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If you know me, you know fly-in season is my favorite time of year, and even though summer has come to an end, there are still plenty of AOPA Fly-ins left.

On September 14 and 15, we head to Santa Fe, New Mexico, which is sure to be rich with history and culture. Sitting at the foot of the Sangre de Cristo mountain range, Santa Fe is a magical, exuberant, colorful destination at any time of year. Not only is it the oldest U.S. capital city, but with an elevation of 7,000 feet, it's also the highest. Santa Fe has long been a center for arts and culture, and ranks as the country's third largest art market, with nearly 300 galleries and dealers to explore.

Then on October 5 and 6, our waypoint is Carbondale, Illinois. Hidden away at the tip of Illinois, Carbondale is a great place for visitors to enjoy lakes, state parks, and a national forest. Carbondale was named one of the Top 101 Best Outdoor Towns and included in Outdoor Magazine's Top 200 places for sportsmen and women to enjoy rock climbing, hiking, biking, hunting, fishing, boating, and geocaching, in the Shawnee Hills.

We round out the season October 26 and 27, in Gulf Shores, Alabama. Visitors can enjoy culinary diversity and extensive options for both water and land-based activities. Sugar-white beaches, fresh seafood, championship golf courses, charter fishing trips, wildlife areas, and historic sites are just a few of the treasures Gulf Shores offers.

Attending fly-ins is not a requirement for being a pilot but participating in the timeless tradition is something every pilot should experience at least once in their lifetime. To find out more, visit **www.aopa.org/flyins.**

Mark R. Baker
President & CEO, AOPA

*For more information on the Aircraft Owners and Pilots Association and the issues that affect your flying go to **www.aopa.org** today.

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October/November 2018

ON THE COVER: Airshow performer Jeff Boerboon of Cave Creek, Arizona, woos crowds at EAA AirVenture Oshkosh 2018 flying his one-of-a-kind Jet-Powered Yak 110. Complete story beginning on page 43. *Chris Bildilli Photo*

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Let's Work To Keep The Welcome Mat Out For Everyone!

by Dave Weiman

The Aircraft Owners and Pilots Association (AOPA) opposes egregious fees charged by fixed base operators, and wants to ensure access, fair pricing and transparency at all public airports. Contrary to the opinion of some people, ***AOPA is not out to control prices!***

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

Some large operators charge high fees because they have a monopoly on the field. Other large operators may charge high fees to keep small aircraft off their ramps, as they cater to corporate jet traffic. All operators need to charge enough to cover expenses and make a reasonable profit.

It would be sad to think that a pilot cannot top off his tanks every time he lands at an airport because the flight center is charging exorbitant fuel prices. But at least we should have the option of parking our aircraft somewhere on the field without being charged excessive ramp fees. Self-fueling and a designated parking area away from the main ramp may be an option.

Excessive fees could be grounds to enforce grant assurances at those airports which have accepted federal Airport Improvement Program (AIP) funding, but the Federal Aviation Administration (FAA) may feel that flight centers have the right to charge whatever they want, regardless.

How can the FAA require that all aircraft be equipped with ADS-B equipment in controlled airspace, but does not require flight centers at public airports affected by ADS-B to charge reasonable fees and ensure access?

I recently flew to an airport and was totally caught off guard when the flight center charged me a $65.00 ramp fee for my Cessna 182 Skylane, on top of high fuel prices, even though I was there for less than an hour.

CONTINUED ON PAGE 8

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Dialogue From Page 5

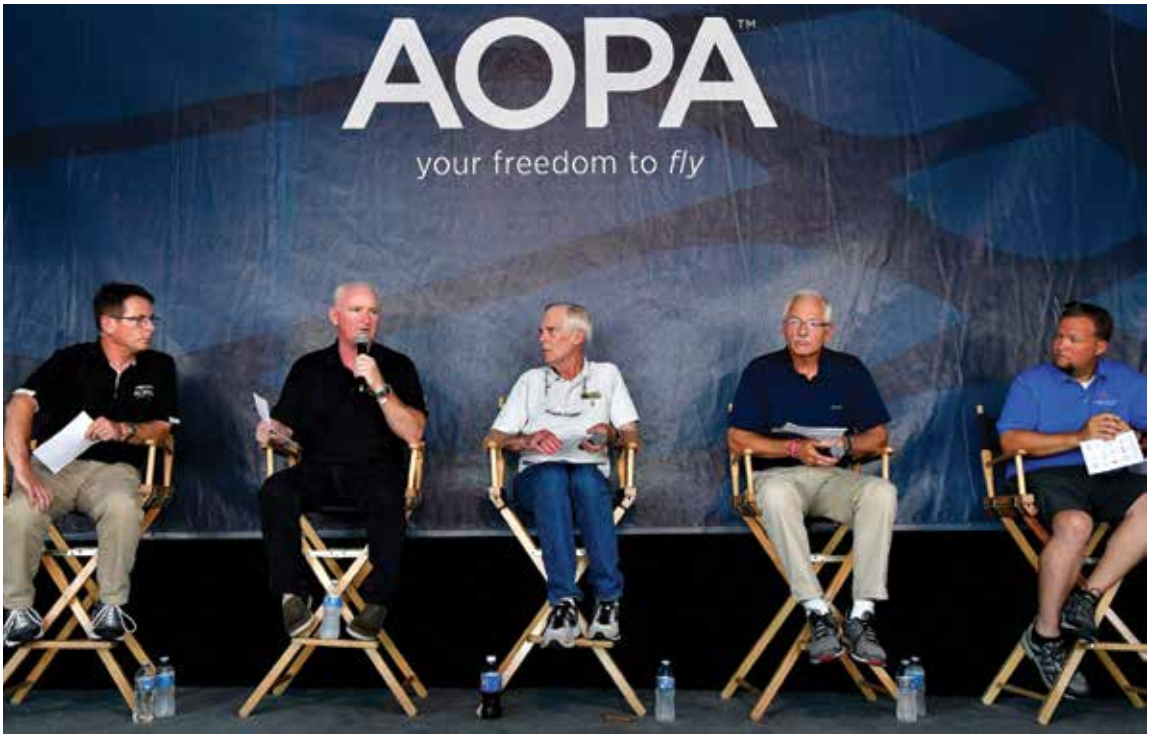
Whether I was there for 5 minutes or 24 hours…whether or not I bought fuel…and whether or not I was flying a Cessna 182 or a Gulfstream IV, the same $65.00 ramp fee applied, which is highly unusual. This was no fancy place, either. The faucets in the restrooms were not even gold plated, but the flight center has a monopoly on the field.

I want to thank the thousands of fixed base operators, flight centers and airports across the country that do not charge a ramp fee, or if they do, a nominal fee based on the weight of the aircraft, which is generally waived when pilots buy fuel. Fair fuel prices are also very much appreciated.

Read more on this topic immediately following this editorial. ❑

$8.00 A Gallon For Fuel? No Way!

Airport Access Panel Briefs EAA AirVenture Oshkosh Attendees On Importance of Fair FBO Pricing & Airport Access



(L/R) AOPA Editor-In-Chief Tom Haines; AOPA President Mark Baker; AOPA General Counsel Ken Mead; former executive director of the Minneapolis-St. Paul Metropolitan Airports Commission and a current AOPA Airport Access Advisory Panel member, Jeff Hamiel; and pilot and Vice President and General Manager of First Wing Jet Center at Indianapolis Executive Airport, Sean White, participate in a panel discussion on FBO fees and airport accessibility during EAA AirVenture in Oshkosh, Wisconsin, July 25, 2018. *Photo by David Tulis*

The fees charged by fixed base operators (FBOs) are an insidious issue that presents a significant risk to general aviation, AOPA President Mark Baker told EAA AirVenture attendees July 25, 2018, during a panel discussion, about airport access and egregious fixed base operator (FBO) pricing structures.

A panel of experts joined Baker and AOPA Editor-In-Chief Tom Haines to discuss the issue from multiple perspectives: AOPA General Counsel Ken Mead, who is the former U.S. Department of Transportation Inspector

General; Jeff Hamiel, former head of the Minneapolis-St. Paul Metropolitan Airports Commission and a current member of AOPA's Airport Access Advisory Panel; and Sean White, a pilot and vice president and general manager of First Wing Jet Center at Indianapolis Executive Airport.

Over the past eight years, consolidation has left some monopoly FBOs with long-term leases at airports that in some cases control 100 percent of the space available to park aircraft, essentially enabling them to charge whatever they want—especially because the FAA and local airport authorities are not exercising their oversight responsibilities based on grant assurances in some instances. FBOs sometimes charge egregiously high fees, even if pilots don't use any of their facilities or services, and will only waive them if fuel is purchased at a premium, if at all. AOPA doesn't advocate that airport authorities or the FAA control pricing, but that they monitor it to prevent these cases in which consolidation creates a monopoly and results in unfair pricing.
"You have a situation that's out of hand, and it's getting worse," Mead said.

While most airports and FBOs provide fair and equal access to all pilots, AOPA has found that some airports, especially those that have Signature Flight Support as the sole FBO, charge what the association believes are unreasonably high prices. Signature recently purchased Epic Fuel, the country's fifth largest aviation fuel distributor, which furthers market control. Baker said he is worried about the slippery slope the fee issue presents, noting that if one FBO can charge $8 a gallon for fuel, then anyone can charge that.

AOPA President Mark Baker signs AOPA's petition asking the FAA to address egregious FBO pricing, following a panel discussion on the topic at EAA AirVenture 2018. *Photo by Mike Collins*

White said his FBO strives to charge fair prices and excels

in customer service because it is the touchpoint for business owners who want to access the Indianapolis area. In addition, 22 of the 46 staff members who work at the FBO are also pilots who use the airport network. White acknowledged that operating costs are on the rise, saying, "You can't pay a line guy $10 an hour anymore," and explained that there are other ways for FBOs to maintain a profit without charging exorbitant fees. White said lowering the price of avgas per gallon cuts into the margin, but the increase in traffic coming to buy fuel offsets it.

John Wayne Airport in Orange County, California, is a prime example of that, Baker noted. The airport received complaints about the FBO on the field, put out a bid for new operators, replaced the FBO, and is now enjoying increased traffic. Avgas and jet fuel sales are up, Baker said.

Hamiel said airport authorities can play an important role in ensuring airport access and reasonable fees, but pilots need to reach out and make them aware of the problem. Hamiel said if pilots meet with airport authorities face to face, the authorities will often be willing to provide transient parking for a nominal fee. They should also be made aware when fuel prices suddenly jump after FBOs on the field have been consolidated. "I think we can change that by being more vocal, more visible," said Hamiel.

Airport authorities that receive FAA Airport Improvement Program funding are required to run self-sustaining airports and ensure fair and equitable services. That doesn't always happen, and that's where the voice of AOPA members is needed.

"The membership of this organization, though, is key," Mead said, noting that members have "proven the power of our voice in the past. We're going to need the power of our voice in this."

AOPA has filed a series of informal complaints with the FAA, called Part 13 complaints, released an Airport Access Watch List, and worked directly with a number of self-help locations. AOPA believes pilots should be able to land at an airport and access the transportation system from the airport without paying for fees and services they don't need.

One airport that was the subject of an AOPA complaint is already turning around: Waukegan National Airport in Waukegan, Illinois, has opened transient ramp access and noted its location on airport diagrams.

The FAA has acknowledged that two other airports that are the subject of AOPA's complaints—Ashville Regional Airport in North Carolina and Key West International Airport in Florida—have sole FBO providers. However, in response to AOPA's complaints, the agency said that FBOs have the right to charge any price, even at federally funded airports. In addition, the FAA said there's no rule requiring the disclosure of fees that are charged.

"How can you have competition when there is no competition?" Mead said.

AOPA has formed an Airport Access Advisory Panel, which includes Hamiel, five FBO owners, and a host of GA pilots, to tackle the issue, and seek feedback from members. "We want to engage the whole community for solutions," Baker said.

Currently, AOPA is encouraging the FAA to chart transient parking areas on airport diagrams in a uniform manner, and to provide airport access at locations with scheduled traffic that must follow special security procedures from the Transportation Security Administration. In many cases, airport authorities delegate security to the FBO, so the only way pilots can pass through the airport is via the FBO.

In addition to member involvement, the association also is considering legislation and other legal options.

Pilots are encouraged to visit AOPA's FBO resource page to learn more about the issue and to report any egregious fees and difficulty accessing public airports: http://aopa.org/advocacy/airports-and-airspace/airport-advocacy/egregious-fbo-pricing

EDITOR'S NOTE: Special thanks to Alyssa J. Cobb of AOPA for reporting on this event. ❑

Beyond "Performance As A Pilot": What Is The Scope of A PRIA Request?

by Greg Reigel, AAL

Greg Reigel

I am frequently asked by pilots whether an employer's disclosure of certain documents is properly within the scope of a request for documents under the Pilot Records Improvement Act ("PRIA"). Answering the question usually requires analyzing whether the document being disclosed relates to the individual's "performance as a pilot." However, based upon a recent Legal Interpretation issued by the FAA's Office of the Chief Counsel, it appears that the scope of a PRIA request casts a bigger net.

The Interpretation initially noted that "the separate provisions of the PRIA work in tandem to provide a complete record of potential pilot employment issues and to capture instances relating to an individual's performance as a pilot that do not fall into one of the provided statutory categories." It then went on to discuss how these provisions overlap.

With respect to whether a document relates to an individual's performance as a pilot, the Interpretation stated "to the extent that a pilot's behavior directly disrupts safe aircraft operations, those records should be included in accordance with the 'catch-all' provision" of § 44703(h)(l)(B)(ii). Next it noted that § 44703(h)(l)(B)(i) requires disclosure of documents an air carrier must maintain under 14 C.F.R. § 121.683 (records of each action taken concerning the release from employment or physical or professional disqualification of any flight crewmember).

The Interpretation then confirmed that the records maintained under § 121.683 are not limited to those records relating to an individual's performance as a pilot. Rather, it stated "[p]ilot infractions not related to pilot performance that would rise to a level grave enough to cause an air carrier to release a pilot from employment would be captured by this recordkeeping requirement, and a hiring air carrier would be required to request and receive those records."

Based upon this Interpretation, it appears the scope of documents an air carrier must produce in response to a PRIA request potentially includes more than just documents directly relating to the individual's performance as a pilot. As a result, if you are a pilot applying for a position with an air carrier and you are concerned

about what your previous or current employer may or may not disclose, I recommend that you request a copy of your employment file BEFORE you apply to the air carrier. That way you will know what is in your file and potentially subject to disclosure.

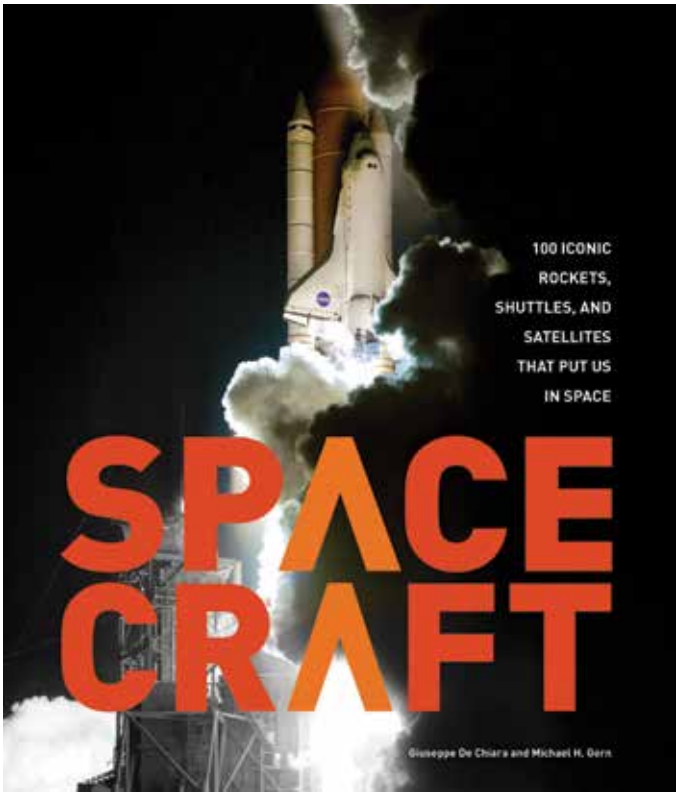
But keep in mind that if you disagree with what is in your file or what the employer may be disclosing, any recourse you may have against your employer is likely governed by applicable employment laws. As the Interpretation states, "PRIA is not a means for the FAA to arbitrate employment disputes."

If you have additional questions regarding PRIA, you should review FAA Advisory Circular 120-68G. And, as always, if you have additional questions, I'm happy to help.

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

Books & Videos

SPACE CRAFT: 100 Iconic Rockets, Shuttles & Satellites That Put Us In Space



In 1957, the world looked on with both uncertainty and amazement as the Soviet Union launched Sputnik 1, the first man-made orbiter. Sputnik 1 would spend three months circling Earth every 98 minutes and covering 71 million miles in the process. The world's space programs have traveled far (literally and figuratively) since then, and the spacecraft they have developed and deployed represent almost unthinkable advances for such a relatively short period.

The book ***Spacecraft: 100 Iconic Rockets, Shuttles, and Satellites That Put Us In Space*** ambitiously illustrates aerospace history profiles and depicts spacecraft from Sputnik 1 through the International Space Station, and everything in between, including concepts that have yet to actually venture outside the Earth's atmosphere.

Illustrator and aerospace professional Giuseppe De Chiara teams up with aerospace historian Michael Gorn to present a huge, profusely illustrated, and authoritatively written collection of profiles depicting and describing the design, development, and deployment of these manned and unmanned spacecraft. Satellites, capsules, spaceplanes, rockets, and space stations are illustrated in multiple-view, sometimes cross-section, and in many cases shown in archival period photography to provide further historical context.

Dividing the book by era, De Chiara and Gorn feature spacecraft not only from the United States and Soviet Union/Russia, but also from the European Space Agency and China. The marvels examined in this volume include the rockets Energia, Falcon 9, and VEGA; the Hubble Space Telescope; the Cassini Space Probe; and the Mars rovers, Opportunity and Curiosity.

Authoritatively written and profusely illustrated with more than 200 stunning artworks, *Spacecraft: 100 Iconic Rockets, Shuttles, and Satellites That Put Us In Space* is sure to become a definitive guide to the history of manned space exploration: $30.00 U.S. · 224 pages · Hardcover. ISBN: 9780760354186. ❑

The Common-Sense Approach Checklist

by Michael J. "Mick" Kaufman

Michael Kaufman

The question often arises, ***"What about an instrument approach checklist?"*** In this issue of *Midwest Flyer Magazine,* I will address some of my thoughts on this topic.

When flying an instrument approach, it is great to have a two-pilot crew or at least a sophisticated autopilot driven by a sophisticated Global Positioning System (GPS) navigator. When training a pilot for an instrument rating, as an instructor, I first teach how to fly the airplane on instruments without using an autopilot. This is to prepare the pilot for the day when the autopilot quits or does something un-commanded. Those of you reading this will wonder what kind of instructor would waste time teaching timed approaches using the VOR or ADF and "needle-ball-airspeed," but it pays off. In my opinion, if a pilot cannot hand-fly an Instrument Landing System (ILS) approach without a GPS assist or an autopilot, he/she should not be flying in Instrument Meteorological Conditions (IMC).

So, what about the checklist for the approach? As I wrote about in my previous articles, I never use a written checklist in the air while flying as a single pilot. I use acronyms and flow patterns, as you should never bury your head in the cockpit while trying to read something. While in VFR conditions, you should be looking for traffic, and in IMC conditions, you should be monitoring your instruments. In a two-pilot airplane, it is important for the pilots to brief each approach before starting the approach. In a single-pilot airplane, it is important to self-brief the approach for the destination airport *if possible* before departing on the flight. This is addressed in the FARs. I wrote "if possible," and this may not be the case as the destination could change during the flight due to weather or other conditions. During an instrument ground school session using a PowerPoint presentation, I display an approach on the screen for 10 seconds, and ask the participants to write down the most important numbers of the approach. I will cover these numbers later.

The first item on the checklist should deal with what approach you will be doing and if using a GPS navigator,

it needs to be loaded in the box. The navigator first wants the airport where the approach will be made and if this is your destination airport as a direct to waypoint or is in the route of a flight plan, it is already there. Next comes the routing of the approach. Is there a standard terminal arrival (STAR) and what is my initial approach fix (IAF), or will this be radar vectors? Oops. This is the **COMMON-SENSE CHECKLIST.**

You are 10 miles from the airport, ATC is extremely busy, you have the ATIS and several approaches are in use. You are flying at 200 knots at 3,000 feet above all the initial approach fixes and you have not been given your approach yet. On that **COMMON-SENSE CHECKLIST,** when do you slow down or go to your approach airspeed? The question on any checklist is using common sense.

We have all been in this situation if we have been flying IFR for any period of time. ATC may be busy and seems to have forgotten you, and you cannot get a radio transmission in edgewise. You are too high, but descending without a clearance would get you in big trouble. There is also a rule on airspeed changes without notifying ATC as well, but I would still slow to my approach airspeed. So, there is always a question or a checklist item that will vary.

If I am at the proper altitude for the approach, I will usually slow to approach airspeed when turning on final approach. This can vary with distance from the final approach fix and with the airplane I am flying. Note, you should have the power, configuration and pitch settings memorized for the airplane you are flying as part of flying by the numbers.

Going back to the checklist item of setting up your GPS navigator if you have one and the approach is other than a GPS approach (VOR, ILS, LOC), ***it is necessary to move the NAV standby frequency to the active window.*** This is one of the top checklist errors I have seen as an instructor. Make this a flow pattern item as part of loading an approach on your GPS navigator.

If you are flying this approach with an autopilot, it is time to include the autopilot in your checklist as well. So much of what you do with your autopilot during an approach depends on the autopilot itself. The pilot should become very familiar with its capabilities as they differ greatly from one make and model to the other. Let's take a brief look at some of the more popular autopilots on the market and their differences and similarities:

King KFC-200 & S-Tec 55 with GPSS add-on.
King KFC-225
S-Tec 55X
S-Tec 50 & S-Tec 30

We could spend an entire issue of *Midwest Flyer Magazine* on just one of these autopilots, so I will only be scratching the surface. I have grouped several of these devices together to explain some key features.

The first group being the King KFC 200 and the S-Tec 55, which did not come with GPS steering (GPSS), and I am describing them with the GPSS add-on. If using these units during the approach, as part of my checklist, I use the GPS steering function until established on the final approach course before switching the function from HEADING to APPROACH mode. While in HEADING mode, I am either flying the heading mode while getting vectors or flying the full approach with the GPS Steering mode engaged.

On the King KFC-225 autopilot (the first autopilot with built-in GPS steering) – providing it was properly installed – the GPS navigator will flash a message for you to select (Nav inputs) after which you recycle the autopilot by pushing the approach button twice.

The S-Tec 55X has certain criteria necessary to do the approach and capture the localizer. This is for software version 5 only:

1. NAV APR mode engaged
2. ALT mode engaged
3. NAV flag out of view on CDI
4. GS flag out of view on CDI
5. LOC frequency selected

The S-Tec 50 and 30 auto pilots are not capable of capturing a localizer without an add-on GPS steering module, but they will fly a localizer or GPS course once intercepted and stabilized. These autopilots have altitude hold, but no available pitch control or glide-slope capture. Assuming these units are paired with a GPS steering module, we can fly a GPS approach without switching to the analogue approach mode, but need to switch once established inbound and stabilized on the final approach for all other approaches. The pilot must provide input manually for the glide-slope.

There are so many circumstances to consider when thinking about a checklist of items for doing an instrument approach. We would need to have a dozen or more different checklists for every type of approach

or circumstance. An example for a VOR approach alone, we would need at least three different checklists…one for radar vectors, one for when the VOR is on the airport, and one when the VOR is not on the airport and is the final approach fix.

When building your **COMMON-SENSE CHECKLIST,** there are a couple of items I always do. If the airplane I am flying "NEEDS" approach flaps (some do and some do not), I put them down and slow to approach airspeed once established on the final approach course. If I have retractable landing gear, the gear goes down at glide-slope intercept or the final approach fix. Once on the final approach segment of a STABALIZED APPROACH, I use the GUMP final check (Gas, Undercarriage, Mixture, Prop).

When training student instrument pilots, I ask them what are the most items to note about this approach and give them 10 seconds to find and list them.

Think about approach similarities if you would have to do an approach to an unfamiliar airport in an emergency, as I have on several occasions.

Let's assume, for example, an ILS approach as follows:

1. Frequency of the localizer.
2. Inbound final approach course.
3. Altitude to intercept the glide-slope.
4. How low can I go (decision altitude) and the missed approach point.
5. Initial part of the missed approach if I need to go missed.

Once I am inside the final approach fix, it is no longer necessary to look at the chart and I often take away the chart from a pilot I am training. At this point, there are two items that the pilot must have memorized: decision altitude and the initial part of the missed approach. Every missed approach I have seen begins with a climb, and either a climbing right or left turn or straight ahead. My missed approach checklist is as follows:

1. Power Up
2. Pitch Up
3. Positive Rate (Climb)
4. Gear Up
5. Autopilot Disconnect or Go-Around Button. (This should be together with the power up as one item.)

Should the missed approach become part of the flight, there are some important items to add as a sequence of events to our **COMMON-SENSE CHECKLIST.** On almost all of the autopilots, it is necessary to disconnect or push the missed approach/go-around button to start the missed approach, thus disconnecting the autopilot servos. Here is where a GPS navigator will make flying much easier, but knowing some basics of the missed approach will help.

The approach plate will indicate at a glance the altitude to climb to before the next sequence of events, and this is one of the common errors I see as an instructor. If your GPS navigator does not auto sequence to the missed approach procedure (most do not), it is important to climb to the first published altitude before pushing the Omni Bearing Selector

(OBS) button on the navigator. If you do not follow this procedure and a turn is part of the missed approach, an early activation of the missed approach sequence could fly you into a hill, mountain or tower. You, as the pilot-in-command, need to customize your **COMMON-SENSE CHECKLIST** to include turning the autopilot back on and selecting the proper mode (GPSS) if necessary.

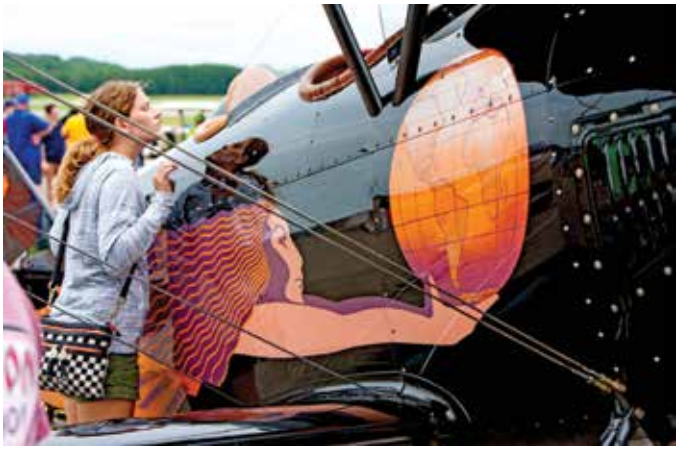
Every airplane, navigator and autopilot is different, so it is the pilot's responsibility to know his/her equipment well. And after maintenance, and equipment or software updates, never fly in IMC until you are certain your equipment is working as it should be. It may affect what happens on that **COMMON-SENSE CHECKLIST.**

Remember, this is the **COMMON-SENSE CHECKLIST.** There are laws – **"Laws of God and physics"** – and there are rules. **"Rules are made for pilots with no common sense by bureaucrats who have no common sense"** – a quote from a General Aviation District Office inspector some 45-plus years ago.

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

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

The American Barnstormers Tour Makes Six Stops In The Upper Midwest



Brainerd, Minnesota was one of the stops for the 2018 American Barnstormers Tour, July 19 through 21. *Brad Thornberg Photo*

The American Barnstormers Tour landed its vintage aircraft in five Midwest states in July 2018. Founders Clay Adams and Rob Lock brought as many as 25 pilots and aircraft to Jefferson City, Missouri; Ames, Iowa; Watertown, South Dakota; Brainerd, Minnesota; and Eau Claire, Wisconsin, wrapping up with a stop at EAA AirVenture Oshkosh in Oshkosh, Wisconsin.

This year's tour highlighted Travel Air biplanes. Walter Beech, Clyde Cessna, and Lloyd Stearman founded the Travel Air Manufacturing Co. in Kansas in 1925, along with Walter Innes Jr. and William R. Snook.

The American Barnstormers Tour celebrates aviation history, seeks to draw communities to their local airports, and offers the general public flight experiences in vintage aircraft. ❑

Basic Airplane Control Is A Good Thing!

by Harold Green


Harold Green

A disproportionate number of loss-of-control accidents happen while turning from base to final caused by a stall spin accident. Typically, this is the result of overshooting the final approach course, steepening the turn and over applying rudder, resulting in a stall and a snap to spin. Perhaps a slight change in emphasis on airplane control could reduce this accident rate.

Over the years, training for the Private Pilot Certificate has been revised with the apparent goal of easing the path to completion. Years ago, an applicant was required to perform spins, chandelles, lazy eights and accelerated stalls, as well as pylon eight ground reference maneuvers in addition to the maneuvers required today. Further, instructors placed heavy emphasis on coordinated flight. If the ball got out of the cage during any maneuver other than a slip, there were sarcastic comments from the instructor. In the old tandem trainers, such as the Aeronca 7AC, where the instructor sat in the backseat, the point could well be driven home by a sharp rap alongside the student's head. Further, most planes did not have coupled controls to assist in keeping the ball in its little cage. Students learned to maintain coordinated flight instinctively. In fairness, radio communications and electronic navigation were not included, so the time devoted to those today was not required back then.

There is also a difference in the airplanes we fly today, compared to the earlier years. The 7AC and the J-3 Cub could both bite if you entered a stall too enthusiastically or uncoordinated. Should you have a chance to fly a World War II trainer, such as the PT-22 or T-6, you will rapidly learn that aileron use in the stall is a definite no-no. If you compare the wings of these older planes with the newer Cessnas, Pipers or virtually any modern airplane, you will find that the designers have gone to great lengths to ensure that the stall progresses from the root outward, thereby causing the stall to be safer

and more gentle. You really don't want the wing to stall at the wingtips first because they probably won't stall at the same time, particularly if the plane is slightly uncoordinated, and the leverage resulting will tend to flip the plane upside down.

Today, even the 310 hp Cirrus SR-22 is a pussycat in a full power stall thanks to the NASA derived airfoil. You may be lying on your back in the seat, but the stall tends to be a non-event. However, any of these planes will bite if you persist in non-coordinated flight or don't promptly execute a stall recovery.

Today's airplanes stall so gently that if the CG happens to be near the forward limit, the newbie may not even be aware that it has stalled. In fact, in many airplanes, again with forward CG, you can hold the plane in the stall with full up elevator, neutral aileron, and holding the heading with the rudders, the nose will bobble up and down, but will remain controllable, as long as you maintain coordinated flight.

A Skyhawk in a full flap stall will descend at about 1300 feet per minute. (Unless you are very accomplished, don't try this without an instructor onboard, nor should you attempt it with the earlier model without the leading edge roll over of the later models or with the CG aft). That's about the same rate that a Cirrus under the parachute descends: Of course, you have forward velocity with the Skyhawk that you don't have with the Cirrus, and the airplane has not been designed to absorb kinetic energy in the same manner as a Cirrus, so this is not a recommended means of conducting an emergency landing.

It is still true, though, that if the pilot persists in uncoordinated use of rudder and aileron, or if he becomes too aggressive on the use of ailerons, the plane will bite. Over you go on your back and the ensuing spin is delightful to watch, from afar and at altitude.

We were all told at some point that a down aileron produces drag. If a stall occurs, a wing will often drop and the unaware pilot applies aileron to raise the wing usually without rudder input. That produces drag causing the plane to yaw in that direction with the result that the airflow over that wing slows causing it to stall further, while the other wing speeds up, causing it to generate more lift. The dirty side of the plane goes up and we begin the spin. For those unaware of it, that is the reason you were told to use rudder and not aileron in stall recovery. Today's airplanes will permit use of aileron as long as you stay coordinated. By the way, the proper method of raising the wing that dropped in the stall is to use rudder. In today's training, we say use coordinated rudder and aileron. However, just rudder will suffice in this condition and that is the way it used to be taught.

Now the point of this is that today's airplanes are so forgiving and gentle in the stall that they can very easily lull the unwary pilot into complacency regarding the dangers of an inadvertent stall. There are some folks who feel that better trainers would be ones which scares the student into respecting the stall. While this could produce the desired result, the unintended consequences would probably be a reduction in the number of students completing training or even beginning training. Perhaps a preferred approach would be to increase emphasis on coordinated flight, stall recovery and stall avoidance.

As a further point on this issue, reference to the Nall report (published annually by the AOPA Air Safety Foundation, which presents accident statistics in a very organized manner), reveals that so long as the aircraft remains under control, the chances of surviving an accident are tremendously improved over loss of control. Thus, the primary goal of the pilot during any emergency should be to maintain control of the aircraft. A saving grace is that today's airplanes, properly flown, will recover from a stall with remarkably little loss of altitude, assuming the pilot recognizes the stall immediately.

More emphasis on maintaining coordinated flight would seem to be in order here. All too often pilots just don't use the rudder. The idea that when the throttle goes forward, so should the right rudder for most engines, seems to escape many pilots. In fairness, the longer since the pilot was last checked, the worse the performance is. Also, when the plane is pitched up, the rudder should be applied also because the P-factor comes into play here. NOTE: If you have an engine with opposite rotation to U.S. engines, the left rudder becomes dominant.

Another aspect of controlled flight, particularly in the landing pattern, is the fact that for a given power setting, pitch attitude determines the airspeed. Yes, if you have more power than you need for that attitude, the plane will climb. In the landing pattern when you reduce power, the airplane will assume a speed determined by the pitch attitude of the plane. In fact, with most airplanes a full reduction in power while holding the pitch attitude level will result in an airspeed remarkably close to the best glide speed for the plane. The point is that while in the pattern and at a fixed power setting, you can hold airspeed by holding attitude. A fact that some people don't seem to accept.

You certainly don't have to stare at the airspeed indicator once you have established your speed. It is only necessary to maintain the pitch attitude that established the speed. This permits you to pay greater attention to the ground track. The

problem comes about when the pilot seeing the airplane is too low tends to raise the nose. This only results in the plane landing shorter than before and could result in a stall. The proper response is to add power and keep airspeed constant by managing the pitch. This not only results in a safer landing, but a better landing as well. Remember, the stabilized approach concept?

Should a stall occur on the turn to final, proper recognition and reaction will result in rapid recovery from the stall. Many of today's airplanes, particularly the lighter planes which make up the majority of the loss-of-control pattern accidents, are capable of recovery from a stall with considerably less than a 500 ft loss. That means that providing the airplane is coordinated at the time of the stall, there is an excellent chance of safe, if scary, recovery. Perhaps during training, we should place emphasis on stall recovery with a minimum loss of altitude.

In summary, what is suggested here is that a renewed emphasis on the very basic elements of airplane control seems to be in order. It is not possible, nor is it desirable, to return to the ways of yore. However, some renewed emphasis on the fundamentals of aircraft control can't hurt and probably would result in increased safety.

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

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

You're Doing WHAT? – Part 2

by Woody Minar


Woody Minar

In the August/September 2018 issue of *Midwest Flyer Magazine,* I wrote about pet peeves that fight instructors and air traffic controllers around the country have shared with me in person, emails, or other correspondence. Below are some more pet peeves.

Concept of Airspace – There are many Class D airports underlying Class B shelves. Let's use Anoka County – Blaine Airport (KANE) in the Twin Cities, for example. Its ceiling is 3400 feet MSL while the overlying Minneapolis Class B airspace is 4000 feet MSL. One controller told me that aircraft have been seen flying at 3900 feet MSL over Anoka. While this is perfectly legal, is it really safe? What if your altimeter is off and you haven't reset it in a while? You could actually be in Class B. And what is the purpose of Class B? To separate us little guys from the really big guys. A controller could have a 777 fly at 4000 feet right over you at 3900. The outcome would be disastrous. Give yourself a buffer between the Class D and B; better yet, request a transition through Class D.

Self-Announce Transmissions – Advisory Circular (AC) 90-66B dated March 13, 2018 states, "Self-announce transmission may include aircraft type to aid in identification and detection, but should not use paint schemes or color descriptions to replace the use of aircraft call sign.… "Midwest Traffic, Twin Commander Five One Romeo Foxtrot 10 miles northeast" … not "Midwest Traffic, Blue and White Twin Commander 10 Miles Northeast." When referring to a specific runway, pilots should use the runway number and not use the phrase 'Active Runway' because there is no official active runway at a non-towered airport."

So, What Runway? – "Bonanza 12345, left downwind runway twenty-eight?" Who taught this pilot communications and why hasn't the pilot been corrected during a flight review? "Runway two eight." It doesn't take any longer to say it.

As long as I'm at it, "…entering a left final for two eight." Huh? It's final. Period. And that's final.

"Any traffic in the area, please advise." – Why? Watcha gonna do about it? This cancerous announcement got so bad the FAA put it in the Aeronautical Information Manual (AIM) under Section 4-1-9.g.1 – "Traffic in the area, please advise is not a recognized self-announce position and/or intention phrase and should not be used under any condition." It's ALSO printed in AC 90-66B. So there. Remember the phrase "See and Avoid?" This also includes "… five out, inbound for 34. Be advised…." Oh, and "Skyhawk 12345," with you at 7,000," is just as bad for IFR pilots because ATC already knows you're with them because you're talking to them. "Skyhawk 12345 at 7,000."

Ball Off Center – "If I told you once, I've told you …" The ball is there for a purpose and pilots tend to regard rudder pedals as unique curiosities. I guess you can see better out the side window if you're climbing out in a skid. Whatever you do, don't get slow or that skid will become a stall/spin and you'll get a really good view out of the windscreen – of the trees! Keep the ball centered. It should be second nature.

What Was Learned Isn't Necessarily Practiced – Flight instructors teach proper procedures and techniques outlined in the Federal Aviation Regulations (FAR), Aeronautical Information Manual, Advisory Circulars, and Practical Test/Airmen Certification Standards. Once the certificate is received and time passes, bad habits can creep into the flying. Seasoned pilots who should know better don't necessarily follow the rules; they get lazy, make up their own rules, or "I like what that pilot does, so I'll do it, too." Examples are drive and dive onto the runway, round patterns, three-mile-wide patterns, not using tail numbers, and unnecessary long finals causing pilots in the pattern to disrupt the safe flow of traffic. For a good review, AC 90-66B is worth reading. The AC states that "pilots conducting instrument approaches should be particularly alert for other aircraft in the pattern so as to avoid interrupting the flow of traffic…"

A common error is not repeating the name of the airport at the end of each transmission. Too often the listener misses the airport name at the beginning of the transmission. Thinking before transmitting can eliminate confusion, such as reporting a wrong position in space; "… 5 miles east inbound …" when the aircraft may be *traveling* east, but is actually west of the airport. Call-up, such as "… 10 miles out …." instead of "… 10 miles north." If you're expecting and looking in the wrong location based on the erred radio call, there could be consequences. See and avoid.

The IFR Announcements – "Cirrus 123WM, holding over ECLEY at 3,000." Where the heck is ECLEY? Or they will announce "… over RICNO inbound on the GPS approach." The VFR pilot, or even an IFR pilot who is

unfamiliar with a GPS approach at Osceola, Wisconsin (KOEO), doesn't have a clue where the aircraft is located (RICNO is the Final Approach Fix for the GPS 28 approach). It's so much easier to say "Osceola Traffic. Bonanza 543WM, five-mile final GPS 28. Osceola and other mileage announcements as appropriate or necessary. The recipient knows exactly where you are, and why you're coming straight in (or circling). The IFR pilot coming into a strange airport, doesn't have to think from what direction you're coming from; the phrase is easy to remember wherever you are. Read para 9.6.1 in the AC.

"With you" or "Checking in" is redundant. "With the flash," "Got'em on the fish finder [or metal detector]," or "Tallyho" – all very unprofessional. "Ident" or "Four two four five [and of course your tail number]." If you have ever flown around Chicago or other very busy airspace, the controllers are so busy they talk like auctioneers and don't have time for the extra verbiage. Be professional - short and sweet.

Continuing Education – The FAA has seen a decrease in accidents, runway incursions, etc., as a result of continuing education and the WINGS program. That's the great news. The good news is that we see the same pilots over and over attending safety seminars. The disappointing news is that we're not seeing an increase in attendance or new faces—especially young or new pilots. How do we reach out to those pilots who aren't attending safety seminars? We can spread the word. We can encourage new, and old, pilots to attend. We can adopt "Bring a pilot to a seminar" program. It's a great way to meet new friends, share stories, network, and you might just learn to step on the ball, use proper phraseology, or not become a statistic.

If you haven't done so, create an account on **www.FAASafety.gov**. You can get alerts about seminars in your area and webinars across the nation. The latter are becoming more popular. Three credits of seminars, webinars, or online courses and some flight maneuvers each year will extend your flight review another year. While an hour of ground and an hour in the air every two years satisfy the basic requirements of a Flight Review, the WINGS program enhances your training by making you a much better pilot through recency of training.

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Aircraft Records, Heavy Wings, College Tuition, Bonanzas, Props, Skyhawks, Upgrades, Filler Caps, Primers & Bluebook Values

by Pete Schoeninger


Pete Schoeninger

Q: Do you recommend keeping all airplane records inside the cockpit?

A: When flying, I suggest you only carry what is required onboard, which are certificates of airworthiness, aircraft registration, plus operational limitations, and weight and balance information. Operational limitations and weight and balance information is usually contained in an Airplane Flight Manual, or Pilot's Operating Handbook. So whenever flying, check to see that all of these documents are onboard.

I would also recommend that if you have not already done so, make an electronic, or paper, copy of everything needed to be onboard, plus maintenance logs. Some of the Airplane Flight Manuals and/or Pilot's Operating Handbooks are several hundred pages, so it might be only necessary to copy pertinent data to your particular airplane (i.e. supplements, equipment lists, weight and balance data). For sure, make good copies of all maintenance records. Keep the copies far away from the originals!

You DO NOT need to have maintenance records onboard when flying, but you must be able to produce them in a reasonable amount of time if asked by Federal Aviation Administration officials.

Q: How do you trim out wing heaviness in a Cessna 182, and in an old Tri Pacer…neither of which have aileron trim?

A: This is a job for a licensed mechanic only. First, he may ask you if you were certain that both fuel tanks contained the same amount of fuel in flight when wing heaviness was noted. Then, was your turn and bank ball in the center in cruise flight? If not, you may have a rudder trim issue rather than a wing trim problem. Lastly, have you like many pilots flown subconsciously or not with the left wing a tiny bit lower than the right wing, and carry a tiny bit of right rudder to compensate for that?

If all of these questions are answered properly, for your Cessna 182, then your mechanic has a couple of choices – the most common is to lower or raise the resting position of one wing flap a tiny bit. For the Tri-Pacer, the most common fix is for your mechanic to turn the adjusting nut at the lower end of the rear wing lift strut in or out, maybe one-fourth or one-half turn at the most. Any of these actions should only be done by a licensed aircraft mechanic.

Q: I have heard of young people graduating from college/flight school with as much as $200,000 or $300,000 in debt. Is that possible, and is it worth the investment? We ask because our son is a senior in high school and wants to be an airline pilot.

A: Yes, it is possible to get that far in debt. The cost of a four-year college degree, combined with lots of flight-time, can be staggering. What some students do is go to an aviation-related college right out of high school and graduate with a degree and many pilot ratings, with at least a shot at being close to having a job with a commuter airline. Going this route is perhaps the quickest way into the cabin of a big airplane, but can be very expensive.

Do you or your son want to put a huge amount of money at risk? The risk is that if you bust a couple check-rides, or develop medical issues, you might be out of that lucrative job way before you get your loans paid off. If that is a risk you do not want to take, or cannot swing financially, there is the more traditional way of working your way up more gradually, by working for an air cargo operator, or a fixed base operator, instructing and flying charter; or as a corporate pilot. Going the traditional route takes longer to reach a high-paying airline job, but there is less financial risk. Your son might also decide in the end that he prefers one of these other flying jobs and employers than working for the airlines.

Q: I rode in a friend's 1980 F-33A Bonanza. I was impressed by the quality of the airplane, the solid feel (he let me fly it a little) and the speed. But there are two stable mates, the V-35B and the A-36. Could you make brief comments on all three models?

A: Sure. I like all of them. Very briefly, the V-35B has the forked tail, four (4) seats, a small center of gravity (CG) range, which requires attention to weight and balance, and is the fastest of the three models. The F-33A is pretty much a V-35B with a straight tail. The A-36 has six (6) seats and a separate entrance for passengers in the backseats. The A-36 carries a little more, and may bring a few bucks more than the others. All 1980 models have 285 hp engines, and the V model is the fastest. The F-33A is about 5 mph slower, and the A-36 is about 5 mph slower than the F-33A. Because these airplanes

are 38 years old, and are roughly the same price on the used market (the A-36 may be a little higher), pick the one that suits your needs best and is in the best shape. Like all high-performance airplanes, be sure to find a shop with lots of Bonanza experience to do a pre-purchase inspection and then routine maintenance after you make your purchase.

Q: Why doesn't someone make a ground-adjustable propeller for many single-engine production airplanes? I know ground-adjustable props are offered to the experimental market. If certified, ground-adjustable props were widely available, you would not have the $8,000 – $12,000 or more expense of a constant speed prop to improve performance, and you would not need an engine built for a constant speed prop. You could usually leave it in a high-pitch mode for faster cruise, but when more power is needed at low speeds (short field, heavy load, flying parachute jumpers), you could set the prop to a finer pitch and get more rpms on takeoff and initial climb.

A: I put your question to a lady at a major prop manufacturer. (She asked me to keep her name and company out of this column.) Her candid response was that officials at her company did not think there would be enough retail sales to certified airplane owners to justify the expense of certification and liability insurance.

Q: Many have said the Cessna 172 Skyhawk is the most produced civilian airplane. Can you provide a few years and production numbers?

A: Let's do every 10 years: Year 1956, 1174 airplanes; Year 1966, 1499 airplanes; Year 1976, 1899 airplanes; Year 1986, 517 airplanes (production ended). Production resumed in 1997 with 305 airplanes built; Year 2006, 411 airplanes; Year 2016, 105 airplanes.

Q: My friend (a licensed airplane mechanic) is going to help me rebuild a worn out 1945 Piper J-3 Cub I recently inherited. My friend is suggesting that we MUST add shoulder harnesses, and that I consider having the horsepower increased from 65 to 75, adding a wing tank, and converting to modern brakes. Your thoughts?

A: No matter what, have the shoulder harnesses installed if the airplane does not currently have them. Without them, in the event of a crunch, the front seat passenger would likely hit their face/head on the all-metal instrument panel, and the rear passenger would hit their face/head on the back of the metal front seat, both of which can cause terrible injuries in the event of a crash. The cost will be about $1,500.00 for both front and rear shoulder harnesses.

Improvements or additions that you add to a stock airplane are usually not financially rewarding. If you are going to sell the Cub after you finish rebuilding it, I would do none of the last three upgrades your friend mentioned. But if you are keeping it, your friend's suggestions are good ideas, to wit: 1) I have flown 65 and 75 hp Cubs. 65 hp is adequate, but there is a significant improvement in takeoff and climb performance with 75 hp engines vs 65 hp. 10 horsepower does not seem like a lot, but remember, it is about a 15% improvement over the 65 hp engine. 2) If you are only flying locally, the original 12-gallon nose tank (2-plus hours of range) should be okay. But if you like to go somewhere, another 6 or even 12 gallons of fuel can be great for flying to a no-fuel landing area. Beware, you can get over gross weight easily with two people onboard, plus lots of fuel. 3) Original J-3 brakes are lousy. Almost any retrofit brakes are better.

Q: Another Cub question: Someone told me that in order to get a 65 hp Continental engine to produce 75 hp, all you have to do is shorten the prop a little and re-pitch it a bit, so the engine turns up more rpms. Is that true?

A: NO! When you change an A65 Continental to an A75 model, there are minor internal engine changes that must be done to accommodate higher rpms, more heat, etc. Yes, I have heard that some people have only changed the prop pitch to get more power without doing required internal engine changes. Doing so might work for a little while, but it would be ILLEGAL, and worse yet, dangerous. If you desire to change from 65 to 75 hp, make the necessary internal

changes; only then get your prop recut. You will enjoy a little more snap on takeoff and climb, but remember, there is no free lunch and you are burning a little more fuel per hour.

Q: Someone stole the gas cap off my Cessna 182. I found a gas cap at an Oshkosh flea market sale that seems to fit, but it does not look the same. Should I use it?

A: NO, not until an aviation mechanic determines that it is the right cap. There are many different OEM caps for airplanes, and then there are also lots of after-market gas caps. Not all are legal (or even safe). Some airplane gas caps have holes in them to allow air in (and water!). Some gas caps are required to have little vents that stick up and face forward to put air pressure on remaining fuel, etc. Be very careful that you have the correct cap. Improperly vented fuel tanks have caused fuel starvation.

Q: Do you have any knowledge of airplanes flying with oil filler caps off (by pilot error)?

A: I do know of a Cessna 172RG which flew from Michigan to Milwaukee across Lake Michigan with the oil dipstick left on a workbench in Michigan. There was almost no oil loss on the 180 hp Lycoming engine. That engine has a long tube coming uphill from the engine case which holds the dipstick. On other aircraft engines that have an oil fill cap right on the crank case, you will have an immediate and massive oil loss. ALWAYS CHECK THE OIL CAP, AND GAS CAPS TO BE SURE THEY ARE SECURELY INSTALLED.

Q: A friend told me he carries a spare source of electric power when flying his Cessna 185 to very remote areas, but not when flying his brother's Cessna 180. He said the C-185 has a fuel-injected engine that needs electric power to run a fuel pump to prime the engine for starting, and the C-180 does not need an electric fuel pump to prime. Don't you have to prime a C-180 engine as well?

A: On a cold start, both engines need prime. You need electric power to run the fuel pump to prime the fuel-injected engine in the C-185's engine, while the carbureted Cessna 180 engine can be primed with a hand primer. With a dead battery in either case, you would need to hand crank the prop after priming to get the engine to start. This is a dangerous procedure and don't even think of doing it until you have gotten a good education from an experienced pilot or mechanic. Departing with a dead battery is never a good idea because if you lose your alternator, you are immediately without any electric power for radios, lights, etc.

Q: What airplane "bluebooks" are available and what do they cost?

A: Two good ones are VREF and Aircraft Bluebook. An Internet search will quickly provide subscription information on each. In addition, I also buy an occasional CD from Airpac, easily found on the Internet, which has massive amounts of data on pilots and aircraft registrations. A subscription to VREF's online version is $85.00 per year and $350.00 for the print version. Aircraft Bluebook is $399.00 online and its online and historical pack is $599.95. Subscriptions include four detailed quarterly issues of their printed versions. VREF is associated with AOPA, but AOPA only shows retail figures. Wholesale pricing and lots more are shown in the printed versions. Airpac CDs are $95.00 for one CD, and they have a new CD each month. I buy a few each year. I use both bluebooks plus Airpac CDs (for statistics.) Usually, but not always, the bluebooks are within 15% or so of each other in used airplane prices. But remember, the older the airplane, the less "average" any particular airplane is, so the bluebooks should be used with a large grain of salt.

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

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The Great Lakes Region Gets A New Regional Flight Surgeon While Basic Med Increases In Popularity

by Dr. Bill Blank, M.D.


Dr. Bill Blank

When I last checked, over 35,000 airmen had availed themselves of "Basic Med." In addition, Mayo Clinic physicians now perform Basic Med exams. In fact, the Mayo Clinic in Rochester, Minnesota, has developed and offered its own on-line Basic Med course which meets the FAA requirements. The only other course is the one offered by the Aircraft Owners & Pilots Association (AOPA).

I feel Mayo's offering of Basic Med is significant. The Mayo Clinic is a well-respected and world-renowned medical institution. They undoubtedly studied Basic Med carefully before deciding to offer it. This is a significant endorsement of the concept.

As many of you know, a one-time Special Issuance is required to obtain certification via Basic Med for certain medical conditions. These include some neurologic and mental conditions, along with myocardial infarction, heart valve replacement, and heart transplantation. What you may not realize is that for the FAA to act on your Special Issuance, they need an unexpired medical on file. What do I mean by this? I mean a medical which has not expired by date, at least as a third class. Your medical may not be valid because of your health condition, but otherwise would be. If your medical has expired by date, then you will need to see your Aviation Medical Examiner (AME) for another exam which he will defer. A practical consideration is, that if your medical only has a few months until expiration, it may expire prior to the FAA completing its evaluation of your records. In that case, they will require that you get another exam.

David Schall, MD, the Great Lakes Regional Flight Surgeon (RFS), took another position with the FAA on April 1. He has been the RFS for 7 years. During that time, he has made many improvements to the Great Lakes Regional Flight Surgeon's Office.

From my point of view, Dr. Schall is one of the finest RFS's I have known. His desk phone number has always been available to AMEs. In many regions, that is not the case and you have to go through the "front desk." He always answered his phone himself. If you left a message, he called back as soon as possible. He also communicated by email. He has called me between planes and sent emails on the weekend. He made it possible and encouraged working many more cases in Chicago instead of Oklahoma City. This was not a priority in the past. He did this to smooth and speed up the certification process. His philosophy has been to treat people like he would like to be treated. I am sure many of our readers have been helped by Dr. Schall without knowing it.

Dr. Schall will be replaced by Joye L. Holmes, M.D. who has been the Deputy Regional Flight Surgeon for the FAA Great Lakes Region in Chicago for 5 years. Prior to that she was the American Airlines Regional Medical Director at O'Hare for 7 years. Her background is in Occupational Medicine. She is experienced in the medical certification process, and, I think, will do a good job.

Is it possible to have a denial reversed? I would like to tell you a story. In September 2017, an airman contacted me because he had been denied certification because of a slightly abnormal visual field in one eye. I reviewed the reports which his treating ophthalmologist had sent to Oklahoma City. It was obvious to me that the visual field changes were minor. I wouldn't have thought twice about certifying him. The next step was to find out who denied him. It was a non-ophthalmologist review officer in Oklahoma City. An ophthalmologist had never seen it. The FAA will reconsider a denial if further supporting information is provided.

I had the airman see and examined by the FAA's ophthalmology consultant. He is the one to whom they send all of their difficult ophthalmology cases. He agreed with me and recommended certification. The case then went to an FAA ophthalmologist. After several discussions between the three of us, it was decided in early March to certify him via Special Issuance and he now has his medical. Unfortunately, it took 6 months to reach this goal. Dr. Schall was very helpful with this case.

Happy Flying!

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

DISCLAIMER: The information contained in this column is the expressed opinion of the author only, and readers are advised to seek the advice of others and refer to the Federal Aviation Regulations and FAA Aeronautical Information Manual for additional information and clarification. ❑

From AOPA Headquarters

www.aopa.org
800-872-2672

AOPA's Game Plan For Bringing Down The Cost of Flying

by Mark Baker
AOPA President & CEO


Mark Baker

Any good coach knows the best teams are made up of a strong offense and defense, and that's exactly how AOPA continues to succeed at promoting and protecting the freedom to fly. In the past five years, we've gone on the offensive, creating cost-saving initiatives to help pilots fly more often and more affordably. And we've defended GA against harmful regulations and legislation.

A recent win that will reduce the cost of flight training and maintaining proficiency resulted in updates to Part 61 of the federal aviation regulations. We worked on this issue for more than two years, but it was worth the effort because the changes are expected to save the GA community approximately $113.5 million over five years. The updated regulations will allow instrument-rated pilots to use a simulator or advanced training device to maintain instrument currency. Pilots can also use the simulator for recurrency without a CFI, further reducing the cost. Pilots training for a commercial certificate can save by having the option to train in a technically advanced aircraft instead of a complex aircraft.

We're also fighting to save pilots money where you live and fly – our advocacy work runs deep through small hometown airports and local FBOs. For nearly two years, we've been pushing the FAA to take action against egregious, hidden FBO fees, and to improve affordable access to publicly funded ramp space. Our AOPA-led coalition of GA groups is calling on the FAA to pay attention to its responsibilities for protecting airport access and insisting on publicly disclosed fees online, access to parking ramps on reasonable terms, charted transient parking, and an end to charges for services pilots don't ask for or want.

These are high-profile issues. But some of our greatest victories are invisible – the legislation that's never written and the regulations that are never proposed, thanks to the influence of our team in Washington, D.C., and in state capitals. We win when bad ideas never see the light of day. But whether our victories play out in public or private, whether we're on offense or defense, our end game will always be to protect the freedom to fly. ❑

AOPA Great Lakes Regional Report

The Preservation & Promotion of Our Nation's Airports

by Kyle Lewis
Regional Manager for Government Affairs & Airport Advocacy
Great Lakes/AOPA


Kyle Lewis

As a pilot, you learn to expect certain things. One of those expectations is finding an airport under your wings when completing a long cross-country. Navigation methods have changed over the years from ground markers to radio beacons (NDB and VOR) to the latest and greatest GPS. Airports have generally stayed in the same spot, with a few exceptions. Most of our nation's airports have been in service for generations, name changes have occurred, but the asphalt and concrete are still there. AOPA has an entire department dedicated to the preservation and promotion of our nation's airports. I am part of that team and would like to share some ideas on how you can take action on a local level.

Airports are complex ecosystems with their own set of rules and standards governed by the FAA and state-level departments. These standards apply to local community airports and large commercial-service airports. Airport zoning, minimum commercial operating standards, compatible land use, runway safety areas, aircraft movement areas, FBO leasing, land leases, and hangar leasing are just a few of the duties airport administration deals with daily. Larger airports have a full-time staff overseeing operations, while small airports have a sometimes-part-time manager who is lucky to get the grass cut every week. In either case, airports are the first impression on an outside visitor.

I have mentioned it before in this column, but I want to stress how important the Airport Support Network (ASN) is to the overall mission of AOPA. Our ASN Volunteers are our eyes and ears for their airports. They promote airport activities and many sit on advisory boards or airport commission boards that oversee airport operations.

You, as an airport user or tenant, can take an active role. Attend airport board meetings, and city council, township, or county commission meetings. This is where the decisions on airport operations are made. Those decisions may affect you as a hangar tenant or airport user. It has become my experience that in many cases, airport decisions are being made with little input from airport users. Having your voice heard and becoming an AOPA ASN Volunteer is a great way to start becoming involved.

AOPA provides resources that allow our ASN Volunteers to stay informed and educated. Our volunteers help educate community leaders about the airport. The ASN program is a tool for any airport administration to take advantage of for the benefit of their tenants and users. Become involved and stay involved.

We ask our volunteers to promote their airport. It can be something as simple as showing a kid an airplane and sparking interest in the next generation.

If you expect our airports to stay under the wings of general aviation, please consider becoming active in your airport community and help us protect your freedom to fly!

EAA AirVenture Oshkosh 2018 is now behind us and it was a very successful event for AOPA. Mark Baker, AOPA President and CEO, held two pilot townhall meetings and sat on a panel discussing our FBO pricing initiative. One of AOPA's core missions is to improve the economy of flying -- not in terms of fuel consumption, but in terms of keeping aviation accessible and affordable.

I spent most of the week at AirVenture speaking with members in the AOPA Campus and the topic of conversation centered around our work on the FBO issues. It is not about setting fuel prices, but about non-discriminatory access and transparency. This is an issue that every pilot should be well educated on, and AOPA provides those resources on our webpage (see www.aopa.org and click on the "FBO Fees" at the top of the page).

In September, I and my fellow AOPA Regional Managers attended the annual National Association of State Aviation Officials (NASAO) conference held in Oklahoma City, Oklahoma. NASAO is a network of state aviation directors and staff who work together on national aviation policy including topics of funding, aviation growth, aviation safety, and airport standards. Our duties with AOPA put us in contact with state department of transportation aviation officials frequently and this conference is a way to show our support and continue the good working relationships we have at the state level.

The summer legislative recess has little updates to offer, but I will highlight a bill that was introduced in Ohio just before the legislature adjourned for summer.

• OH House Bill 685: Regulate Operation of Drones Near Airports (Rep. Barnes – D, OH 12th).

This bill strictly prohibits the operation of a UAS (unmanned aerial system) within 5 miles of any airport that has a control tower, within 3 miles of an airport that has an instrument approach but no control tower, within 2 miles from an airport that has neither a control tower or instrument approach. Penalties recommended include a charge of 1st degree felony, fines up to $20,000 and an 11-year jail term. There are no provisions for FAA Part 101 or Part 107 operators. The bill lacks any understanding or concurrency with current federal law or regulations. There are also provisions in the bill for retailers to collect data on purchasers of drones, but little direction is given as to how the information would be used. The bill has been introduced and assigned to the House Transportation and Public Safety Committee with no hearing date set as of this writing. AOPA, along with other organizations such as the Academy of Model Aeronautics (AMA), are opposing the bill as written. It is expected that this bill will not get out of committee, but we are monitoring it.

It is always a privilege to be able to communicate my work with you and as always, please do not hesitate to contact me with questions or concerns (kyle.lewis@aopa.org). ❑

Floatplane Pilot Tells of His Alaskan Adventure At Private Potluck Fly-In

Jeff Plantz (center).
Dave Weiman Photo

VERONA, WIS. – Each year, retired Dane County Deputy, Tom Kretchman of Verona, Wisconsin, opens up his private airport – Sugar Ridge Airport (WS62) – to the community for a potluck dinner. The event grows each year, attesting to the general public's fascination with aviation. This year the potluck fly-in took place on August 16, 2018. Hundreds of people attended. In addition to a variety of conventional, antique and homebuilt aircraft, there were classic cars on display.

Among the pilots who flew in were Jeff and Patty Plantz of Madison, Wisconsin, with their J1 Super Cub lookalike homebuilt on amphibious floats, powered by a 180 hp Lycoming IO-360. The couple just returned from Alaska where they had an "incident" with the plane on Naknek Lake on July 22, 2018.

Jeff Plantz said that he landed safely on Naknek Lake, then proceeded to water taxi to the dock where his wife, Patty, was waiting to secure the aircraft. During his taxi, Plantz needed to turn crosswind and when he did, the wind lifted one wing, and pushed the other wing into the water. The floats kept the aircraft upright except for the wing in the water, which kept sinking. Finally, with the wind still blowing hard on the upright wing, the plane went inverted wingtip first. Plantz was able to get out of the aircraft and hang on to one of his floats until rescuers arrived.

Since there was no significant damage or injuries, the Federal Aviation Administration ruled the mishap an "incident," and not an accident. In fact, once Plantz was able to upright the aircraft, it was inspected and he flew it home.

Jeff and Patty Plantz hope to return to Alaska in 2019. ❑

Czech Pilot Martin Sonka Gets Back-To-Back Wins With Kazan Triumph

Martin Sonka wins the Red Bull Air Race in Kazan, Russia.
Red Bull Air Race Photo

(L/R) Michael Goulian, Martin Sonka and Kirby Chambliss
Red Bull Air Race Photo

KAZAN, RUSSIA – The 2017 overall runner-up Martin Sonka came into Kazan on a high after claiming his first race win of the 2018 season in Budapest, yet struggled to find the best lines in the Russian racetrack and finished 12th in qualifying. But in the final race on August 26, the Czech star was on rails, clocking the fastest time in the opening round of 14 and doing the same in the round of 8. The Final 4 piled on the pressure, as Americans Kirby Chambliss and Michael Goulian – who were first and third in Kazan in 2017 – as well as Spain's Juan Velarde – all logged times under 53 seconds. It was all up to Sonka, and split times were neck-and-neck, but in the end Sonka pulled off 52.123 of a second, outpacing Goulian by just 0.115 of a second for the win and a jump up on the overall leaderboard.

The Russian result boosts Goulian, the most consistent pilot of the season with four race podiums and five Final 4 appearances, back to the top with 55 points, while Sonka and Australia's Matt Hall are now tied for second in the points at 49. French standout Mika Brageot and Yoshihide Muroya of Japan managed to hold tight in the fourth and fifth positions, respectively, but have seen the points gap to the leaders widen.

The World Championship moves to Indianapolis, Indiana and Forth Worth, Texas, for the final two stops of the season.

World Championship standings after five races:

1. Michael Goulian (USA) 55 points,
2. Martin Sonka (CZE) 49 pts,
3. Matt Hall (AUS) 49 pts,
4. Mika Brageot (FRA) 27 pts,
5. Yoshihide Muroya (JPN) 22 pts,
6. François Le Vot (FRA) 20 pts,
7. Kirby Chambliss (USA) 19 pts,
8. Juan Velarde (ESP) 16 pts,
9. Matthias Dolderer (GER) 15 pts,
10. Ben Murphy (GBR) 15 pts,
11. Pete McLeod (CAN) 11 pts,
12. Petr Kopfstein (CZE) 10 pts,
13. Cristian Bolton (CHI) 6 pts,
14. Nicolas Ivanoff (FRA) 6 pts

Red Bull Air Race 2018 Calendar

2-3 February: Abu Dhabi, UAE
20-22 April: Cannes, France
26-27 May: Chiba, Japan
23-24 June: Budapest, Hungary
25-26 August: Kazan, Russia
15-16 September: Wiener Neustadt, Austria
6-7 October: Indianapolis, USA
17-18 November: Fort Worth, USA

About Red Bull Air Race

Created in 2003, the Red Bull Air Race World Championship has held more than 80 races around the globe. The Red Bull Air Race World Championship features the world's best race pilots in a pure motorsport competition that combines speed, precision and skill. Using the fastest, most agile, lightweight racing planes, pilots hit speeds of 370 km/h while enduring forces of up to 12Gs as they navigate a low-level slalom track marked by 25-meter-high, air-filled pylons (www.redbullairrace.com). ❑

Flying Low & Slow In Alaska... Where Less Is More & Lower Is Better!

by Yasmina Platt

Published in the August/September 2018 issue of *Midwest Flyer Magazine.*
See the full blog of the trip at **www.airtrails.weebly.com/alaska**
Photos by Arturo Polo Ena (**www.arturopoloena.com**)

St. Charles, Missouri – A Trip Back In Time!

by Yasmina Platt

Situated just northwest of St. Louis, Missouri – St. Charles – traces its history back to the late 18th century. Founded in 1769, it became the first European settlement along the Missouri River until the first American settlers began arriving in the 1790s. In 1804, when the Louisiana Purchase was finalized, the settlement's name was anglicized to Saint Charles from San Carlos. One day in 1804, William Clark arrived in St. Charles with the main body of the Corps of Discovery to await the arrival of Meriwether Lewis who was still attending business in St. Louis. Thereby, St. Charles is designated as a Lewis and Clark site on the Lewis and Clark National Historic Trail and is home of the Lewis & Clark Boat House and Nature Center that is now home base for the replica boats of the expedition.

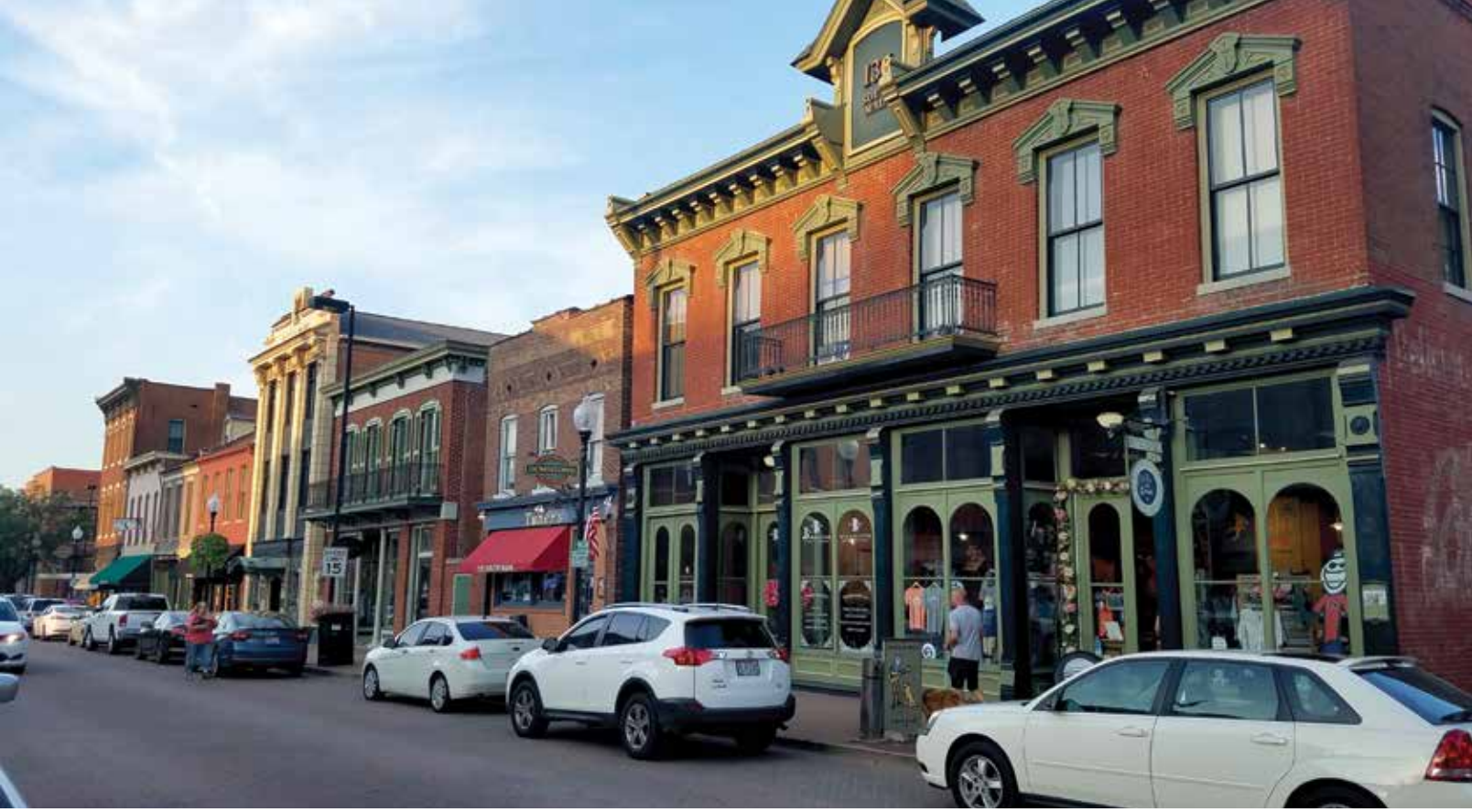
If that wasn't enough history, St. Charles also served as the territorial capitol of Missouri and as its first state capitol from 1821 until 1826 when it was moved to its current location in Jefferson City.

The Riverfront and Main Street area is a central gathering place and focal point for the community. Main Street is on the National Historic Register and contains over 30 notable structures across 16 blocks that now house a variety of restaurants, cafés, shops, and other businesses.

You can also tour the Foundry Art Centre, visit the Shrine of St. Philippine Duchesne, try your luck at the casino, or walk/bike the Katy Trail. Of course, St. Louis is only minutes away as well but I do believe you have plenty to do in St. Charles without going to "the big city."

Your entry into this hidden gem is the St. Charles County Smartt Field Airport (KSET), another little hidden gem in itself, which is approximately 11 miles north of town. KSET also has history associated with it:

- A picture of the airfield from the 1940-50 era shows



that, aside from its normal runway, the odd-looking star infrastructure was mostly used for helicopter training.

- Smartt Field was named in honor of Ensign Joseph G. Smartt who was killed in action during WWII while serving with Patrol Squadron 11.

If you're there on a Thursday or Saturday (10 am to 2:30 pm), there is a good chance the Missouri Wing of the Commemorative Air Force (CAF) will have its hangar/museum doors open and you can read and see more of the airport's and CAF's history then. Once a year, in October, the airport holds the Annual Open House and Pumpkin Drop as well. EAA Chapter 32 provides a number of experimental aircraft on display, as well as food and drinks and, for those willing to try their luck hitting an airplane with a pumpkin or two from the air, the opportunity is available to "bomb" an old fuselage.

Once on the ground, the St. Charles Flying Service has a crew car you can use if you're planning a short stay (like just grabbing lunch), or you can call a taxi, Uber/Lyft for longer stays. Once downtown, you can walk around everywhere or use the St. Charles Trolley which runs from March 15 to December 31.

However, if you're the outdoorsy type and prefer to put your bike(s) in the airplane, the eastern start/end of the Katy Trail is very close to the airport (in the junction between the MKT and the Chicago, Burlington and Quincy (CB&Q) railroads in Machens), then going by downtown St. Charles, and offering views of a very scenic area with limestone bluffs bordering the trail through the Weldon Spring Wildlife Area.

If you decide to plan a trip to St. Charles, I suggest you go to www.airtrails.weebly.com/missouri for more links and pictures, including one of the old airfield.

As always… fly safe and fly often! ❑

Introducing A Friend To GA With A Special Destination

by Dave Weiman

I am convinced that there is no better way to introduce a non-flyer to general aviation than to fly them to some special destination, especially one which is only accessible by air. And if the person is an outdoors enthusiast, such as a fisherman, what better place to take him than to a remote fishing lodge in Canada?

I contacted an old classmate of mine from the Twin Cities, Ken Lundquist, and being the fisherman enthusiast that he is, he was more than thrilled to sign up for this year's **Canada Fishing Fly-Out to Miminiska Lodge, Ontario,** August 9-15, 2018.

Prior to takeoff from the Twin Cities, Ken and I donned our Revere life preservers, and I briefed him on emergency procedures, including what to do if we had to make a water landing, tools available to cut seat belts and break windows, and how to activate the onboard GPS Emergency Locator Transmitter (ELT) and my Personal Locator Beacon (PLB). Knowing that we would be on a flight plan, and that Canada has one of the best search and rescue systems in the world, was reassuring.

The sand point outside of Miminiska Lodge.
Dave Weiman Photo

In Canada, pilots are required to file a flight plan if 25 miles beyond their departure airport, unless someone at their destination airport is expecting them, and can contact Winnipeg Flight Service (FSS) to initiate search and rescue if they do not show up within 1 hour of their estimated time of arrival (ETA). Ken and I actually did both – we filed a VFR flight plan from Thunder Bay to Pickle Lake, and contacted the Wilderness North office in Thunder Bay with our "Flight Itinerary." They in turn notified Miminiska Lodge of our ETA to Pickle Lake, and from Pickle Lake to Miminiska. *(See Transport Canada Regulations 602.73 thru 602.77.)* Normally, we would have also flown with other members of our group, but schedule-wise, that did not work out for us this year, although it did for others in our group.

Months before the trip, I ordered and obtained my annual U.S. Customs & Border Protection *aircraft decal* online at **https://dtops.cbp.dhs.gov.** Then just days before our trip, I filed our outbound (from U.S.) and inbound (from Canada) flight manifests using the U.S. Customs & Border Protection *electronic Advance Passenger Information System* (eAPIS). To register, go to **https://eapis.cbp.dhs.gov/.** While this may sound complicated, it's not, especially once you are registered and have gone through the process.

The night before our departure from the Twin Cities, I called Canada Customs at **888-CAN-PASS** with our ETA to Thunder Bay International (CYQT) where we would clear Canada Customs. Canada Customs requires that pilots call them at least 2 hours in advance of their ETA, and no sooner than 48 hours in advance. U.S. Customs requires that pilots confirm their ETA to their airport of entry as filed on their flight manifest at least 1 hour prior to their ETA, or prior to departing the U.S. I then filed a flight plan to Thunder Bay, which is required to cross the border, and obtained a transponder squawk code from Minneapolis Center. If on a VFR flight plan, you can also get a squawk code from Lockheed Flight Service. In addition, pilots crossing the border must be on frequency with either flight service or center. The simplest way to fulfill all three requirements is by filing an instrument flight plan, because you already have a squawk code and are on frequency. When returning to the U.S. from Canada, pilots are to follow all steps noted above: be on a flight plan, obtain a squawk code, and be on frequency with either flight service or center.

Customs officials in both the U.S. and Canada will want to see your pilot certificate, medical certificate, and passport,

Miminiska Lodge
Pete Aarsvold Photo

The *Midwest Flyer Magazine* group enjoying fellowship and pilot camaraderie at dinner in the main lodge. *Photo Courtesy of Miminiska Lodge*

as well as the passports of each crew member and passenger. Also, have your aircraft registration available should they ask for it, as well as a certificate of insurance proving liability coverage. When you speak with either the Canada Customs Officer or Agent, they will give you a "clearance report number," but remember to also request their name and badge number to document who you spoke with or met. For the return flight back to the U.S., U.S. Customs will not give you a clearance report number, so be sure to get the name and badge number of the U.S. Customs Officer you meet with, as this will be the only proof you will have that you actually cleared customs.

Upon our arrival in Thunder Bay, Canada Border Services (CBS) officers were not there to meet and greet us, which is not uncommon. In these circumstances, the pilot-in-command may get out of his aircraft and go inside the fixed base operation to call 888-CAN-PASS to clear customs. Thanks to cell phones and extended coverages, I simply called Canada Border Services while standing by my aircraft, and once I received our clearance report number, we were both free to go inside the FBO. Remember that neither you as pilot-in-command – nor your passengers – may get out of your aircraft when you return to the U.S., until you are met by a customs officer, and he gives you the okay.

Once we cleared customs in Thunder Bay, the FBO topped us off and we filed a VFR flight plan to Pickle Lake, Ontario (CYPL), 188 nm north, for fuel before flying the scant 62 nm east to Miminiska Lodge.

Until this year, we always flew from Thunder Bay to Miminiska Lodge, then flew to Pickle Lake for fuel after our stay at the lodge, and also to call and confirm our ETA to our U.S. airport of entry, and to file our flight plans with Winnipeg Flight Service. But thanks to *"Wi-Fi Calling"* through Verizon, and the iPhone 6 or newer version iPhone, we were able to use the Wi-Fi system at Miminiska Lodge, and make our calls from there. If you have never used the Wi-Fi Calling feature on your iPhone, and Verizon is your mobile phone carrier, I encourage you to call Verizon at 800-922-0204 and have them assist you in setting it up. Also, be sure to shut down and reboot your iPhone once in Canada to ensure you get a good connection.

To keep Ken's interest in the flight, I assigned him some responsibilities, like keeping track of our position using the Thunder Bay VFR Navigation Chart, and writing down

every spoken word and frequency from air traffic control, and the time and position of other aircraft in our group. Of course, our primary means of navigation were our Garmin 430 WAAS GPS nav-coms and *Foreflight* on my iPad. Ken was amazed with the sophistication of the instruments on our 1976 Cessna 182P Skylane, and liked the ADS–B in and out feature of our Garmin GTX-345 transponder, providing both traffic and weather. Ken said that he had never experienced flight in a small airplane above a line of broken clouds and thought the view was spectacular! He also reminded me that the only other time he had flown in a small plane was when I took him flying in a Cessna 150, shortly after I got my private pilot certificate in 1971.

Ralph Benjamin with a stringer of Northern Pike and Walleye.
Pete Aarsvold Photo

the ground, Thunder Bay Radio also closed our flight plan. Pickle Lake is a major cargo hub in northern Canada, and Thunder Bay Radio's means of coordinating traffic remotely is not only efficient, but economical.

We departed Pickle Lake for Miminiska Lodge with our fuel tanks full. Based on the information contained in the Canada Flight Supplement, we used 2000 feet MSL as the pattern altitude at Miminiska, 122.8 Mhz as the common traffic advisory frequency (CTAF), and began making position announcements 5 nm out below 4000 MSL.

After a final check of the wind using the windsock on the sand point in front of the lodge, and the waves on the lake, we made our traffic

Scott Alperin with a nice Northern Pike.
Bob Wright Photo

Greg Stratz with a Walleye that measured 25.5 inches.
Bob Carew Photo

Very few Canada fishing lodges have their own airstrip, and fewer are as remote as Miminiska Lodge, located miles from any roads. This makes Miminiska Lodge especially appealing to pilots and true outdoorsmen.

When we were 5 nm south of Pickle Lake, we called Thunder Bay Radio at Pickle Lake (CYPL) on 122.2 as required for traffic advisories (5 NM 4300 ASL). Once on

announcements and touched down on Runway 27. Waiting for us to shut down and secure our aircraft were lodge managers, Kate Hutt and Brian Tabb, who transported our gear to our cabin. We met up with the rest of our group that evening in the lodge.

The lodge features a rustic dining room overlooking the lake, a lounge for kicking back and relaxing, a full bar and billiard room, Wi-Fi Internet, and a big screen satellite television. There is also a sauna by the lake, as well as canoes, kayaks, and paddle boards for your enjoyment.

Many of the pilots and their passengers in our group had been on the trip in past years, but joining us officially for the first time was a group of pilots from Cleveland, Ohio. They had heard about our trip through *Midwest Flyer Magazine,* then unofficially joined us in 2017, vowing to officially join us in 2018, which they did. We had such a good time this

Preparing the fish for lunch on Shore Lunch Island. *Pete Aarsvold Photos*

At 12:00 noon each day, the boats empty out at Shore Lunch Island. *Dave Weiman Photo*

year that they plan to return in 2019.

Miminiska Lodge can accommodate up to 30 guests at a time, so after dinner the first night, we joined all of the tables together and welcomed all guests to join us, including some guests from Virginia and Tennessee. We were one happy group at the lodge for breakfast and dinner, and at our daily shore lunch on none other than "Shore Lunch Island."

All meals are professionally prepared and were superb! To my pleasant surprise, one evening the lodge even served ice cream with apple cobbler for dessert, and there's always a fresh pot of coffee delivered to your cabin each morning, and Thermoses for your boat. *From the dining room to the docks, the staff at Miminiska Lodge is the best!*

Miminiska Lodge is Wilderness North's premier American plan lodge and one of Ontario, Canada's most respected full-service fishing destinations.

Located on the Albany River Watershed in northwest Ontario, and miles from the nearest road, Miminiska Lodge offers guests the opportunity to experience the raw beauty of pristine boreal wilderness. Northern Pike and Walleye are caught in abundance. Brook Trout can be caught at the mouth of the Albany River.

There are three ways to effectively catch fish at Miminiska Lodge – trolling, jigging and casting.

Trolling crankbaits is a good way to cover ground and find

Dave Phillips of Fremantle, West Australia, is a member of the Miminiska Lodge staff. He is seen here enroute to Shore Lunch Island to prepare shore lunch for the guests. *Pete Aarsvold Photo*

(L/R) Dave Weiman of *Midwest Flyer Magazine* with fishing guru, Ken Lundquist, with Weiman's Cessna 182 Skylane. *Pete Aarsvold Photo*

(L/R) Guests Pete Aarsvold and Ralph Benjamin with Benjamin's Cessna 182 Skylane. *Dave Weiman Photo*

(L/R) Guests Jerad Groves, Scott Alperin, and Bob Metelko with Alperin's Piper PA46T Jet Prop. *Dave Weiman Photo*

(L/R) Guests Bob Carew and Greg Stratz with Stratz's F33A Beechcraft Bonanza. *Dave Weiman Photo*

concentrations of Walleye and Northern Pike. Good baits are #7 and #9 fire tiger and purple tiger Flicker Shads, neon yellow and orange Perch Pattern Shads, and orange and gold Rapala Shad Raps and similar crankbaits that run 8-12 ft. below the surface. Jointed Rapalas are good for shallower depths and attract both species.

Jigging over structure is a traditional way of catching Walleye and the unsuspecting Northern Pike. For jigging, we used 1/8th and 1/4-ounce jigs in a variety of colors with Mister Twister Tails in chartreuse or white. Jigs with any variety of artificial Gulp minnow, worm or leaches also work extremely well.

Casting copper or silver spoons in the bays is always effective for Northern Pike. Casting crank baits on a wind-blown shore is usually productive for Walleye.

None of us used any live bait, but it is available if ordered in advance. You cannot bring live bait into Canada from the U.S.

As for fishing rods, I take two rods and reels: one medium weight rod for Walleyes and one heavy weight rod for Northerns. If you don't have a heavy weight rod, two medium weight rods will work, too. For transporting in small aircraft, I recommend rods that break down and are enclosed in a hard rod case. Ken went to Menards and bought some PVC tubing and made his own custom rod case which impressed the staff. He also made one of his rods.

The company that owns Miminiska Lodge, Wilderness North, takes care of getting fishing licenses and the Ontario Outdoors Card for guests, as well as any special beverages and provisions. Everything is waiting for you upon your arrival. And when you are ready to depart, any fish you caught to take home will be cleaned and frozen.

Guests are allowed to keep two fish of each species: Northern Pike under 27 inches in length, and Walleyes under 18 inches. This is a conservation policy which helps to maintain a superb fishery.

The lodge has 16 ft. Lund boats with brand new 25 hp Yamaha 4-stroke, electric start motors and fish finders.

Guides are available, but are not necessary. The lodge has a detailed map of the watershed showing where to catch each species of fish, but due to an increase in water temperature

and a decrease in water level, that did not always hold true. We would be jigging for Walleyes and catch Northerns, and then casting with spoons for Northerns and catch Walleyes. But regardless, there was plenty of action for everyone and we never went hungry. And as Ken said, *"if we don't catch them here, we will just move over 6 feet,"* and he was usually right.

Master angler, Greg Stratz of Fond du Lac, Wis., caught the largest Walleye at 25.5 inches, and I lucked out in catching the largest Northern Pike at 36-plus inches. Ken caught an almost identical Northern the day before, but the Walleye net we were using was too shallow to get the fish into the boat and it fell back into the water before we had a chance to measure it. At least it left the lure.

When we took a break from fishing, which wasn't often, we would stop at various sites, such as an old mining camp, and Church Island, where there is a small church you can go inside and sign the guest book. Outside the church is the grave of the last native priest to have held services there.

Our Flight Home

Guests have their choice of either a 3-night/2-day trip, or a 5-night/4-day trip, so our arrival and departure days varied somewhat, as did our routes of flight going home. Most pilots chose to file instrument flight plans to either Duluth, Sault Ste Marie or Green Bay, although VFR flight plans are certainly acceptable.

Since Miminiska is 196 nm north of Thunder Bay, you have to climb to 10,000 feet MSL and be within 100 nm of the Canada/U.S. border before you can reach Winnipeg Center. However, your flight plan is activated automatically as per your proposed time of departure specified on your flight plan. To confirm our actual departure time, we contacted Winnipeg Flight Service shortly after takeoff once we reached altitude.

Ken and I flew direct to Duluth International (KDLH), 319 nm south, with our friends Pete Aarsvold and Ralph Benjamin in their C-182 departing ahead of us. Once we were airborne, we stayed in radio contact with one another on 122.75 Mhz.

After we cleared U.S. Customs, Ken and I flew direct to the Twin Cities, 124 nm further south where I dropped Ken off. I then flew back to my home airport near Madison, Wisconsin. Pete and Ralph flew from Duluth to Middleton Municipal Airport – Morey Field (C29) on the west side of Madison. The weather was great in Canada and northern Minnesota, but as the day progressed, and the summer heat intensified, weather started to develop in southern Wisconsin. But everyone made it home, safe and sound, to all destinations in the Midwest.

2019 Canada Fishing Fly-Out

The dates and trip options for the ***2019 Canada Fishing Fly-Out to Miminiska Lodge*** are August 8-11 and August

11-14 for the three-night/two-day trips, and August 8-13 for the five-night/four-day trip. For special group rates, email me at **info@midwestflyer.com**. For reservations, call Lynette Mish at Wilderness North toll free at **1-888-465-3474,** and be sure to check out the Wilderness North website: www.wildernessnorth.com. There's even a special section on the website for pilots flying their own aircraft. Those guests who do not fly their own airplane to the lodge, fly there in one of the Wilderness North Cessna Caravans on wheels, or their de Havilland Otter on straight floats.

Some people go on this trip for the fishing, and others for the adventure of the flight, but most go for the total experience and pilot camaraderie, to meet new people, and to reconnect with old friends!

Whether on wheels or floats, this Canada fishing trip is for you!

EDITOR'S NOTE: 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, or 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 trip or for the trip itself. Any flight planning and navigational information mentioned in this article or elsewhere is subject to change and error, and is the responsibility of the reader to research, verify and confirm. Pilots are urged to reference the Canada Flight Supplement, Canada Navigational Charts, Nav Canada and Federal Aviation Administration publications and resources, and the various electronic devices and their programs, such as ForeFlight, to obtain and confirm information. ❑

Gloster F.Mk.1 Meteor
Chris Bildilli Photo

Royal Air Force Celebrates 100th Anniversary At EAA AirVenture Oshkosh 2018

OSHKOSH, WIS. – The 100th anniversary of the Royal Air Force was commemorated with historic aircraft, flyovers, and special programming during EAA AirVenture Oshkosh, July 23-29, 2018, at Wittman Regional Airport in Oshkosh, Wisconsin. Primary focus on the centennial took place on July 24.

"From the World War I era, to the Battle of Britain and early jets, to today's modern military aircraft, the RAF has been an integral part of aviation history," said Rick Larsen, EAA's vice president of communities and member programs, who coordinates AirVenture features and attractions.

The aircraft on display on the showcase Boeing Plaza and flying during the airshow included an array of World War I and World War II aircraft, some of the early fighter jets, and modern RAF aircraft. Aircraft included those in British markings, as well as those from Commonwealth nations such as Canada. Among the aircraft scheduled to participate was a de Havilland Venom that unfortunately crashed July 20, 2018, the weekend prior to AirVenture in Sheboygan, Wis., killing its pilot, Martin Tibbitts, 50, of Grosse Pointe Park, Michigan. Tibbitts was a cofounder of the World Heritage Air Museum in Detroit and Pontiac, Michigan, which owns eight vintage planes, including the Venom (info@worldheritageairmuseum.org).

The Royal Air Force was formally founded on April 1, 1918, with the merger of the Royal Flying Corps and the Royal Naval Air Service. The service grew and became known for its extraordinary heroism during the Battle of Britain in the early days of World War II, as well as the development of many early fighter jets, such as the Gloster Meteor and de Havilland Vampire.

The RAF was the first service to use the Harrier jump jet after its development in the 1960s, with RAF aircraft and personnel still on active duty in many parts of the world today. ❑

B-52 Stratofortress
Chris Bildilli Photo

EAA Featured Tankers & Other Big Jets & Welcomed British Participation

by Jim LaMalfa

EAA's 2018 AirVenture opened Monday, July 23rd with ideal weather and large crowds. EAA had announced its 2018 event as honoring the year of the tanker and the Royal Air Force (RAF). Both were much in evidence. So were made in America Piper, Cirrus, Cessna and Beech aircraft, although Cessna merged with Beech, Hawker and Textron.

Piper M500
Jim LaMalfa Photo

Piper displayed its line of general aviation aircraft including its trainers – the Archer, Arrow and Seminole; and its executive M series aircraft – the M350, M500 and M600.

During AirVenture, Piper announced that sales of trainers in the second quarter of the year increased 126%, compared to the same period in 2017. Both their single and multi-engine trainers have solid backlog orders into Q3 of 2019. The twin-engine Piper Seminole leads the increase with a 150% growth in deliveries, followed by both the single-engine Arrow and Archer, which showed a combined growth of 85%.

For 2018, Piper is on track to deliver more than 100 PA-28s – a combination of single-engine Archers, and single-engine, complex Arrows. In addition to the success with Piper's PA-28 products, sales for the twin-engine Seminole will reach their highest level in more than 15 years.

Piper says that the increase in demand for its trainers can be directly attributed to the looming pilot shortage and the resulting demand for pilots. Among its clients are many aviation campuses throughout the country.

The Archer TX and Arrow feature the Garmin G1000 NXi avionics package, which incorporates modern processing power that supports faster map rendering and smoother panning throughout the displays. In addition to the standard 180 hp Lycoming O-360-A4M powerplant, an optional fuel-injected Lycoming IO-360-B4A engine is available, as well as a diesel option utilizing the Continental CD-155 engine. The Piper Arrow is the only complex single-engine training aircraft built today, and features a 200 hp Lycoming engine.

The Seminole is also configured with the G1000 NXi, and comes equipped with two 180 hp Lycoming engines. The Seminole has a maximum takeoff weight of 3,800 lbs, cruise speed of 162 ktas, and ceiling of 15,000 feet.

Piper's growth in both aircraft deliveries and revenue was across all segments during the period with M-Class deliveries growing 11% in Q2 2018. The M-Class consists of the M350, M500 and M600. The M350 has a top speed of 213 kts, a range of 1343 nm, and is the only current production pressurized piston-engine aircraft available today with the ability to cruise at 25,000 feet. The M500 turboprop with a 500 shp Pratt & Whitney PT6A-42A engine, has a top speed of 260 kts, and a range of 1,000 nm. The M600 has a top speed of 274 kts and features the new clean-sheet wing, providing slick aerodynamics that helps extend its range to 1658 nm. All three M-Class aircraft carry six people.

Cessna displayed a mockup of its new high-performance Denali, a single-engine turboprop. Textron expects to have FAA approval by 2019 and sales interest shows they intend to fill a niche in the corporate/utility category. The 1240 hp FADEC-equipped jet engine, using a five-blade constant speed McCauley carbon fiber propeller, propels the Denali at speeds of 285 kts with a full fuel payload of 1100 lbs. The Denali will have a range of 1600 nm with one pilot and four passengers up to 31,000 feet, and will feature the Garmin G3000 glass cockpit.

Cessna Grand Caravan EX
Jim LaMalfa Photo

Parked nearby was Textron's Cessna Grand Caravan EX with a cargo pod and a range of 912 nm at a maximum cruise of 185 kts. Powered by a Pratt & Whitney Canada PT6A-140, 867 shp engine, the Grand Caravan EX carries 10 to 14 passengers, with a useful load of 3,532 lbs.

I stopped by the Cirrus Aircraft display where I chatted with Ryan Klapmeier, son of Cirrus cofounder, Dale Klapmeier. Cirrus Aircraft has factories in Duluth, Minnesota and Grand Forks North Dakota, and its Vision Center in Knoxville, Tennessee with its new training facility and full motion flight simulator.

The SR20 and SR22 continue to be top sellers for Cirrus, but I wondered how sales were going for the new Cirrus SF50 Vision Jet.

Cirrus SF50 Vision Jet
Jim LaMalfa Photo

"This year, 60," said Klapmeier, "and we hope to sell another 20 or 30 more!"

Several years ago, I had the opportunity to take dual instruction in an unpowered sailplane at San Estrella near Phoenix, Arizona. Flying over the rangeland in states like Arizona with a chase crew on the ground is fine, but in more populous areas like Wisconsin, sailplane enthusiasts might look into "powered sailplanes," which are very popular in Europe.

One such company, Stemme of Strausberg, Germany, was displaying its two-place S12. The S12 is a high-aspect ratio sailplane with a foldable and variable pitch propeller, and retractable landing gear. The aircraft is powered by a Rotax 914 F2/S1 Turbo, 84.5 kw engine. Its 60 ft wings fold up for ease of transport. The prop folds into the spinner for lower drag and the glide ratio is 1:53. The top speed of the Stemme S12 is 161 mph, and it has a range of 1,093 miles.

I asked Wolf Kruhl of Stemme if the rear-mounted engine with the prop up front was more efficient than other designs with the engine mounted on a retractable pod.

"This is more efficient," said Kruhl. "When you extend the retractable pod type, you have a new CG."

The S12 has a sophisticated glass cockpit, which includes the state-of-the-art LX8000 soaring computer. But taped to the windscreen, just as my sailplane had in Arizona, was a piece of yarn as a slip indicator. Some things in sailplaning never change!

Enstrom 280C Helicopter
Tony LaMalfa Photo

I stopped by to chat with Dennis Martin of Enstrom Helicopter, Menominee, Michigan. Enstrom was showing off its 280C, turbo-charged, recip-powered helicopter, and their 480B jet-powered helicopter. I asked Dennis if these were Enstrom's only models:

"Right, in fact we just had a sale of 19 helicopters to Pakistan and six to the Czechoslovak Army. Pakistan bought the 280C, which performs well in their hot climate, and Czechoslovakia bought the 480Bs." Robinson and Bell are the only other companies which build choppers in the U.S. today.

The two themes featured at AirVenture 2018 were aerial tankers and the birth of the Royal Air Force (RAF), which started in 1918. At Wittman Regional Airport, we photographed several World War II British fighters… the famous dam buster, Geoffrey de Havilland's "Wooden Wonder," the twin-engine DH.98 Mosquito, also known as "Mossie;" and the Gloster Meteor, the first British jet fighter and the Allies' only jet aircraft to achieve combat operations during World War II.

For an interesting insight into the history of the Mosquito, look up Edward Bishop's book "Mosquito, the Wooden Wonder." Interestingly, Mossie was built with yellow birch veneer harvested in Vilas County, Wisconsin by the Roddis Lumber and Veneer Company. This story is well documented in Sara Witter Conner's book, "Wisconsin's Flying Trees in World War II," Chapter 5, "The British Connection."

DH.98 Mosquito "Mossie"
Tony LaMalfa Photo

The famous Gloster F.Mk.1 Meteor on display was flown in by the World Heritage Air Museum, located in Detroit, Michigan. It was used from 1944 into the 1950s using Frank Whittle's jet engine. The aircraft is powered by two Rolls-Royce W2B/23 Welland turbojet engines with a maximum speed of 410 mph and service ceiling of 40,000 feet. WA591 came to Oshkosh from the UK. The aircraft was used during World War II to attack Hitler's vengeance weapons, the pulse jet-powered V-1s, because propeller-driven fighters could not match the speed of the buzz bomb.

Two methods of attack were employed, one by using the Meteor's cannons or flying alongside the V-1, getting a wing under its wing and rolling. The move would tumble the

Vickers Supermarine MK IX Spitfire
Larry LaMalfa Photo

gyros of the V-1 and it would crash. Other British aircraft on display included the Airco DH.4, Vickers Supermarine MK IX Spitfire, and an Airbus A220.

Touring the north end of Wittman Field, there were two Grumman F7F Tigercats, the only twin-engine Navy and Marine Corps fighters designed for Essex-class aircraft carriers. Other warbirds of note were the B-17 "Yankee Lady," B-29 "Doc," a Yak 9 Russian fighter, the Tuskegee Airmen P-51 Mustang "Red Tail," and the Razorback P-51 "Lopes Hope." A lone surviving F-82 Twin Mustang was scheduled to arrive, but was not there on opening day. Other interesting warbirds included a Marine Corps 378 Vought Corsair, and two Curtis P40s exhibiting colorful Flying Tiger paint schemes.

B-17 "Yankee Lady"
Tony LaMalfa Photo

Surefly Hovercraft
Tony LaMalfa Photo

Hovercraft and flying cars are back in the news. In the 1980s, Molt Taylor actually built a successful flying car, but it did not become marketable. Others have tried. At AirVenture 2018, the Terrafugia, and the Surefly, basically a human size hovercraft/drone made of carbon fiber and powered by four gear-box-driven propellers on booms, were on display.

As usual, fly-in attendees had to battle Wisconsin's changing weather; the night airshow was cancelled Wednesday, but weather on Thursday was ideal. And if you are a Packer fan, well folks, the Green Bay Packers just opened a building on Wittman Field across from press headquarters, east of the control tower. Very convenient, as I'm a stockholder!

EAA will be celebrating its 50th consecutive year in Oshkosh in 2019, so the history of the organization, and a half-century of unforgettable highlights at Wittman Regional Airport, will be featured, July 22-28, 2019. ❑

Jeff Boerboon's Jet-Powered Yak 110.
Chris Bildilli Photo

Jet-Powered Yak 110 Woos Crowds At Oshkosh

by Dave Weiman

EAA AirVenture Oshkosh never fails to amaze me, especially when it comes to innovations, aircraft modifications and great airshow performances. In the many decades we have been covering airshows, I have witnessed a lot of cool acts, flown by some extremely talented

For instance, the act called "Double Take," performed by Craig Hosking of Moorpark, Calif., featured a Pitts S-2B biplane with an extra landing gear mounted on top of the wings. Why, you might ask? So, Hosking could take off and land inverted, of course. It was one of those unique acts that took the word "boring" out of airshows. Hosking performed "Double Take" from 1986 to 1992 when he decided to devote full time to his motion picture pursuits. Google "Double Take Biplane."

And who didn't marvel when Jimmy Franklin of Neosho, Missouri, mounted a General Electric J85 jet engine on the bottom of his UPF 7 Waco to create the one and only "Jet-Powered Waco?" Google "Jet-Powered Waco."

It would be just a matter of time until someone else came along with a novel act, and it happened this year at Oshkosh, Wis., July 23-29, 2018.

Airshow fans were amazed to witness a performer flying not one, but two Yakovlev Yak-55 airplanes welded together to create a multi-engine aircraft of sorts. In addition to the aircraft's two Vedeneyev M14P nine-cylinder radial engines, a General Electric CJ610-6 turbojet was mounted between the two airframes, producing 3,000 lbs of additional thrust. The aircraft is called the "Jet-Powered Yak 110."

With two identical airframes, pilot Jeff Boerboon of Cave Creek, Arizona, had to decide from which cockpit he would fly from – left or right. He chose the left cockpit.

Assisting Boerboon with this project is his business partner, Chad Bartee of Lubbock, Texas, and aircraft builder and mechanic, Dell Coller of Boise, Idaho.

Boerboon and Coller first drew a basic design, then decided how best the controls would work, then made up a CAD design for the new wing center section. The two elevators were tied together; the elevators required some modification; the airplane got new wiring, plumbing, and instruments; the fuel system and air system components were redesigned to operate electronically; and the controls were removed from one aircraft, but the seat remained for a willing passenger. The jet engine was the last mechanical component to be added.

Craig Hosking's "Double Take" Pitts S-2B.

Jimmy Franklin's Jet-Powered Waco.

"The Yak 110 has been an amazing project and is a great flying airshow plane," says Boerboon. *"I was fortunate enough to fly the Screamin Sasquatch for three years, and now with differential power, there are all sorts of new maneuvers to explore."*

Congratulations Jeff Boerboon, Chad Bartee and Dell Coller on a most entertaining aircraft design, but that's not all folks… *"Next, we will be adding an afterburner and a night show.... stay tuned!"* says Boerboon.

For additional information, check out their website at Yak110.com. Airshows interested in booking the act can call Jeff Boerboon at 480-748-1937 or email jeffboerboon@gmail.com. ❑

2018 Warbirds Adventure Tour Growing

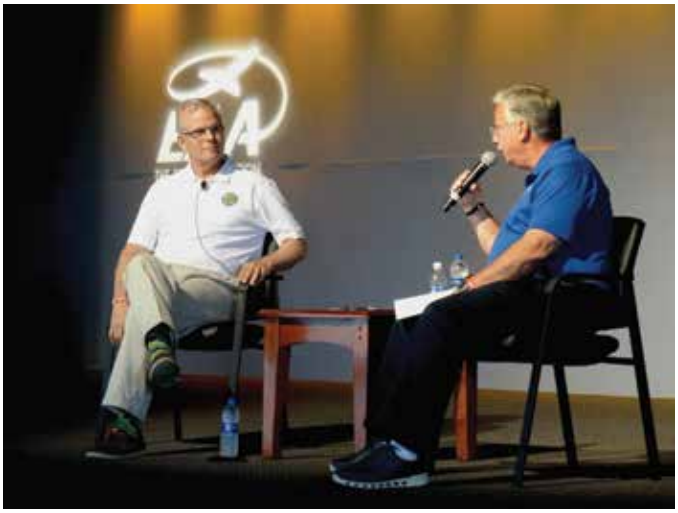
OSHKOSH, WIS. – The "Warbirds Adventure Tour" exploded onto the EAA AirVenture Oshkosh stage July 23-29, 2018. Two trams ran virtually nonstop for six straight days. The tram served just under 5,000 guests, doubling the number of people served in 2017.

Among some of the riders was the President of an African nation and his entourage, complete with uniformed generals and armed secret service; the family of General Jimmy Doolittle; a current U.S. Air Force General; hundreds of veterans, including P-51 and B-29 pilots from World War II; and thousands of young people and their families.

Major sponsors included Shell Oil Company, Hartzell Propeller, Gill Aircraft Batteries-Teledyne, and Trade-a-Plane. In addition, the tram took in $2,500.00 in cash donations.

The Warbirds Adventure Tour has a need for additional volunteers including drivers, narrators, briefers, security, membership recruiters, and videographers. For additional information, email Vic Krause at vakrause@me.com. ❑

EAA AirVenture Oshkosh 2018 Facts & Figures



EAA President and Chairman Jack Pelton (right) in a face-to-face interview with Acting FAA Administrator Daniel K. Elwell (left) at the "Meet The Administrator" forum during EAA AirVenture Oshkosh, July 26, 2018. Pelton announced at a press conference prior to the forum that EAA would not be charged an air traffic control fee for the fly-in this year, saving the organization as much as $600,000. EAA has long advocated that the FAA fee beginning in 2013 amounts to a "user fee," which was never authorized by Congress. In protest, EAA filed a complaint with the U.S. Court of Appeals for the Seventh Circuit in Chicago, stating that the fee was imposed without standard notice and comment procedure from the FAA, making it procedurally improper and unlawful. Other events requiring air traffic control services, such as the Super Bowl which attracted 1,600 corporate jets to the Twin Cities the week of February 4, 2018, and tied up every airport within 50 miles, have not paid a fee. And unlike EAA AirVenture Oshkosh in which most of the 10,000 aircraft that arrive and depart Wittman Regional Airport VFR, the 1,600 corporate jets that arrived for the Super Bowl did so on IFR flight plans, causing even greater congestion and demands on air traffic control. Had EAA not paid the fee, the FAA would have withheld air traffic control services, essentially holding EAA hostage. It is not known if the FAA intends to permanently discontinue charging EAA the fee.

Dave Weiman Photo

OSHKOSH, WIS. – "A 'perfect' event may be unattainable, but AirVenture 2018 came about as close as one could imagine," said EAA Chairman Jack Pelton, following this year's event, July 23-29, 2018 at Wittman Regional Airport, Oshkosh, Wis.

Pelton continued: "The combination of outstanding programs, aircraft variety, a robust economy, and good weather combined to complement the efforts of our staff and 5,000 volunteers throughout the grounds. The week was upbeat, exciting, and filled with many 'Only at Oshkosh' moments."

Attendance was approximately 601,000, nearly two percent above 2017's record total.

"EAA members and aviation enthusiasts attended in large numbers, even without the presence of a military jet team as we had in 2017," said Pelton. "Our efforts to create unique attractions and aviation highlights across the grounds were incredibly successful. Attendance on opening day was the best in our history, as the vast majority of our guests came to Oshkosh early and stayed throughout the week."

More than 10,000 aircraft arrived at Wittman Regional Airport and other airports in east-central Wisconsin. At Wittman alone, there were 19,588 aircraft operations in the 11-day period from July 20-30, which is an average of approximately 134 takeoffs/landings per hour.

There were 2,979 showplanes (second straight year over 2,900): 1,160 homebuilt aircraft (5 percent increase), 1,094 vintage airplanes, 377 warbirds (7 percent increase), 185 ultralights and light-sport aircraft, 75 seaplanes, 22 rotorcraft, 52 aerobatic aircraft, and 14 hot air balloons.

There were more than 12,300 sites in aircraft and drive-in camping, which accounted for an estimated 40,000 visitors.

Commercial exhibitors: 867.

Forums, Workshops, and Presentations: 1,500 sessions attended by more than 75,000 people.

EAA Aircraft Flights: 2,800 people flew aboard EAA's Ford Tri-Motors, while 3,032 people flew aboard EAA's Bell 47 helicopters and 680 flew aboard EAA's B-17 Aluminum Overcast.

A record 2,714 visitors registered from 87 nations, also a record total. (Actual counts may be higher since international visitor registration is voluntary.) Top countries represented by registered visitors: Canada (538 visitors), Australia (386), and South Africa (277).

There were 976 media representatives on-site, from six continents.

The economic impact was $170 million for the five counties in the Oshkosh region (Winnebago, Outagamie, Fond du Lac, Calumet, and Brown) based on a 2017 University of Wisconsin Oshkosh economic impact study.

What's ahead for EAA AirVenture Oshkosh 2019 (July 22-28, 2019)?

Comment from Pelton: "We are celebrating our 50th consecutive year in Oshkosh during 2019, so we'll be looking back on a half-century of unforgettable highlights at Wittman Regional Airport, and planning activities that involve EAA's hometown and its unique place in aviation history. While 2018 is barely in the record books, we're talking to many groups and individuals with intriguing new ideas for aircraft, innovations, exhibits, and events. We're already planning for 2019 and are looking forward to announcing features and attractions very soon." ❑

One Kid's Perspective – EAA AirVenture Oshkosh 2018

by The Kid Reporter

When I first arrived at EAA AirVenture Oshkosh, July 23-29, 2018 at Wittman Regional Airport, Oshkosh, Wis., I felt a chill in the air. But the warmth of the people I met soon made me feel real comfy!

The Kid Reporter with FAA Controller Kristopher Blocher of Detroit, Mich. *Stacy Wilk Photo*

We walked into press headquarters and spoke to the leader of the press, Mr. Dick Knapinski, who gave us a pleasant welcome to begin our day.

From there, we walked over to the control tower nearby where we met Kristopher Blocher of Detroit, Michigan. Kristopher has been an air traffic controller for 6 years and his favorite color is blue, like the sky on a beautiful day. Kristopher said that the best part of EAA for him are the people and talking to people from all around the world.

As I walked around looking at the many planes on display, tied down and taxing in, I came across a gorgeous 1946 Aeronca a young man from Greenfield, Indiana was wiping down. He told me he was working on completing his pilot license and came to Oshkosh with his dad. He has been coming to EAA for 16 years – practically all of his life – and his favorite part about AirVenture is also the people.

The Kid Reporter is with a young man from Greenfield, Ind. with his dad's 1946 Aeronca. *Stacy Wilk Photo*

A couple steps away, I encountered a vintage Ercoupe named "Scampy," flown by Syd Sohen, who has been coming to EAA for 48 years. Syd's favorite thing about EAA is looking at planes, showing off his plane, and of course, the people! Syd's eye-catching Ercoupe had a polished aluminum fuselage and fabric wings.

The Kid Reporter with Syd Sohen of Wausau, Wis., and Sohen's Ercoupe "Scampy." *Stacy Wilk Photo*

On our way to the parking lot, an exhibit booth featuring "pedal planes" caught my attention. They can be built from a kit or plans, and are tailored to kids ages 3 to 7. There are 14 models to choose from including the Oshkosh 85 Pedal Pitts, Oshkosh 86 Pedal Eagle, Oshkosh 88 AT6/SNJ/Harvard, Oshkosh 89 Jet Top Cat, Oshkosh 90 Tiger Moth, Oshkosh 91 Jungmeister, Oshkosh 92 Scorpion, Oshkosh 93 P-51 Mustang, Oshkosh 95 Gee Bee R2, Oshkosh 99 Pietenpol, Oshkosh 06 Taylorcraft, Oshkosh 07 J3 Cub, Oshkosh 07 Super Cub, and Oshkosh 08 Staggerwing.

The Kid Reporter with Gary Sampson of Pedal Plane Kits of Cedar Rapids, Iowa *Stacy Wilk Photo*

The fuselage and wings of each pedal plane are made out of 3/8-inch plywood. The landing gear and working parts are made of steel. The cowl and covers are made from aircraft aluminum.

The pedal planes move by pedaling and steering using a control stick. Most of the planes are approximately 55 inches wide and 50 inches deep, and feature tailwheel steering. Some models have a rotating propeller that is driven from the pedal crank.

The manufacturer, Pedal Plane Kits, is a family owned business out of Cedar Rapids, Iowa. Owner, Gary Sampson, has been coming to EAA for 33 years and enjoys what else, the people and talking with them (www.pedalplanekits.com).

I had conversations at EAA 2018 with people from many locations. Everyone I spoke with has been coming to EAA for years, and the one thing that keeps them coming back are the "people." There are always new people to meet and talk to, new planes and airshow performances to see, blue skies to explore, adventures to be had, and memories to share.

I hope to see you next year at EAA AirVenture Oshkosh, July 22-28, 2019. Reporting exclusively for *Midwest Flyer Magazine,* The Kid Reporter! ERW

Completing Flight Training Back In The USA

by Sharon Thiry

EDITOR'S NOTE: *Sharon Thiry, 25, of Cadzand, Holland was featured on the cover of the February/March 2018 issue of Midwest Flyer Magazine with her 1943 Aeronca L-3 Defender. In 2017, she and her partner, Huub van Iwaarden, took flying lessons in the United States, bought the Defender here, then had it shipped back to Holland. The plan was to return to the U.S. in 2018 so they could complete their training and take their check-rides for their private pilot certificates. Unfortunately, Iwaarden unexpectantly died of a heart attack on December 23, 2017 while working out, so he never saw the magazine featuring the photo he took of Thiry and their aircraft. The following story tells of Thiry reaching her goal, and about the people who helped her. See the first article on the Midwest Flyer Magazine website: https://midwestflyer.com/?p=11422. Readers can keep up with Thiry and her flying adventures on Instagram: www.instagram.com/sharonthiry/ What the future will bring to Thiry is anyone's guess, but you can be assured it will involve aviation!*

On the 3rd of July 2018, I arrived in Kokomo, Indiana, from The Netherlands, one year from my first visit there. It felt great to be back where my flight training began.

While most Americans probably celebrate Independence Day by relaxing and taking things easy, I received my first two hours of flight training in a Super Decathlon to get me acquainted with the aircraft I would be flying to complete my check-ride for my private pilot certificate in the weeks that followed.

Five weeks went by and the day had finally arrived… It was the 24th of July and I was ready for my check-ride. This was the moment I thought about so many times since last year, but I was motivated and determined to complete training and get my certificate.

I would have to admit, though, I was quite nervous after watching numerous YouTube videos of various check-rides. But as soon as I met the FAA examiner, I realized my fear was unwarranted. He was also an aviation enthusiast whose goal was to help others realize their dreams. His positive attitude put me at ease and made me confident enough to demonstrate my flying skills. When the examiner signed me off, he presented me with my "temporary airman certificate," which was a moment of pure excitement. I was actually a pilot from this point forward!

Immediately after my check-ride, I departed for EAA AirVenture Oshkosh 2018 in Oshkosh, Wisconsin with the owner of the flight school and his family. Last year, I flew my 1943 Aeronca L-3 Defender to Oshkosh with my flight instructor.

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Aeronautics Report

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Sharing The Airport... Operations At Non-Towered Airports

by Hal Davis
WisDOT Bureau of Aeronautics

Hal Davis

Each year at EAA AirVenture Oshkosh, I'm reminded as to just how many ways there are to take flight. For those of us who regularly only fly "conventional" aircraft, it's easy to overlook those who take to the skies by more adventurous means. Gliders, balloons, powered parachutes and skydivers operate under a wide range of parameters and regulations. However, they are all protected aeronautical activities, meaning federally-funded airports are required to make their facilities available to these users on reasonable terms.

Of course, there are certain airports where a specific aeronautical activity cannot be reasonably accommodated without negatively impacting safety or efficiency. These impacts may be due to the physical characteristics of the airport or the existing traffic mix. In either case, the airport may prohibit or limit certain aeronautical activities as long as the restrictions are approved by the Federal Aviation Administration (FAA). However, these situations are rare. Most of the time, we just need to be accommodating and look out for one another.

At an airport with an air traffic control tower, pilots can rely on the controller to facilitate the mixing of different types of aeronautical users. At an uncontrolled airport, users must rely on each other to ensure a safe and efficient flow of traffic.

In March 2018, FAA published Advisory Circular 90-66B *Non-Towered Airport Flight Operations.* In it, FAA describes recommended operating procedures related to radio communications, the recommended standard traffic pattern, and traffic patterns specifically for unconventional, fixed-wing aircraft.

Communicate

As with any relationship, good communication is key to getting along with fellow airport users. In general, those capable should continuously monitor and communicate, as appropriate, on the Common Traffic Advisory Frequency (CTAF) whenever operating within 10 miles of an uncontrolled airport. As a pilot of any type of aircraft, regularly announcing your position and intentions greatly improves the situational awareness of those operating around you. However, two-way radios are not required at most uncontrolled airports. Therefore, pilots should always remain on the lookout for no-radio aircraft while operating in the traffic pattern.

Traffic Patterns

Among other benefits, the use of a standard traffic pattern allows pilots to better anticipate the path of other aircraft. This is especially critical when no-radio aircraft are involved. Prior to entering the traffic pattern, pilots should identify which runways are currently in use. If overflying the airport is necessary to check runway conditions or wind direction, it should be done well above traffic pattern altitude to avoid a collision with aircraft already in the pattern.

Entering the pattern should always be done at pattern altitude. An airport's traffic pattern altitude is listed in the FAA chart supplement, previously known as the airport facilities directory. Usually, the traffic pattern for conventional fixed-wing aircraft is 1,000 ft. above ground level (AGL). Larger or faster aircraft should fly 500 ft. above the standard traffic pattern altitude. At those airports with regular unconventional aircraft operations, special traffic patterns may also be established. For example, FAA recommends a rectangular pattern 500 ft. below and inside the standard traffic pattern for ultralight vehicles. In some circumstances, it may be advantageous to separate different types of traffic using right traffic for one category of aircraft and left traffic for another.

Right-of-Way

While operating in the traffic pattern, pilots must yield the right-of-way to other categories of aircraft as prescribed in the applicable Federal Aviation Regulations (FARs). Largely, right-of-way is given to the less maneuverable aircraft. The following lists the right-of-way rules as established by FAR 91.113 and FAR Part 103.13 in order of descending priority.

1. Aircraft in Distress
2. Balloon
3. Glider
4. Aerial Refueling/Towing Operations
5. Airship
6. Fixed-Wing Aircraft, Rotorcraft, Powered Parachute, Weight-Shift Control Aircraft
7. Unpowered Ultralight
8. Powered Ultralight

Skydiving

FAR Part 105 also establishes rules for skydiving activities on airports. In general, skydiving operators are prohibited from landing on an airport without prior approval from airport management. Skydiving must also be conducted without creating a hazard or disrupting other air traffic. The chart supplement lists airports with permanent drop zones. Even though skydivers don't fly a traffic pattern, parachutes can be expected to be deployed below 3,000 ft. AGL within two miles of an airport. In addition, it is highly recommended that pilots of jump aircraft report skydiving operations on the CTAF while jumpers are in the air.

Flying into any uncontrolled airport, pilots should be aware that there may be unconventional, no-radio aircraft flying in the area. Notable glider, hang glider, ultralight and skydiving activity at a particular airport may be depicted on a sectional chart and reported in the chart supplement. However, don't expect these activities to be confined strictly to these airports. If you encounter unfamiliar air traffic near an airport, communicate, exercise caution, and be patient. There's plenty of blue sky to go around! ❑

MINNESOTA AERONAUTICS BULLETIN
www.dot.state.mn.us/aero

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

Cassandra Isackson, Director **Dan McDowell, Editor**

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Understanding Grant Assurances

by Cassandra Isackson
Director, Minnesota DOT Office of Aeronautics


Cassandra Isackson

The value of an airport is appreciated by and impacted by its users, whether transient or based at the airport. Proper use and good planning can attract new users, new tenants, and inspire airport growth. In fact, your airport is, or can be, a significant economic engine for your entire community.

One way that you can help your airport to stay viable and continue to attract new users and new tenants is by understanding what "grant assurances" mean to your airport, how you can help your airport, and its plans for the future.

Aviators should understand that Airport Improvement Plan (AIP) funds can only be used to pay for specific projects that directly contribute to the actual capital improvement of an airport. In Minnesota, the Office of Aeronautics contributes funds toward the maintenance and operation of airports and also participates in capital projects.

Both state and federal funds come "with strings attached." An airport must accept the terms and conditions with the grant, and assurances that the grant obligations will be met. The goals of the conditions are simple: 1) To keep the airport open, 2) It must be well maintained, and 3) It must provide a safe environment for a variety of aviation.

As a pilot, tenant, user, or supporter of your local airport, you can be helpful in assisting your airport to meet these assurances. You can work with your airport manager, city leaders, and supporting organizations to volunteer to help maintain your airport. Then you can help make sure it is as safe, efficient, clean, and user-friendly as possible. Don't hesitate to let the airport manager know if you see or experience a situation that can have a negative impact on safety. Then, ask what you can do to help them correct the noted issue.

Please take time to review the basics of grant assurances and develop an understanding of the processes involved in funding your airport. Links to resource information are provided below for your convenience. You'll be better able to assist the city and/or your airport manager, in working to keep your airport open, viable and growing. And remember, from agricultural sprayers to business jets, aviation users fuel the economy!

Grant Assurance Resources:
https://www.faa.gov/airports/aip/grant_assurances/
https://www.faa.gov/airports/aip/grant_assurances/media/airport-sponsor-assurances-aip.pdf
https://www.faa.gov/airports/aip/
https://www.faa.gov/airports/aip/overview/ ❑

The Lowdown On Flying Down Low

General Aviation (GA) flying is so much fun that people will fly hundreds of miles just to have lunch and enjoy the freedom of flight. Breaking the bonds of gravity, to an extent, provides a sense of release and control that can only be found through flight. There, the endless blue sky above and the artists' palette of constantly changing shapes and colors below, cleanses the mind. It also intrigues the soul and enriches the spirit of the aviator with the feeling of freedom, almost to a point of giddiness.

With all that beauty to absorb, it is still sad that so many GA pilots and passengers will never see it again because of the failure to maintain control of their aircraft at low altitude. And while this also happens to airline and other professional pilots, it happens much more often with GA pilots. Why does that happen? Is it because of a lack of training, overestimating one's skills, or just complacency?

In a fact sheet published by the National Transportation Safety Board (NTSB) titled **Prevent Loss of Control (LOC) in flight in General Aviation,** it states, "While airline accidents have become relatively rare in the U.S., pilots and passengers involved in general aviation (GA) operations still die at alarming rates every year due to loss of aircraft control by the pilot."

It goes on to say, "GA pilots typically need to complete

a flight review, consisting of 1 hour of ground training and 1 hour of flight training, every 24 months. They almost exclusively maintain and improve skills on their own, and their conduct of safe flight depends more on individual abilities and judgment, potentially leaving them unprepared for situations that can lead to loss of control."

Many LOC accidents take place while aircraft are maneuvering at low altitude. While at this lower altitude (1,000 feet or lower), the margin for error is significantly reduced. At lower altitudes pilots face many obstacles and hazards like towers, wind generators, trees, powerlines and even flocks of birds. There may also be wind shear or unexpected turbulence caused by buildings and natural objects on the ground.

While statistics show that approach to landing, maneuvering, and climb are the deadliest phases of flight for loss of control-in flight (LOC-I) accidents, many of these accidents happen at low altitude. When maneuvering at low altitudes, pilots naturally have an increased workload. This comes about as a direct result of the hazards mentioned in the previous paragraph and with the aircraft possibly at a high angle of attack and at a slower speed.

With the increased workload, the chance for loss of airspeed awareness is also increased. That, quite simply, is caused by a failure of the pilot to fly the airplane first, instead of succumbing to distractions on the ground. It can also happen when the pilot is distracted by some perceived (or actual) minor malfunction with the aircraft.

Bear in mind that when maneuvering at low altitude, there is much less time and fewer opportunities to recover from aerodynamic stall and loss of control. A quote from the Australian Transport Safety Bureau succinctly states, "Flying at low altitudes is not only risky when things are going right; it becomes downright perilous when things are going wrong."

Minnesota Department of Transportation Chief Pilot Jeff Flynn, suggests, "Pilots should practice doing go-arounds from the flare, with your favorite CFI aboard and be done at a safe altitude to get a feel for the critical inputs and trim changes associated with such radical power changes." Flynn adds, "Practicing that maneuver will assist the pilot in building 'muscle-memory' while instilling the proper, quick, and well-practiced actions that help keep aviators safe."

So, the next time you get the urge to fly low and check out something on the ground, ask yourself these questions first: Is there an operational need for me to be flying at or below 1,000 feet AGL? Am I experienced/trained to operate an aircraft at low altitude for more than a transitional period of time?

You should have been trained and qualified by a CFI to fly at low altitude, if low flight is going to be necessary. If you do plan to fly a low altitude profile, you should always complete a thorough aerial inspection of the proposed low flight area from an appropriate and safe altitude before ever attempting low flight.

If you have questions, go to the **FAASTeam.GOV** website. It is a great resource for pilots to help improve their skills and knowledge. The site not only hosts the FAA WINGS pilot proficiency program, but also contains online pilot training materials. Pilots, flight instructors, and mechanics are encouraged to register online. Check it out today!

Here is one more piece of information for you if you think you are going to do low-altitude flying before being properly trained or retrained to do so. Mr. Les Dorr, spokesperson for the FAA in Washington, D.C., released a fact sheet titled **General Aviation Safety,** on April 4th, 2018. It is packed with important information and additional guidance. This fact sheet also notes that from 2001 through 2016, three (3) of the top 10 leading causes of fatal GA accidents include (1) Loss of Control in Flight, (2) Controlled Flight Into Terrain (CFIT), and (9) Low-Altitude Operations. All of these elements are causes of fatal accidents in low flight. You can read the Fact Sheet at: https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=21274

Proper Use of CHECKLISTS = Safety & Professionalism

The results of a study by K. M. Megha, and E.E. Bowen of Embry-Riddle Aeronautical University, Prescott, found that approximately "…70% of all approach and landing accidents were caused by omission of checklists, either partially or completely."* 70%! That begs the questions, what is causing that to happen? Are we in too much of a rush to get to that $100 hamburger? Are we too distracted by the "gee whiz" technology and capabilities of our glass cockpits? Are we just getting lazy, or worse yet, complacent?

Unless things have changed drastically over the years, flight instructors (CFIs) would pound into the student's brain the facts that preflight checks and the correct and consistent use of checklists was critically important to having a safe flight. The CFI would also remind the students many times that as the pilot-in-command, they are 100% totally responsible for assuring their aircraft is fit for flight, including having the correct paperwork that belongs in the aircraft. They would also drill into the student pilot's head that consistent use of checklists helps to make your passengers comfortable (once you were legally able to carry folks with you). It also demonstrated your dedication to safety. That is one more fact that helped your passengers enjoy their flight.

You want your passengers to walk away having had a fun and positive experience. You want to leave them with a great impression of aviation, right? So why would you rush through

a checklist, or worse yet, do your checks from memory knowing that items could be missed or accidentally skipped?

Obviously a safe and conscientious pilot with a "professional aviator" attitude would not do those things. No aviator wants to bend metal or worse yet, cause the demise of a passenger or himself. But failure to use your checklists properly and completely can quickly set up multiple weak links in a chain of causation that leads to disaster.

Start every flight by using your checklists as appropriate to the stage of preparation or flight. Doing this every time will become a smoother process as you build your flow (and "muscle memory"). If something legitimately distracts you and an item is missed, you will very likely feel the difference. Then you can return to the last known item checked and proceed forward from there, or restart that part of the checklist from the beginning.

When you consistently use your checklists correctly from walk-around before flight, to walk-around post flight every time you fly, it will become a part of you and your professional aviator habits. Then skipping them or rushing through them will feel unnatural and incorrect.

FAA AC120-71B Ch. 5 Para 5.1 states, "Checklists are of no value if the flight crew is not committed to their use. Without discipline and dedication to using checklists at the appropriate times, errors will inevitably occur." It further states, "The checklist is an aid to the memory and helps to ensure that critical items necessary for the safe operation of aircraft are not overlooked or forgotten."

Please always use your checklists. It is for your safety, and the safety of your passengers, but also for the safety of those below your flight path, and those with whom you share the sky.

* https://commons.erau.edu/cgi/viewcontent.cgi?article=1118&context=aircon
Electronic Checklist Implementation: Transition Training and General Aviation (GA) Usage
Megha, K. M. & Bowen, E. E., Embry-Riddle Aeronautical University, Prescott. ❑

MNDOT Office of Aeronautics Promotes Flying In Minnesota At EAA AirVenture Oshkosh 2018

A future pilot sits in a mockup of a floatplane at the Minnesota Department of Transportation Office of Aeronautics exhibit at EAA AirVenture Oshkosh. *Peggy Weiman Photo*

OSHKOSH, WIS. – The Minnesota Department of Transportation Office of Aeronautics staff met with pilots, aircraft owners, airport managers, aviation business owners and other aviation officials at EAA AirVenture Oshkosh 2018 to promote flying and airports in Minnesota.

The annual fly-in was held July 23-29, 2018 at Wittman Regional Airport in Oshkosh, Wisconsin, and attracted 601,000 spectators.

Minnesota has more than 16,000 pilots, approximately 6,000 registered aircraft and 135 publicly-owned and operated airports.

For additional information visit www.dot.state.mn.us/aero.

(L/R) Kevin Carlson, Kathy Vesely and Cassandra Isackson greet pilots. *Dave Weiman Photo*

Businesses Doing Business In Wisconsin At EAA AirVenture Oshkosh

Mike Schweiss of Schweiss Doors, Hector, Minnesota, reported record sales at EAA AirVenture Oshkosh 2018 (www.SchweissDoors.com). *Dave Weiman Photo*

John Lowe, Chairman of HondaJet Midwest and Des Moines Flying Service, Des Moines, Iowa, worked in the HondaJet Pavilion at EAA AirVenture Oshkosh 2018 (https://desmoinesflyingservice.com). *Dave Weiman Photo*

The owners of Wag-Aero, Mary Myers and Bill Read, at their booth at EAA AirVenture Oshkosh 2018, July 23-29, Wittman Regional Airport, Oshkosh, Wisconsin. Wag-Aero has exhibited at the event since the fly-in began. The Wisconsin Aviation Trades Association (WATA) named the Wag-Aero Group "Wisconsin Aviation Business of the Year" in 2017 for having provided more than 50 years of professional service to the aviation community worldwide. The company is located in Lyons, Wis. (www.wagaero.com). *Dave Weiman Photo*

Olivia Macfarlane of Trig-Avionics, Edinburgh, Scotland, was at EAA AirVenture Oshkosh promoting their TT31 ADS-B capable transponder, as well as their full line of avionics (https://www.trig-avionics.com/products/).
NewView Technologies of Oshkosh, Wisconsin, is an authorized dealer. For additional information call Bruce Botterman at 920-303-0709 (www.NewViewTech.com). *Dave Weiman Photo*

AOPA Holds Congressional Meet & Greet At Thunderbird Aviation

Rep. Erik Paulsen (R-Minn.) is a strong supporter of general aviation.

Nancy Grazzini-Olson, President of Thunderbird Aviation and Rep. Erik Paulsen (R-Minn.)

EDEN PRAIRIE, MINN. – Longtime GA ally and supporter, Rep. Erik Paulsen (R-Minn.), a member of the House General Aviation Caucus, and cosponsor of the Pilot's Bill of Rights 2, which included third-class medical reform (BasicMed), met with AOPA members and representatives of the Minnesota Aviation Trades Association (MATA) August 24, 2018 at Thunderbird Aviation, Flying Cloud Airport, Eden Prairie, Minn.

Paulsen kicked off the event speaking about the FAA reauthorization bill and efforts over the past two years to remove air traffic control from the FAA. Despite pressure from leaders in his party, Paulsen told attendees that he could not support the bill without GA's seal of approval. The House passed its FAA reauthorization bill without the controversial ATC privatization proposal on April 27 by a vote of 393 to 13. Paulsen voted for the bill.

Representing AOPA at the event was Scott Verstandig, AOPA Senior Director of Legislative Affairs. Representing MATA was Nancy Grazzini-Olson of Thunderbird Aviation and former Minnesota legislator, Mike Beard.

Other topics discussed included the impact of the 1500-hour rule on pilots and the aviation industry, prospects for a driver's license medical, and airport development grants.

With a total annual economic output of $229 million, supporting 1,190 jobs, Flying Cloud Airport is an invaluable resource for Eden Prairie, Minnesota. In 2017, the airport had more than 90,000 takeoffs and landings. There are 373 aircraft based on the field.

In June, the airport was awarded a $1.1 million grant for infrastructure improvements including installing airfield guidance signs, runway lighting, and reconstructing a runway, which Paulsen supported.

Flying Cloud Airport is one of six reliever airports operated by the Metropolitan Airports Commission, with Minneapolis-St. Paul International Airport as the air carrier airport in the Twin Cities. ❑

Newby Joins Exclusive Aircraft

EDEN PRAIRIE, MINN. – Nick Newby, a graduate of Friends University in Wichita, Kan., has joined Exclusive Aircraft Sales as director of jet sales. Newby has 20 years of experience in domestic and international aircraft sales, maintenance, contracts, and product management; holds airframe, powerplant and private pilot certificates; and has a Bachelor of Science degree in E-Commerce Management. ❑

Planes, Cranes & Automobiles

MAPLE LAKE, MINN. – The "Gearhead Days" celebration in Maple Lake, Minnesota, featured a Grumman G-44 Widgeon, owned by local resident, Jon Miller, who thought it would be a good idea to have an aviation presence at the event. So, Miller had the aircraft towed from the airport, which is on the edge of town to downtown, and had Landwehr Construction, Inc. bring in their crane to display the aircraft.

The Dodge avgas truck that was used to tow the Widgeon was used by St. Cloud Aviation in the 1970s and '80s, then moved to Maple Lake where it was used at the seaplane base. Miller acquired the truck from Wright Aero and he has refurbished it to its original markings as produced by Shell in the early 1950s.

The Grumman G-44 Widgeon is a small, five-person, twin-engine amphibious aircraft flown by the U.S. Navy, U.S. Coast Guard, U.S. Army Air Corps, and U.S. Army Air Forces. It was designated J4F by the Navy and Coast Guard, and OA-14 by the Army Air Corps and Army Air Forces. It was used during World War II as a small patrol and utility aircraft by the Navy, Coast Guard, and Royal Navy's Fleet Air Arm.

The Widgeon was originally designed for the civilian market. It is smaller but similar in design to Grumman's earlier G-21 Goose, and was manufactured from 1941 to 1955.

A total of 276 aircraft were built by Grumman, including 176 for the military. The aircraft was nicknamed "Gosling" by the British Royal Navy. ❑

Academy College Announces 2018 Sherm Booen Legacy Scholarship Recipient

Brigham Nelson received the 2018 Sherm Booen Legacy Scholarship.
Academy College Photo

BLOOMINGTON, MINN. – Brigham Nelson of River Falls, Wisconsin, has received the Sherm Booen Legacy Scholarship. Established in 2016 to celebrate Academy College's 80th Anniversary, the scholarship provides $10,000 for a student pursuing a professional pilot career in honor of World War II pilot, Sherm Booen, the host of the radio and television program, "The World of Aviation."

Nelson was inspired by aviation at a young age because of his interest in remote control airplanes. In the beginning, Nelson struggled with takeoffs and landings, but in time he acquired the proficiency with four-channel controls and was able to perform aerobatics. Upon graduating from River Falls, Wisconsin High School, Nelson wondered if his love for flying remote control airplanes could transition to flying real airplanes as a career. In 2014, he walked into Academy College and his dream became a reality. He is now enrolled in the four-year Commercial Pilot Program and has never looked back. He has obtained his Commercial Pilot Certificate and is starting Multi-Engine and Flight Instructor training this fall. Nelson's goal is to become a commercial airline pilot and give back to the community by teaching young kids about aviation and of course, flying remote control airplanes.

Applications for the 2019 scholarship will be accepted from March 1st to May 31st, 2019. Contact Academy College at 952-851-0066, or email scholarship@academycollege.edu for details (www.academycollege.edu). ❑

Minnesota Aviation Trades Association 2019 Scholarship Applications Now Being Accepted

The Minnesota Aviation Trades Association (MATA) is accepting applications for its 2019 scholarship in the amount of $2,000. Applicants must be currently enrolled in a flight training curriculum at a Minnesota flight school that is also a member of MATA. Applicants must submit a one to two-page essay on why they wish to learn to fly or continue their training. The application form, details, updates and requirements can be found at www.mata-online.org and should be completed and submitted electronically to info@midwestflyer.com. The deadline for applications is January 1, 2019. The scholarship will be presented at MATA's spring conference. ❑

Minnesota Aviation Hall of Fame Scholarship Applications Now Available!

BLOOMINGTON, MINN. – The Minnesota Aviation Hall of Fame will be presenting four aviation scholarships to students from Minnesota who are pursuing a career in aviation. Each scholarship is valued at $1,500.00. Application information can be found on the hall of fame website: www.mnaviationhalloffame.org. For additional information, email MAHF Scholarship Committee Chairman, Patrick Halligan, at flyinghooligan@gmail.com. ❑

Joe Coraggio Receives Phillips 66 Aviation's EAA Young Eagles Leadership Award

Second generation Young Eagle accepts honor in home state during AirVenture 2018.

OSHKOSH, WIS. – A passion for aviation runs deep for Joe Coraggio, this year's recipient of the Phillips 66® Aviation EAA Young Eagles Leadership Award. The award, which is announced annually at EAA AirVenture Oshkosh, recognizes outstanding Young Eagles volunteers who have supported the future of aviation by going above and beyond the basic Young Eagles flight.

Young Eagles Banquet – Phillips 66 Award: Eric McMurphy (left), Sales Manager for Phillips 66 Aviation, presents the Phillips 66 Leadership Award to Joe Coraggio of Glendale, Arizona, during the annual EAA Young Eagles Banquet held as part of EAA AirVenture Oshkosh 2018.
EAA Photo/Dave Witty

Coraggio, a second-generation Young Eagle, has been active in the Young Eagles program for more than 20 years. His love of aviation began well before he could fly an airplane, or even drive a car – and he credits the Young Eagles program for much of the success in his aviation career.

"I am humbled to receive this award," said Coraggio. "I know some of the past recipients, and they're incredible pilots that have given back in such a big way. I'm blown away to now be among their ranks."

For more than 25 years, Phillips 66 Aviation has proudly sponsored The EAA Young Eagles, a program whose sole mission is to introduce and inspire kids (ages 7-17) throughout the world to become pilots and involved by providing them their first ride in an airplane. More than two million children have flown through the program with the help of EAA's network of volunteer pilots and ground volunteers, like Joe.

"Joe was chosen to receive the award not only because of his Young Eagles volunteer efforts, but because of the impact he's helping make in the aviation community – both on the ground and in the air," said Eric McMurphy, Director of Sales, General Aviation, U.S. "We're delighted to honor him."

Navigating On The Ground

Since earning his pilot certificate 17 years ago, Joe has flown more than 80 Young Eagles flights, but his involvement with the organization began long before he could fly, as a ground volunteer.

Today, Joe spends a lot of time mentoring aspiring aviation professionals. Whether it's teaching them, helping them earn scholarships, or guiding them through airline career options, Joe helps kids pursue their love of aviation. He is currently working with three young mentees.

Joe is also vice chairman of the AirVenture Cup, during which Young Eagles flights are available. For Joe, one of the key benefits of participating in and leading the AirVenture Cup is to be able to support the Young Eagles program, raising awareness of it among the hundreds of pilots who participate in the event.

A Testament To The Young Eagles Program

Joe is the epitome of a Young Eagles success story. After being introduced to the world of aviation at the age of 12, he quickly discovered the Young Eagles program and was connected with family friend Eric Whyte, who received the EAA Young Eagles Leadership Award last year.

Eric gave Joe his first official Young Eagles ride in 1995, and after attending an aviation day camp at Capitol Drive Airport in Brookfield, Wisconsin, Joe's hometown, he's been hooked. The local EAA Chapter took Joe under their wing and encouraged his passion for flying. On his 16th birthday, Joe completed his first solo flight before heading to the state department of motor vehicles to get his driver's license. And on his 17th birthday, he earned his private pilot certificate.

Today, Joe resides in Phoenix, Arizona, and works as a pilot for a major airline. One of his greatest accomplishments was building a Long-EZ. Next to the rear seat of the plane is a sign that proudly states, "3rd Generation Young Eagles Fly Here."

"This award – and the EAA Young Eagles program itself – is a testament to all of the Young Eagles pilots out there because the program changes lives and changes the course of lives," said Coraggio. "The program and the volunteer pilots make aviation accessible to everybody who has a dream and love of flying. The only prerequisites are the interest, hard work and determination. When I learned t hat, it was a license to set goals and dream big. Now I want to make sure others know that, too." ❑

Drone Summer Camp For High School Teachers & Their Students

Students and educators get hands-on experience with building, flying, and understanding what makes a drone tick.

by Thomas Biller


Thomas Biller

Drones are everywhere now! No matter how many airshows we attend, information booths we set up at conferences, or school visits, we get the same responses to our exhibit table. It draws them in and many times people of all ages immediately tell us about their own personal drone and the experiences they've had with them. It's always amazing to me to see how many (especially farmers) have had experiences flying drones, and some have spent considerable money on these products! It tells me that drones are here to stay and everyone in every walk of life or age group has some kind of interest.

Here at Northland Community & Technical College, we've been teaching large-scale Unmanned Aerial Systems (UAS) for quite some time, but as recent as 2016, like many schools throughout the country, we have introduced a small UAS program geared toward the field technician – a person who can help a customer decide what type of drone is needed for an application, then use the drone to perform the specific task and make any repairs as neeeded along the way. This individual is a well-rounded operator/maintainer focused on industry-specific applications, whether they be in agriculture, forestry, utilities, or even law enforcement. As you can see, the opportunities in the drone industry are endless as the technology advances and gets less expensive.

Northland was awarded a National Science Foundation (NSF) grant in 2012 for a project called DRONE TECH. We were funded to promote drone education in K-12, primarily focusing on students in grades 9-12. To accomplish this, we have set up summer camps for the first week of August each year. The first camp is geared toward high school teachers, especially those from more rural or smaller districts. Many schools have cut technology departments over the years and are now starting to revive them to an extent. Our goal is to give these educators some hands-on experience with building, flying, and understanding what makes a drone tick. In many cases, we even give them a drone and some basic curriculum ideas on how to implement a program back in the classroom. This is geared toward any educator who can make the connection in the classroom (i.e. the history teacher can use it just like the math teacher could depending on the teaching angle they are looking for).

The second part of camp is for the kids...typically students going into 9th grade, all the way through the 12th grade. This is a fun, very interactive two-day experience highlighting the drone build and a good day of flying and learning about the uses and products they can produce with them.

During the build, our main focus is to introduce these kids and educators to what makes the drone tick. Much like the radio control (RC) airplane industry, drones fall into that category as far as building, finding the parts, and some of the basic rules. We teach them materials science and why we like carbon fiber and composite type materials versus traditional aluminum or plastics. We discuss the resources for 3D printing drone parts as more and more schools have access to this technology as prices continue to drop. We recently added a new printer for $300!

That's just the frame…now we have to talk about the brushless DC motors that in effect serve as the powerplant and the flight controls at the same time! These motors must have a way to interface with the main flight controller board or central processing unit (CPU). We use Electronic Signal Controllers (ESC) to make the transition from digital to analog and back the other way. In other words, all four motors on a quadcopter must be digitally controlled through the flight computer.

We can vary spin on each motor individually to give us the normal flight controls we are used to: pitch, roll, yaw and throttle. The flight board or CPU is the brains of the outfit and can be a very basic microcontroller board with sensors that allow flight stabilization for the hands-on pilot, much like many of the RC airplanes are doing now. These boards help electronically stabilize the drone to make them easier to fly. That is a basic board all drones have, but the better, more capable drones, also add in the autopilot CPU in addition to allowing for autonomous flight via a laptop or even a cell phone. These are the drones you see like the phantom that are programmed to execute flights and land all by themselves!

Once you have the basic principle of drones and

Calendar

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

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

You can also email: info@midwestflyer.com – Or – Mail To: Midwest Flyer Magazine, 6031 Lawry Court, Oregon, WI 53575

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

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

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

OCTOBER 2018

5-6 Carbondale, Ill. - **AOPA Regional Fly-In.** www.aopa.org

7 Carbondale, Ill. - Avidyne 8-Hour Mastery Training, following AOPA Great Lakes Regional Fly-In: www.AvidyneTraining.com. 800-284-3963.

7* Watertown (KRYV). - **Fall Pancake Breakfast.** 920-650-6027.

13-14 Rome, Ga. - Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.

16-18 Orlando, Fla. - 2018 National Business Aviation Association (NBAA) Business Aviation Convention & Exhibition. www.nbaa.org

26-27 Gulf Shores, Ala. - **AOPA Regional Fly-In.** www.aopa.org

27* Boscobel (KOVS), Wis. - Pull Pork Sandwich Luncheon 11am-3pm. 608-485-029

NOVEMBER 2018

3-4 Stuart, Fla. - Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.

10-11 Monroe, N.C. - Quick Silver P-51 Airshows with pilot Scott "Scooter" Yoak performing. runwayTHREE-SIX.com.

APRIL 2019

24-26* Willmar, Minn. - **Minnesota Airport Conference at Willmar Conference Center. For more information, please visit the conference web page or contact Katherine Stanley at sell0146@umn.edu or 612-626-1023. The conference is brought to you by the Minnesota Council of Airports and the Minnesota Department of Transportation and facilitated by the Airport Technical Assistance Program (AirTAP).**

MAY 2019

5-7* Green Bay, Wis. - **64th Annual Wisconsin Aviation Conference.** http://wiama.org/

JULY 2019

22-28* Oshkosh, Wis. - **EAA AirVenture Oshkosh 2019.**

For More Listings, Information & Updates
Go To www.midwestflyer.com (Calendar Of Events)
Email Calendar Listings To info@midwestflyer.com

PLEASE SEND US YOUR LISTINGS AT LEAST 90 DAYS PRIOR TO THE EVENT.

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understand that they all have the same makeup, you can actually approach this as a great hobby! All the normal hobby stores are carrying drone parts now and a quick look on Amazon will find you any part you need! It can be surprisingly inexpensive to find ideas and order the parts for all different levels of drones and capability. A great resource for anyone looking at this hobby is http://ardupilot.org/ardupilot/index.html, which is a completely open source, meaning all content is free for anyone to use and/or contribute to.

Bottom line is drones have gone completely main stream and will be much more common as the prices continue to drop and they become easier and easier to use. Many incredibly capable drones are available for under $500.

The industry is wide open for commercial users and hobbyists alike! Drones are also a great educational tool for introducing different technologies like micro controllers, sensors, electricity, materials science – you name it! We are already gearing up for the upcoming year of DRONE TECH and look forward to seeing more educators, especially take advantage of this opportunity. The NSF project provides participant support funding offsetting associated travel costs. More information on registering for the camps can be found at: http://www.northlandcollege.edu/aerospace/dronetech/. If you have interest on a specific event or career fair where you would like a drone presence, we will do our best to make it happen.

Happy flying!

EDITOR'S NOTE: Tom Biller is an avionics instructor at Northland Community & Technical College in Thief River Falls, Minnesota. ❑

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Business aviation is defined as the use of a general aviation airplane for a business purpose. It is essential to tens of thousands of companies of all types and sizes in the U.S. that are trying to compete in a marketplace that demands speed, flexibility, efficiency and productivity. It is also a vital contributor to America's job base, economy and transportation system. Furthermore, it connects small towns and communities that often have little or no airline service. Equally important, business aircraft are very often used to support humanitarian causes, and provide relief in the wake of natural disasters. NoPlaneNoGain (https://noplanenogain.org/) ❑

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Flying through the VFR corridor in Chicago.

Flight Training From Page 47

It never fails to amaze me as to how well organized everything is at AirVenture. It's obvious why this event is the best and most impressive fly-in in the world!

When I returned to Kokomo, it was time to gain some more flight experience and polish my flying skills, including aerobatics in a Decathlon, and formation flying with an Extra 300S and a Pitts S-1T. I am also working at improving my communication skills with air traffic control, which is not easy for us foreigners with accents.

I also wanted to fly as many different airplanes as I could to gain even more experience. The aircraft I flew included a Piper Cub and a PT-26 Fairchild. The open cockpit of the PT-26 remains one of my favorites. Nothing can beat the fresh air and sunlight shining directly on your face. Besides, the view is so much better! The open cockpit gives you the true feeling of flying!

A few days before I had to fly home to the Netherlands, I flew through the VFR corridor in Chicago. This was definitely one of the highlights of my trip to the United States thus far!

When I approached the Lake Michigan coastline, it became clear how massive and beautiful the Chicago skyline really is. Looking up through the skylight in the roof of the Decathlon, I realized that these were "the big boys" making their approaches to O'Hare International. Seeing these massive airplanes, flying in the same airspace, made me feel so alive and appreciative of the freedom that exists in the United States. It was also a reminder that general aviation pilots need to be on their toes and act as professional as possible at all times.

In Europe, flying through a VFR corridor in Class B airspace is unthinkable. This freedom in the sky in the United States is something we Europeans admire. Consequently, there are a lot of flight students from Europe who come to the United States to complete their flight training. There's greater freedom and it is less expensive.

Nevertheless, I'm looking forward to exploring Europe from my own little warbird. There's so much to still explore, and I hope I can convince more people of the beauty of aviation by taking them for a ride and telling them my stories and about my experiences. In particular, I hope to get more women involved in aviation in Europe, especially flying taildraggers. Currently, I am the only woman in the Ursel Flight Club, who is qualified to fly taildraggers. Wouldn't it be wonderful if I could change this by inspiring more women to pursue flying for fun or as a career?

AUTHOR'S NOTE: *Special thanks to Ed Escallon and Mike Wild of Wild Aerobatics (www.wild-aerobatics.com) at Kokomo Municipal Airport, Kokomo, Indiana (KOKK), who were our flight instructors. They also helped us to locate and purchase our 1943 Aeronca L-3 Defender, then assisted us in shipping it back to Holland. I greatly appreciated Ed flying with me from Indiana to EAA AirVenture Oshkosh in Oshkosh, Wisconsin in 2017. It was an amazing adventure that I will never forget! And I'm greatly thankful for all the care I received from the Wild family. They made me feel at home while being far away from home. Flying in the United States is a gift every pilot should appreciate. I know I do and will cherish it forever!* ❑

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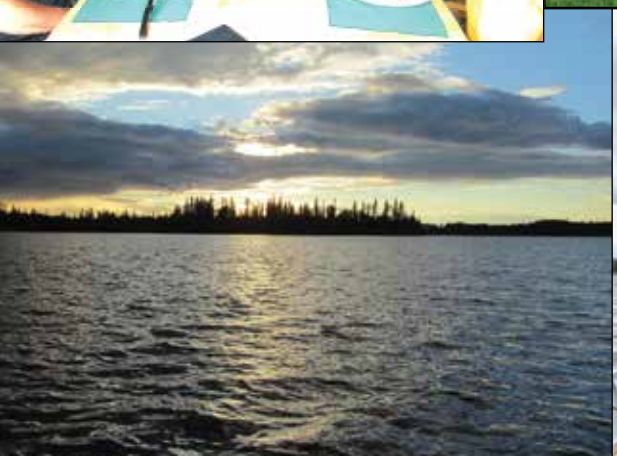

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