their airport.

Fly-ins, fundraisers, socials, and other special events engage the community and help airports succeed. Giving young people a firsthand opportunity to build or fly airplanes can be life changing. Airport managers learned how to take a grassroots approach to build a community of supporters around their airport to help inspire people of all ages and ensure that aviation enjoys a vibrant future. Speakers included Larry Sullivan, Founder, Kettle Moraine Youth Aviation; and Jeff Russell, Director, Recreational Aviation Foundation.

The topic of how to alleviate the waiting list for hangar space was led by Greg Cullen, C.M., Airport Director, Southern Wisconsin Regional Airport, and Jim Schell, C.M., Airport Director, Wittman Regional Airport.

Encroachment of incompatible land uses and obstructions near airports hinder the long-term utility of Wisconsin airports. State law affords airport sponsors a strong tool to protect critical airport infrastructure. Doing this requires a properly designed and effectively implemented local ordinance, which considers the future, involves the public, and has local support. This session was an opportunity to review and improve existing local ordinances and discuss how to implement them effectively. Speakers included Hal Davis, C.M., Airport Compliance Program Manager, Wisconsin BOA, and Melissa Underwood, Senior Aviation Planner, SEH.

Marketing events for commercial and GA airports was led by Christina Cole, Senior Digital Aviation Strategist, Advance Aviation.

Bergstrom Automotive President and CEO Tim Bergstrom attended the conference to talk about growth and development in today's market. Bergstrom Automotive, headquartered in Neenah, Wisconsin, is one of the top 50 automotive retailers in the U.S.

The F-35 jet fighter replaced the F-16 at the Wisconsin Air National Guard's 115th Fighter Wing at Dane County Regional Airport in Madison, Wisconsin in 2023. Colonel Bart Van Roo, the Wing Commander, shared the story behind the design and deployment of the new 5th generation aircraft. Col. Van Roo explained how the F-35 represents a true paradigm shift in fighter aircraft design and performance. He explored the F-35's cutting-edge features in-depth, highlighting its groundbreaking capabilities, maneuverability, and state-of-the-art sensor integration.

Awards & Recognition

Each year, the Wisconsin Airport Management Association recognizes individuals who have made an impact on aviation in the state.

Terry Donovan of Mead & Hunt received the "Airport Engineer of the Year Award." Terry has been with Mead & Hunt since graduating from UW-Platteville with a degree in Civil Engineering. He is the project manager for Southern Wisconsin Regional Airport, Dane County Regional Airport, and Seymour Johnson Air Force Base in South Carolina, and routinely assists with other airport projects. He is a tremendous asset, contributing to the success of airports. Terry balances complex projects at multiple airports while



Rachel Engeler, President of the Wisconsin Airport Management Association (WAMA), presented the "Airport Engineer of the Year Award" to Terry Donovan of Mead & Hunt. Midwest Flyer Magazine Photo by Dave Weiman



Rachel Engeler, President of the Wisconsin Airport Management Association (WAMA), presented Charity Zich of Chippewa Valley Regional Airport, with WAMA's "Distinguished Service Award." Midwest Flyer Magazine Photo by Dave Weiman

ensuring projects are completed safely. He goes the extra mile, often working after hours to ensure projects stay on track. Additionally, he volunteers his time, serving on the Wisconsin Aviation Conference planning committee.

Charity Zich, Director at Chippewa Valley Regional Airport, received WAMA's "Distinguished Service Award" for 2023. Charity has served the airport for 17 years. She continually makes outstanding contributions to Wisconsin aviation through her tenure at the airport and in serving on the WAMA Board of Directors. Charity has helped the board keep its past in sight, while working on the airport challenges of today and tomorrow. Her uniquely pragmatic problem-

Rachel Engeler, President of the Wisconsin Airport Management Association (WAMA), presented the "Blue Light Award" to Dick Knapinski of EAA. Midwest Flyer Magazine Photo by Dave Weiman

solving approach has been most evident in her efforts to keep commercial air service in Eau Claire. Charity is a leader in her community, and in the aviation industry throughout Wisconsin and beyond.

WAMA's "Blue Light Award" for excellence in aviation journalism was presented to **Dick Knapinski**, who has promoted aviation for more than 30 years. Dick has been EAA's director of communications since January 2010, having advanced to that position after serving as a member of EAA's public relations/marketing staff since 1992. His responsibilities include working with media

representatives who report on EAA activities throughout the year. Those activities include EAA AirVenture Oshkosh, which has a yearly attendance of more than 600,000 spectators, and attracts 10,000 aircraft and over 800 members of the international media. Before joining the EAA staff, Dick worked for broadcast and print media outlets throughout Wisconsin. He continues to write for newspapers and magazines, and co-authored the book "EAA Oshkosh: The Best Aviation Photography."



Rachel Engeler, President of the Wisconsin Airport Management Association (WAMA), presented Weber of Appleton International Airport with WAMA's "Person of the Year Award." Midwest Flyer Magazine Photo by Dave Weiman

Abe Weber, Director of Appleton International Airport, received WAMA's "Person of the Year Award." Abe has served on the WAMA Board of Directors since 2012, and as past president of the organization. He has been an active leader in WAMA's advocacy, leading past efforts to pass sales tax exemptions for aviation parts and labor in Wisconsin. As a WAMA governmental affairs committee member, over the past year Abe has shepherd efforts to pass legislation to help airports deal with nuisance wildlife.

He continues to look for opportunities to improve aviation for all Wisconsin airports.

Bob O'Brien received WAMA's "Lifetime Service Award," having worked in the aviation industry for nearly four decades. He served in leadership roles at various airports throughout Wisconsin, Indiana, Iowa, Illinois, Minnesota, and Georgia. The list of airports is long, including Madison, Green Bay, La Crosse, Platteville, Fort Wayne, Dubuque, Springfield, Brainerd, and Columbus (GA). In 2012, after nine years at Chicago Rockford International Airport, Bob was appointed the executive director of WAMA and served in that position until 2020. He also served 20 years in the U.S. military, mostly in the National Guard and Army Reserves.

Hal Davis, C.M., the Airport Compliance Manager with the Wisconsin Department of Transportation, Bureau of Aeronautics, recognized pilots who have achieved



Hal Davis, C.M., the Airport Compliance Manager with the Wisconsin Department of Transportation, Bureau of Aeronautics, recognized pilots who have achieved various levels in the "Fly Wisconsin Passport Program." Midwest Flyer Magazine Photo by Dave Weiman

various levels in the "Fly Wisconsin Passport Program." The Wisconsin Department of Transportation, Bureau of Aeronautics, and the Wisconsin Airport Management Association, continue to team up to bring the airport passport program to Wisconsin. Pilots and their passengers may earn awards by flying into Wisconsin airports, attending FAA safety seminars, and visiting Wisconsin's aviation attractions.

The program launched on September 1, 2017. Since then, over 2,500 participants have registered. Pilots wishing to register for the program should visit wisconsindot.gov/flywi. Mail-in registration cards can also be found at airports.

Achieving the Gold Level for 2023 were Sydney Cohen,

Michael Morrow, Mark Owen, and Gregory Patchel.

Achieving the Silver Level for 2023 were Sydney Cohen, Dennis Davis, Debi Lett, Brian Lett, Michael Morrow, Mark Owen, and Gregory Patchel.

Achieving the Bronze Level for 2023 were Sydney Cohen, Debi Lett, Brian Lett, Katherine Morrow, Michael Morrow, Mark Owen, Gregory Patchel, and Dwight Simpson.

Jim Schell, Airport Director at Wittman Regional Airport in Oshkosh, was elected President of WAMA, and Harold Mester, Director of Marketing and Public Affairs at Milwaukee Mitchell International Airport and Milwaukee Timmerman Airport, joined the executive committee.

WAMA also welcomed the following new board members: Todd Berry, Manager, Prairie du Chien Municipal Airport; Aimee Scrima, Operations Supervisor, Waukesha County Airport; and Mike Shaw, Manager, West Bend Municipal Airport.

The 2024 Wisconsin Aviation Conference will be held October 2-4, 2024, at the Madison Marriott West in Middleton, Wisconsin. For additional information, email director@wiama.org.















DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE 63



State Aeronautics directors gather for the annual NASAO Convention & Trade Show in Rogers, Arkansas.

Daniel Stanley Photo

What's NASAO?

by Jim Bildilli

any of us are familiar with the acronyms AOPA, EAA, NBAA, GAMA and several others, but there's also an aviation organization called the National Association of State Aviation Officials or NASAO for short. NASAO was organized in 1931 and held its 92nd Annual Convention and trade show in Rogers, Arkansas in mid-September 2023. Starting with the Wright brothers' first flight at Kitty Hawk, many states became interested in promoting the aviation industry as a potential benefit to their local, regional, national, and international economies, not only on an economic basis, but for safety as well. Recognizing that this common interest would affect every state, its efforts were concentrated on developing national standards for airport and airway design, as well as standards for pilots, accident investigation and search and rescue operations. Due to many states establishing their own standards, it was soon recognized that an effort to establish national standards was needed.

NASAO is comprised of aviation officials from all 50 states, Guam, and Puerto Rico. Unlike most "alphabet" group organizations, NASAO doesn't represent any one special interest group. Instead, its main focus has been to establish uniformity of safety and the standardization of airport regulations to ensure a true national air transportation system. It also seeks to guarantee that those standards take into account the needs of local, state and regional areas. To that end, the United States enjoys an aviation system that is second to none.

Besides the standardization of aviation regulations, NASAO has been highly involved with the review of new technologies and their impacts on new federal rules and regulations. In addition, it also provides review and comments on pending federal funding legislation. In fact, it was through its efforts, and that of three states which performed a demonstration program, that convinced Congress to pass State Block Grant Program legislation. Collectively, member states invest over \$3 billion annually for planning, operations, infrastructure development, maintenance, and navigational aids at more than 5,000 airports. The sharing of information and new technologies and initiatives between states through NASAO has helped reduce design and construction costs for airports, including navaids and maintenance. In many cases, the reduced costs have been the result of increased efficiencies.

As a pilot, did you know that NASAO is directly involved in your preflight planning? Most of the information contained in FAA's Chart Supplement (formerly the Airport Facilities Directory) is the result of a contract with NASAO. That contract allows each state to collect and update information that is not only used by the FAA, but by other organizations which publish similar documents. Currently, there's a three-year cycle on collecting information and entering it into the Airport Data and Information Portal (A.D.I.P). However, states, airport managers, owners and other responsible individuals are allowed to access the system (with proper identification and passwords) and will frequently update an airport's information.

In short, NASAO represents the states' opinions and views, and makes recommendations to Congress, the Administration, and the FAA. They accomplish this by working closely with the U.S. Department of Transportation (USDOT), National Aeronautics and Space Administration (NASA), Transportation

Research Board (TRB), and the American Association of State Highway and Transportation Officials (ASHTO). NASAO is the only organization of its type to have official Memorandums of Understanding with the FAA and the U.S. Department of Agriculture (USDA). Besides its strong relationships with the other aviation-related associations, NASAO also maintains associations with the National Governors Association and the National Conference of State Legislatures.

NASAO is governed by a Board of Directors that is comprised of an Executive Committee and Regional Directors. Gregory Pecoraro is President and CEO. At this year's convention and trade show, a new Executive Committee and Regional Directors were sworn in. For 2023-2024, the Executive Committee includes: Kyle Wanner (ND) Chair, Martin Blake (IN) Vice-Chair, Clayton Stambaugh (IL) Treasurer, Frank Farmer (AL) Secretary, and David Ulane (CO) Immediate Past Chair. The elected Regional Directors are as follows: Tim McClung (IA) Central, Greg Campbell (VA) Eastern, Michael Trout (MI) Great Lakes, Denise Garcia (MA) New England, Kenji Sugahara (OR) Northwest Mountain, John Paul Saalwaechter (TN) Southern, Grayson Ardies (OK) Southwest, and Kurt Haukohl (NV) Western-Pacific.

Included in the more than 300 attendees at this year's conference were representatives of 40 aviation-related companies and aviation directors from 37 states and territories. Staffers from several states made presentations and participated in panel discussions. Topics covered at this year's

conference included the Airport Inspection and Weather Camera Programs, Block Grant updates, Communicating the Economic Value of Airports to the Public, Engaging the Public on Infrastructure and Public Safety, Linking Airports and Communities through Innovative Statewide Programs, Maintaining Airport Pavements, New Technologies for Airport Operations and Airport Obstructions, Readiness for the Advancement of Mobility Initiatives, Delivering on UAS Integration and Community Partnerships, Complexities of Airport Consolidation and Relocation, Building Regional Aviation Education and Workforce Development Pipelines, and Creative Approaches to Airport Construction and Small Community Engagement.

As you will note, the subjects covered very diverse topics and not all are listed above. However, what you will notice is that they are directed toward the sharing of individual state initiatives that are in the interest of aviation safety and the efficient use of limited funds to promote programs and expand aviation education and workforce.

If you are interested in learning more about NASAO, you can visit its website at nasao.org and become familiar with its staff and identify the regions in which your state is located. Many state aviation agencies maintain a similar database that covers safety, construction initiatives, future plans and proposed legislation.

Next year's conference will be held September 7-11, 2024, at the Sheraton Pittsburgh Hotel at Station Square.

GA Industry Announces "Climbing. Fast. Campaign"

As reported by Eric Blinderman Senior Director of Communications, AOPA

eaders from general aviation associations and entities gathered at the National Business Aviation Association Convention and Exhibition in Las Vegas, October 17, 2023, to announce the "Climbing. Fast." initiative, a new advocacy campaign designed to spotlight how GA is making progress on its goal of achieving net-zero carbon emissions from flight.

General aviation industry stakeholders, including AOPA President Mark Baker, announced a new initiative to achieve the shared goal of net-zero emissions.

The multimedia effort is designed to "coordinate and elevate a message about the game-changing technologies that are fostering business aviation sustainability on the ground and in the air."

The unified industry campaign includes 10 stakeholder organizations, whose leaders stated their support for the new initiative.

"What business aviation contributes to society is immeasurable and its commitment to sustainability unmatched. The 'Climbing. Fast.' initiative will help showcase the industry's resolve toward positive change through

sustainable programs, and the Aircraft Owners and Pilots Association is pleased to support this admirable campaign," said AOPA President Mark Baker.

As a cross-platform public affairs campaign, the "Climbing. Fast." program will spread the industry's message about sustainability through a dedicated website, advertising, video, a multichannel social media presence, and a targeted media relations program. The "Climbing. Fast." campaign will emphasize business aviation's value as an incubator for innovation. For example, investments in airplane winglets, lightweight airframe composites, satellite-based navigation systems, and other carbon-cutting technologies have led to a decrease in emissions from business aircraft by 40 percent in just four decades, while new business aircraft are up to 35 percent more efficient than the previous generation.

The "Climbing. Fast." initiative will also highlight the pioneering work toward making its net-zero carbon emissions goal a reality, a combined effort that includes development of eco-friendly aircraft that use ultra-efficient engines, and alternative energy sources such as hybrid, electric, and even hydrogen-powered propulsion. The campaign also supports the production of sustainable aviation fuels that can reduce net-carbon emissions by 80 percent, along with the use of smarter, faster, more efficient flight routing that requires less energy.



Midwest Antique Airplane Club Grassroots Fly-In 2023

Article & Photos by Skot Weidemann

he annual "Midwest Antique Airplane Club" (MAAC) Grassroots Fly-In was held September 7-10th, 2023 at the Brodhead, Wisconsin airport (C37). Brodhead is a south-central Wisconsin small town with limited hotel options, but the airport features a 2,440 ft. grass runway (9/27) and offers many camping options, either near one's aircraft along the tree line, or in an area on the southeast corner of the airport designated for camping, motor homes and trailers.

The fly-in is a specialized gathering (open to MAAC members only), which makes the event unique and non-commercial. It is a showcase for carefully maintained and operated Golden Era antique aircraft and an assortment of other models from the earlier days of aviation. This year's fly-in welcomed 200-plus aircraft of 100 different types from at least 20 states. But who's counting?

The fly-in attracts no shortage of (round) radial engines, tube and fabric taildraggers, many open cockpit aircraft, and 66 DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE

a few replicas and homebuilt replicas. Aviators of all ages from coast to coast fly in with their antique aircraft, and a few members even catch flights from Canada and England to attend. An impressive number of youth attended, who are into their own restoration projects and flying; and a few A&Ps, who benefit from a collective, unmatched level of expertise in and around the airport; and many seasoned flyers attended. At 80 years young, Ted Miller continues to hold the record for "Longest Distance Flown" to attend the fly-in from his home in Santa Rosa, Calif. in his 1943 open cockpit Stearman.

The combination of MAAC members, local EAA Cheeseland Chapter 431 members, and Kelch Aviation Museum supporters (all based in Brodhead, Wisconsin), makes the mix of dedicated staff and volunteers special for the weekend. There are no organized airshows, no air traffic control tower, or loudspeakers, nor thousands of spectators as you see at EAA AirVenture Oshkosh. However, there are continuous takeoffs and landings, frequent fly-bys (understatement), ride hopping, and lots of socializing around











DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE 67









the airfield and in hangars, and a welcoming bonfire pit. This slice of history takes place every year in late summer, always the second weekend in September, and always with hopes for good flying weather, and a great safety record.

Volunteers make the fly-in a success, from folks who sign in attendees at the registration table, and EAA 431 Chapter members who serve several great meals to include pancake breakfasts, a barbecue, and a fish boil. The Kelch Aviation Museum alone is worth visiting Brodhead during the MAAC Fly-In or throughout the year to browse a superb/still-flying aircraft collection, an extensive historical documents archive, its "fly market," or to enjoy soft-serve ice cream.

MAAC volunteers who mow the lawn, pump fuel, and tend to other areas, make the difference for this 40-plus-year social flying club at this location.

After dark, open hangars welcome onlookers with many get-togethers between old friends and new, and an outdoor theater shows old aviation movies for all to enjoy.

MAAC welcomes individuals, families, and anyone with a common interest in old flying machines, their history, and the people who fly them. Bonus: after an initial new member fee of \$25.00, the annual renewal remains at only \$10.00. Interested? Become a member today! www.maacgrassroots.net/join

Internet contacts related to the MAAC Grassroots Fly In:

www.maacgrassroots.net/about www.eaa431.org

www.kelchmuseum.org

EDITOR'S NOTE: This article was written with the assistance of MAAC staff.





Midwest LSA Expo 2023

by Jim Bildilli

MT. VERNON, ILL. – September 7-9, 2023, marked the fifteenth anniversary of the Midwest LSA Expo. The Expo is an annual event held at Mt. Vernon Municipal Airport (KMVN) located in southern Illinois.

Airport Director Chris Collins, his staff and a large group of volunteers, ensure that the event goes smoothly. This year's crowd was one of the largest in the history of the event. The airport easily handled the extra crowd and aircraft with its two runways, ILS, a spacious ramp and an excellent FBO.

The main runway (05/23) is $6,496 \times 150$ feet with a crosswind runway (15/33) at $3,146 \times 100$ feet. For some of the LSA aircraft, a parallel turf strip to the main runway was available.

The event was certainly family friendly with a free camping area provided for both primitive (read as tent) and the "glamping" crowd (like me) who like to "plug in" their trailers and motor homes. For the "non-LSA-interested" attendees, the city was hosting the 47th anniversary of the Cedarhurst Art and Craft Fair with live music, good food, and as they described, a "plethora of artisans with unique offerings."

Those of us who remember airshow performer, Charlie Wells, and his Pitts Special, probably heard him saying that "the greatest fear of flying is starvation." And if you've flown enough, you can certainly understand the meaning of that phrase. However, that certainly isn't the case at KMVN with the "Bonnie Café." It's one of a very limited number of restaurants where the town's residents actively frequent the facility. They are open seven days a week from 6 AM until 8 PM, specializing in buffet-style dining, and have reasonable prices with discounts for seniors over 55.

There were 31 exhibitors with several providing demonstration flights. With the excellent weather, there were a record number of demonstration flights held over the three-



day event. With the large facility and the relatively uncrowded airspace, the Midwest LSA Expo provides an excellent opportunity to try out an aircraft you've considered buying!

The FAA's Wings seminars started each day at 11:00 AM and continued until 2:30 PM. Friday's afternoon seminar presented by Steve Goetz of Southern Illinois University went two hours longer and covered the preparation for taking the Sport and Private Pilot checkrides.

Steven Bateman's presentation covered AOPA's "Flying Club Initiative." FAA Safety Team members Nick Loftus and Clive Adams covered "Transitioning to Experimental, Homebuilt or LSA." Bob McDaniel lectured on "Mixing it up in the Traffic Pattern," and Dan Johnson provided insight into the proposed mosaic changes to the current LSA regulations. Dan reminded his audience that the comment period is more than halfway over, and if you have any comments or suggestions, it was time to submit them. If you are not familiar with the proposed changes, he suggested that you go to his website www.bydanjohnson.com where you can find a link to Roy Beisswenger's USUA/LAMA Study Guide and also a video.

If you missed this year's Expo, do yourself a favor and plan to attend in 2024... you will find it fun and interesting.



Indiana Seaplane Pilots Association Celebrates 21st Anniversary With Splash-In & Wedding

by Randy Strebig President, Indiana Seaplane Pilots Association

OUTSTANDING!! Might be the ultimate summary in a single word to describe the 21st Annual Indiana Seaplane Pilots Association Splash-In, September 23-24, 2023, on Lake James at Pokagon State Park in Angola, Indiana. A glorious Midwest September weekend delivered the nearly perfect conditions for a splash-in. The event resulted in 33 seaplanes participating and volunteers were second to none!

Once again, the event reported a 100% safety record.

70 DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE

Jakob Mckenney, who is a walking Wikipedia of all things airplanes, participated again as the announcer. Randy Rhodes and his daughter, Sara, along with Scott Millard, seamlessly handled the Friday and Saturday aircraft operations. And it seems that I could no longer make this event happen without Joe Willig as my wingman.

We had a beautiful evening for our Saturday evening barbecue and bonfire at my airstrip on the other side of the lake. Once again, our local Land O' Lakes Lions Club prepared our evening meal.









We dropped four skydivers into our airstrip (myself-included) from our Maule on floats flown by Allison Wheaton. Upon landing, a note was delivered to me by my niece, Aubry, and by AJ Balyeat, that when read aloud, surprised many that Allison and I would be getting married. A crew rushed over to set up a beautiful scene in the trees, alongside the taxiway that included white lights strung from the trees and a piano for Allison's grandmother to play. The short, but sweet ceremony opened with "Chaps," the white pony, carrying saddle bags with rose pedals spread by Allison's niece, Clara, and our German Shepard, Jack, bringing the rings. Jacob Balyeat officiated, ending with a "you may high five your bride!!" And yes, a customary kiss. Along with our seaplane friends, we had our hometown friends, and our families present to witness the fun.

After the celebration, we got back to the food and the bonfire where we opened the poker hands. Allison, and her brother-in-law, Kevin, a seaplane pilot from Seattle, Washington, had the winning hand and took home a very cool laser cut LED backlit seaplane wall hanging, and of course the loot. The spot landing runner-up was Dan Peacock

in his Sea Ray. The top prize went to Kevin Anderson flying his Cessna 182 on straight floats.

With a cloudless sky at the park on Sunday, we were able to share the day with guests who came to see the airplanes and meet the pilots. Thanks to Allison Wheaton, and Rick and Josh Kaskel who flew a beautiful pair of Republic Sea Bees, and Mark Fisher and Kelly Carnigham for providing morning rides with a free raffle drawing. The event was abuzz with seaplanes all day. At one point the park manager texted me and said there was absolutely no place else to park a car in the 10,000-acre state park. Seaplanes make people happy!!

Special thanks to the Indiana Department of Natural Resources, State Parks Administration, and the staff of Pokagon State Park, with leadership from Ted Bohman, manager, who was on duty for the event. Potawatomi Inn manager, Emily Burris, and staff, attended to our meal needs, and provided a complimentary meal for our pilots on Sunday.

The Lake James Association has sponsored this event for all 20 years running, along with the Steuben County Visitors and Tourism Bureau. The Herald Republican newspaper and WLKI radio provided coverage.

Springfield Holds First Wings & Wheels Expo

by Jim Bildilli

n August 30, 2023, EAA Chapter 770 of Springfield, Illinois, held its first "Wings & Wheels Expo" as a fundraising event to promote aviation education and sponsor flight training scholarships. This was the chapter's first attempt at raising funds to help increase awareness of careers in aviation. Admission was free, but the sale of food items and donations made the event a success.

Over 100 cars and trucks and 25 aircraft participated in the midday event. One attendee flew his Cessna 172 from Waukesha, Wisconsin, the furthest distance anyone flew.

Chapter members grilled and served hamburgers and hot dogs, helped park cars, answered numerous questions about aircraft, and provided security for the event. In addition, there were representatives from Springfield's Civil Air Patrol Composite Squadron, Lincoln Land Community College's A & P program, the Flying 20 aircraft club, and Southern Illinois University's Aviation Management & Flight program, to answer questions and provide information. For the younger

"wannabe" pilots, the Sangamon Valley RC Flyers model airplane club provided instruction on the chapter's "Build and Fly" flight simulator.

As an extra feature, Springfield's Combat Air Museum parked its P-51 Mustang "Worry Bird" in such a manner as to provide an excellent backdrop for pictures. Many of the auto enthusiasts and owners wanted photographs taken of their Ford Mustangs, and other antique and muscle cars, in front of the P-51 Mustang. As such, "Worry Bird" also contributed to the funds generated.

The event was so successful that preliminary planning for 2024 has already begun. Indications are that next year's Wings & Wheels Expo will display additional vehicles and aircraft. The air museum has already hinted that there may be additional aircraft on display and/or available for photo sessions.

Be sure to mark October 5th on your 2024 calendar for Wings & Wheels Expo 2024. If you forget, you can always check the *Midwest Flyer Magazine* calendar. Hope to see you there!

CALENDAR

Email your calendar items to: dave@midwestflyer.com - Or Mail To - Midwest Flyer Magazine, 6031 Lawry Court, Oregon, WI 53575 Include the DATE, TIMES, LOCATION (Include City, State & Airport Name & I.D.), and CONTACT PERSON'S TELEPHONE NUMBER, as well as that person's email address for reference. First 15 words FREE \$.75 for each additional word.

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

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

MIDWEST FLYER MAGAZINE IS NOT RESPONSIBLE FOR ACCURACY OF, OR RELIANCE ON, ANY INFORMATION PUBLISHED.

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

FEBRUARY 2024

16-18* Buckeye (KBXK), Az. - AOPA Fly-In at the Buckeye Air Fair.

Seminar Venues, Aircraft Diaplay, Exhibit Hall with latest new tech, gear and services. aopa.org

MARCH 2024

16* BATTLE CREEK (KBTL), Mich. - Women's Aviation Career Symposium (WACS) presented by Michigan Business Aviation Association at WMU College of Aviation 9am-4pm. www.mibaa.org/wacs

JULY 2024

22-28 Оsнкоsн, Wis. - EAA AirVenture Oshkosh 2024 eaa.org/airventure

AUGUST 2024

9-11* Ontario, Canada - Canada Fishing Adventure to Miminiska Lodge.
 Check out more information on page 77 for trip options:
 3-nights/2 days; 4-nights/3-days or 5-nights/4-days.

11* LINO LAKES (MN24), MINN. - Minnesota Seaplane Association Pig Roast at Surfside. mnseaplanes.com/

SEPTEMBER 2024

- 7-11* Pittsburgh, Penn. National Association of State Aviation Officials (NASAO) 93rd Annual Convention at the Sheraton Pittsburgh Hotel at Station Square. nasao.org
- **20-21*** Brainerd, Minn. Minnesota Seaplane Association Seminar at Madden's on Gull Lake mnseaplanes.com/

OCTOBER 2024

- 2-4* MIDDLETON, Wis. 2024 Wisconsin Aviation Conference at Madison Marriott West. For additional information email director@wiama.org
- 5* SPRINGFIELD, ILL. Wings & Wheels Expo 2024. (Read article above about 2023 event.)

To get more dates, locations and times for *The Flying Hamburger Socials* and other aviation events in the Midwest, go to http://www.flyinghamburgersocial.com



Zenith STOL CH 750 "Super Duty" aircraft.

Richard Saint-George Photo

Zenith Aircraft Homecoming Attracts 500 Builders, Pilots & Enthusiasts

MEXICO, MO. – Kit aircraft manufacturer, Zenith Aircraft Company, hosted its 32nd annual "Homecoming Fly-In & Open Hangar Days," September 15-16, 2023, at its factory located on Mexico Memorial Airport (KMYJ), Mexico, Missouri.

Zenith builders and flyers from around the country flew in for the event, one of the largest of its kind in the nation. The grassroots event provided both educational and fun activities for guests, made up primarily of Zenith builders, owners, and pilots, as well as future builders and pilots, and enthusiasts.

Select suppliers and vendors were invited to participate. EAA Chapter 944 provided a hot breakfast both mornings, sponsored by Wheels & Wings (builder assistance services) on the first day, and by KITPLANES magazine, and AVEMCO aviation insurance on the second day.

EAA's Charlie Becker provided an update on FAA rules

and initiatives affecting homebuilt aircraft and Sport Pilots, updating visitors about the FAA's MOSAIC NPRM.

Zenith Aircraft also hosted guided tours of the factory and provided kit assembly demonstrations to showcase the newest kit technology (utilizing CNC final hole size match drilled parts and components). Visitors were able to see up close all the airplanes that were flown in and meet with their owners. Organizers estimate that more than 500 visitors were in attendance over the two days.

As part of the annual homecoming festivities, Zenith hosted a "banquet dinner" on Friday evening.

Zenith Aircraft features the CH 750 Cruzer, and the sleek, low-wing Zenith CH 650 for sport pilots. With builder choices in mind, all Zenith aircraft kits are designed to offer builders a wide variety of suitable engines, avionics, and custom kit options (https://zenithair.net/).





DECEMBER 2023/JANUARY 2024 MIDWEST FLYER MAGAZINE 73

CLASSIFIEDS

SINGLE LISTING: \$.75 per word. Minimum Order \$20.00 per issue EMAIL AD TO: dave@midwestflyer.com and you will be invoiced via PayPal and you can then pay using your credit card or PayPal account.

OTHERWISE, PLEASE MAIL AD WITH PAYMENT TO:
Midwest Flyer Magazine - 6031 Lawry Court - Oregon WI 53575

T-HANGAR RENTAL – THREE MONTHS FREE WITH TWELVE-MONTH LEASE (specific hangars) at the Southern Wisconsin Regional Airport, Janesville, WI. Call <u>608-757-5768</u> for details.

AIRCRAFT SALES & BROKERING – Sell your airplane quickly and efficiently. 150-plus transactions! Spring City Aviation. Email **gavin@springcityaviation.com**, or call **414-461-3222** (Office) or **218-280-2615** (Cell).

AVIATION INSURANCE RESOURCES – Best Rates, Broadest Coverage, All Markets. Access the entire market with just one phone call: 301-682-6200. Or online at www.AIR-PROS.com

INSURANCE – 67 years risk management serving aircraft operators and owners. Superior, empathetic service. Mid-Continent Aircraft Corp., Hayti, MO. acinsurance@midcont.com. 1-800-325-0885.

AIRCRAFT CONSIGNMENTS WANTED – Buying or selling, we'll work for you! WisconsinAviation.com 800-657-0761

FLY TO CANADA IN 2024 - "Canada Fishing Fly-Out To Miminiska Lodge." Make plans and reservations now to experience flight into the Canadian wilderness, while enjoying the comforts of home! Miminiska Lodge, located 196 nm north of Thunder Bay, Ontario, features a 2400 ft. grass airstrip within walking distance to your cabin, the lodge and waterfront. Top-notch meals are provided, excellent fishing, guides optional, newer and well-maintained boats and motors, well-maintained facilities and excellent housekeeping, delicious shore lunches, and scenery. See Page 77 for more info. https://wildernessnorth.com/accommodations/miminiska-lodge/









The State's Premier Full-Service FBO

Madison Watertown

Air Charter • Aircraft Management • Aircraft Sales Flight Instruction • Aircraft Rental Maintenance • Avionics • Interiors



AIRCRAFT RENTAL

Diversified fleet of over 25 aircraft!



 Cessna 152 (7) Cessna 172 (4)

Piper Warrior (3)

- Piper Archer (4)
- Piper Arrow (3)
- Citabria Taildragger
- Cirrus SR20 (2)
- Cirrus SR22 (2)
- · Piper Seneca (2)

608-268-5024 FlightSchool@WisAv.com

AVIONICS



608-268-5006 Avionics@WisAv.com

AIRCRAFT SALES







1975 Bellanca Citabria 7ECA N53832 1476 TT, 1476 SNEW, NDH, Recent Annual (10/23), Sigtronics Intercom, Bendix King 97A Comm, no transponder/ ADS-B, new exhaust system (10/23), original interior (6/10) & exterior (7/10). Very clean plane for its age!.........\$45,000

COMING SOON!

- 1976 Cessna 172N
- 1977 Beech C23 Sundowner
- 2004 Cirrus SR22-G2

CONSIGNMENTS WANTED

Buying or selling, we'll work for you!

800-657-0761 ACsales@WisAv.com

TECNAM Flight To Hawaii Took Nearly 15 Hours





ECNAM is proud to announce the delivery of the first batch of two P2012 Traveller aircraft to Pacific Air Charters Inc. in Hawaii. Following the delivery of the first aircraft in August 2023, this second aircraft took off from Santa Maria (SMX), California and arrived in Honolulu (HNL) on September 14, 2023, after a 14-hour 57-minute flight over the Pacific Ocean.

With a third P2012 aircraft currently being assembled at Tecnam's facility in Capua, Italy, and 24 additional Travellers an option, Pacific Air Charters Inc.'s fleet is growing rapidly to serve the Pacific market.

Known for offering its customers the ultimate in luxury and safety, Pacific Air Charters, Inc. is the premium provider of air charter services in the Hawaiian Islands.

Multi-engine operations over water provide a significant safety advantage for the company's market area. The P2012 Traveller will also offer very competitive operating costs due to its FADEC piston Lycoming engines. Passenger comfort was a key factor in the operator's decision. The aircraft features all single seats with generous pitch, dedicated window and in-seat amenities like a USB port, cup holder, seat pocket, and armrest, plus overhead stowage and dual air conditioning (which can also be operated on the ground via a DC power connection to "pre-cool" the aircraft prior to boarding).

The first P2012 Traveller delivered to Hawaii demonstrated its versatility when a series of wildfires broke

out in Hawaii in early August 2023, mainly on the island of Maui. The aircraft, operated by Pacific Air Charters Inc, had only been in Hawaii for 10 days when it was used to transport and deliver thousands of pounds of desperately needed food, medicine, and other supplies to Maui and, on return flights, to evacuate those who needed medical attention in Honolulu.

"After one of the world's most demanding ferry flights between California and Hawaii, our P2012 Traveller immediately demonstrated its versatility, being able to be configured for any mission required to serve a community. And with this last 15-hour ferry flight, we have set a new record for Tecnam," said Francesco Sferra, Tecnam P2012 Special Mission Platforms Sales & Business Development Manager.

For further details on the P2012 STOL and the P2012 Series aircraft, visit www.tecnam.com.

Tecnam is an Italian aircraft manufacturer and one of the world's leading piston aircraft manufacturers. Founded in 1948 by brothers Luigi and Giovanni Pascale, the company is headquartered in Capua, Italy, and operates two subsidiaries in Sebring, Florida, and Brisbane, Australia, to serve and support the needs of local Tecnam owners and operators. Tecnam designs and manufactures a wide range of aircraft for personal use, commercial operations, business travel, flight training, surveillance, law enforcement and other specialized applications.





A Flying Fishing Adventure To Miminiska Lodge Ontario, Canada

196 nm north of Thunder Bay, Ontario on the Albany River Watershed *CPS5*



Wilderness North is providing Midwest Flyer Magazine readers with three trip options in the same week.

And despite inflation, Wilderness North is keeping their "Reel Deal Group Rates" for 2024, the same as 2023.

3-nights/2-days. Arrive August 6 and depart August 9, 2024. 4-nights/3-days. Arrive August 6 and depart August 10, 2024. 5-nights/4-days. Arrive August 6 and depart August 11, 2024.

Any guest who arrives by 2:00 pm on the scheduled date of arrival, may fish that afternoon at no additional charge! Rates include taxes and boat insurance! Gratuity is not included.

Call or Email for rates and availability:

1-888-465-3474

krista.cheeseman@wildernessnorth.com

"10% Reel Deal Group Discount,"
make your reservation no later than
January 1, 2024.

Wilderness North
PO Box 22012, Strathcona RPO
Thunder Bay, ON P7A8A8 CANADA

Miminiska Lodge has been the preferred fishing destination of Midwest Flyer Magazine since 2007!

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







To Read More Aviation Articles Go To midwestflyer.com **Archives**

PDF Archives For The Whole Issue or for individual articles go to **News - Columns - Features - Headlines - Podcasts Sections - State Aeronautics**



- Seat Belt and Harness. **Exhaust and Engine** Mount Repairs
- · FAA Certified Repair Station #A14R244N
- · Economically Priced
- Full A.D. and Service **Bulletin Compliance**
- Fast Service
- · One-Year Unlimited Hours Warranty
- Dealer Program Available

ENGINE MOUNT EXCHANGE PROGRAM Visit WWW.Wagaero.com



Executive FBO and Fueling * Flight Training Maintenance 🛧 Classroom Ground School Scenic Flights 🛧 Youth Programs 🛧 Pilot Shop

*FCM Only



FLYING CLOUD AIRPORT*

14091 Pioneer Trail Eden Prairie, MN 55347 952.941.1212

CRYSTAL AIRPORT

5800 Crystal Airport Road Crystal, MN 55429

763.533.4162

Family Owned and Operated since 1962

www.thunderbirdaviation.com



fly@thunderbirdaviation.com