

**50 YEARS!**EAA 461 CELEBRATES
OUR 50TH
ANNIVERSARY IN 2023!



IFR/VFR SAFETY
SEMINAR
CHICAGO CHAPTER OF
THE NINETY NINES
HOSTS 2023 SEMINAR



FROM THE LEFT SEAT THAT BEAUTIFUL, 231-POUND PLYWOOD BOX FULL OF ALUMINUM



EAA SPORTAIR WORKSHOP THE GOAL OF THE HOBBY IS TO BUY TOOLS!





## From the Left Seat

I hope all of you lifted off into 2023 set on a course for awesomeness! My year started with the arrival of an RV-14A empennage kit on January 10. (What have I done?!) That beautiful, 231-pound plywood box full of aluminum and hardware looks intimidating on the workbench, but I am getting accustomed to it. I am working through some home renovations at the moment, but I expect to be bending metal and banging rivets (and buying many more tools) soon!

Speaking of awesomeness.... we have a new Ray Scholarship Coordinator,

EAA Chapter 461 is a 501(c)(3) non-profit charitable organization based at Bolingbrook's Clow International Airport (1C5)



a new Social Media Manager, and a new Membership Coordinator!

Dina Romanova accepted the reins from Gia Kapp and will manage our chapter's Ray Scholar program.

Amy Reeb volunteered to manage our social media presence and drive membership.

Folks, Dina and Amy are two of the most motivated and energetic people I know, so I am beyond thrilled at their respective decisions to get involved in these roles. These are huge wins for all of us! Thank you Dina and Amy!

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#### **Hangar Happenings:**

Lounge-461: The ceiling panels are all primed and painted, and we will begin putting up the "coffer framework" in the next few weeks. The lounge should start looking less like a workplace and more like a play place over the next several weeks.

If you are interested in getting involved in Lounge-461, please join us at "Hangar Night" on Thursdays at 7:00 pm. You may also check the events section of our website (<a href="https://www.eaa461.org/events/">https://www.eaa461.org/events/</a>) for the most up-to-date view of chapter events, or you can request more information via email: <a href="mailto:contactus@eaa461.org">contactus@eaa461.org</a>

#### **Chapter Waypoints:**

Cavalcade of Planes 2023 will be held on June 3 & 4th. If you are interested in getting involved, please contact Dean, me, or Al so we can count you in and put you to work!

As a reminder, the arrival of January 1, 2023 means dues season is once again upon us. Chapter dues are \$25 per member, and members must also be members in good standing of EAA national (evidenced by an active EAA number). Dues may be paid by cash, check, or PayPal. If you wish to pay via PayPal, please be sure to use the dues-specific PayPal button on the EAA Chapter 461 website (www.eaa461.org - about halfway down the page) to ensure the chapter receives a full \$25 after PayPal takes their \$1.01 (total dues via PayPal are: \$26.01).

For those interested in a family membership, the board approved family memberships during the January board meeting. Family memberships are \$35. For those who wish to use PayPal, a PayPal option for family dues (along with fee details) will be available on

## Aviation For All Ages and Interests

https://www.eaa461.org







Whether you fly, build, restore or simply enjoy airplanes and aviation, you are welcome to attend our events and join our chapter. We are a group of aviation enthusiasts, aircraft builders, and pilots who get together with like-minded people to share ideas, exchange information, encourage safety, serve the local aviation community and have a lot of fun doing so.

the chapter website starting on Feb 1, 2023.

Thank you to everyone who opted to use Amazon Smile (an anonymous endeavor) and select EAA Chapter 461 for their designated charity over the past few months. Unfortunately, Amazon recently announced that they will be shutting down Amazon Smile at the end of February 2023; however, they will continue to honor donations until program termination. I will continue using Amazon Smile until the program ends, and I hope you will, too!

VFRs!

## Ray Aviation Scholar Update

Jake Marchese

Since December, I have been doing my best to keep up with my flight training. Nonetheless, the weather has proven a substantial difficulty, given that I cannot schedule a sufficient number of slots to fly. This means I am not proficient enough to take a checkride because I need to be certain that I have recent experience at the controls before I can handle a checkride. I am confident in my studies and my flying abilities that I can pass when the time comes.

I am very grateful and prideful to be the 2022 Ray Aviation Scholar, as this journey would have been less feasible without the scholarship I earned. I am looking forward to achieving my Private Pilot's Certificate; the suspense is killing me, but I need to be sure I can pass without any unforeseen issues.

## EAA SportAir Workshop

Robbie Culver

Recently I attended an EAA SportAir Workshop on Electrical Systems, Wiring, and Avionics for Experimental Amateur Built (EAB) aircraft. The workshop is one of several that EAA holds at various locations across America. The one I attended was held at EAA headquarters in Oshkosh, WI, where almost 20 years ago I attended the sheet metal basics workshop at the same location. That workshop set me on the path to eventually building, completing and flying my Sonex. EAA runs fantastic workshops, and I cannot recommend them highly enough for anyone interested in kit built aircraft.

### MONTHLY MEETINGS

The Chapter meets on the first Thursday of the month at Clow International Airport, typically at the Illinois Aviation Museum starting at 7:00 pm. Family members, extended family and guests are always welcome.



## MEMBERSHIP INFORMATION

Membership dues for EAA Chapter 461 are \$25 per year and are due on the first of January each calendar year. Chapter 461 members are to be current members of the EAA, Oshkosh, WI.

Individual membership to the EAA is \$48 per year. Family memberships are available for \$60 per year. Both include a twelvemonth subscription to Sport Aviation magazine.



The workshop is two very full days of education, hands-on practice, and camaraderie with like-minded builders. The workshop I attended happened to include four other Sonex/Waiex builders - enough that EAA's Charlie Becker quipped we were "*The Sonex Mafia*." The name stuck, and yes - there will be tee shirts. Inevitable jokes such as "*You will kiss my cleco*" followed - I guess you had to be there...

Even better for me, my good friends Russ and Justine Pavlock - local Chicagoland Sonex builders - also attended. Both are long-time friends of mine and I had no idea they would be in the workshop. You never know who you will meet in Oshkosh!

Each workshop is led by an expert. We were exceptionally lucky to have Dick Koehler, an A&P/IA with an incredible aviation pedigree. He is a retired US Navy aviator and combat veteran, personable, and an excellent instructor with just the right mix of real-world experience, sea stories, and technical expertise.

The workshop began in the lobby of EAA's new education center, located adjacent to the Eagle Hangar of the EAA museum. After a short group meeting for all of the workshop attendees in each subject area, we were led off into the depths of the EAA museum. A Wisconsin Air National Guard meeting was also taking place, so we wove our way among some of America's best on our way to the classroom.

When we got to the classroom, each table was set up with a red nylon bag full of tools, a brown phenolic-style mat for soldering on, some electrical connectors and wire, and a very complete

#### Board of Directors

Chairman - Dean Karafa

Al Bally Robbie Culver Jeff Krasowski Amy Reeb Dina Romanova Rich Tichy

## YOU CAN FIND US ON FACEBOOK!



#### **HANGAR NIGHT**

Every Thursday evening from 7 pm to 9 pm we host a "hangar night" where we learn, we build aircraft, we socialize, and we work on our hangar.

No experience is required, no membership dues must be paid, and no expectations are set.

Come out, meet friends you haven't met yet, see what the buzz is all about, and join in the fun!

workbook for the class material. As a professional trainer, I was impressed by the appearance and organization of the materials. As an aircraft builder, I was in awe of the tools! (As you will often hear me say - the goal of the hobby is to buy tools!)

Dick introduced himself and showed us the coffee. A great start to a fantastic weekend, and proof that Dick knew pilots who needed caffeine when he sees them. After the required refills, we began.

Dick started with introductions - after discovering we had "*The Sonex Mafia*" in the room, the RV guys found themselves outnumbered for once. I found myself among a great group of builders. Dick began his lecture with some basics - the schedule, an outline of the course, and a safety review.

First up was some reference materials - FAA Advisory Circular 43.13-1B & -2B (Hangar Night attendees have often heard us refer to this as the Bible for building experimental aircraft), the Tony Bingelis book series, and AeroElectric Connection. Next up was a nod to the suppliers and sponsors for the course - thank you Aircraft Spruce & Specialty! And to start the educational portion of the class, "Initial steps for your electrical system."

The 7 steps outlined formed the basis for the course. *Determine Equipment*. Locate each piece of equipment. Protect the components. Make wiring connections. Ground and bond properly. Install instruments to monitor system and Complete detailed wiring diagrams.

Now, some of you may wonder - why would I attend a wiring class when I have already completed and flown my project? No, we are not starting another kit. In fact, we have other major life adventures in the plans (if I say "all y'all" it may be a hint). I was attending because my Sonex wiring, which began as a neat, tidy, well organized system had grown into not so organized wiring hidden behind the instrument panel. A long term goal is to re-wire the airplane.

The lecture portion of the class was fantastic - I kept separate ideas in my own notebook of things I wanted to focus on in my Sonex. Hands-on projects supplemented the lecture, and each built on the knowledge gained in class.

Dick's hands-on demonstrations of each skill made executing the practical exercises much easier. Dick took the time to thoroughly explain why we are doing each step, and some common errors he sees builders (and even experts) make. Mixed with real-world experiences Dick had, this gave us the background of the what and

#### Chapter Leadership

President & Web Editor: Chad E. Carlson Vice President: Al Bally Treasurer: Brenda Culver Secretary: Alexander Falco Sonnenberg

Ray Scholarship
Coordinator and Young
Eagles Coordinator:
Dina Romanova
Membership and Social
Media Coordinator:
Amy Reeb
Facilities Coordinator and
Newsletter Editor:
Robbie Culver



#### CONTACT INFORMATION

Mailing address: 118 S. Clow International Parkway, Bolingbrook, IL 60490 http://bbclowairport.com

Email address contactus@eaa461.org

why to accompany the how. There truly is no replacement for that kind of training.



Russ and Justine Pavlock working on their wiring

Following a lunch break, class continued in the same format - lecture and practice. We did not end on Saturday until after 5 pm, at which point "*The Sonex Mafia*" decided to do a group dinner.

Russ, Justine and I all happened to be staying at the Hilton Garden Inn on the north side of Wittman field. The rest of the *mafioso* joined us. During AirVenture, the hotel is the focal point for the pilots, crews, and VIPs of the show. In January, the hotel is quiet and serene. Until a group of pilots has dinner and drinks....



The Sonex Mafia

#### Resources

Some resources used in studying for the FAA knowledge exam include the Airplane Flying Handbook, the Aeronautical Information Manual (AIM), the Pilot's Handbook of Aeronautical Knowledge, the FAA Aeronautical Chart Users' Guide, and the Practical Test Standards (PTS).

All of these are available for free online - a quick search found these documents in PDF format.

Much of this is the source material for your knowledge and oral exams, and none of it has to be purchased.

Click here to locate these documents

I felt bad for the bartender, but she got good tips. We were polite, but yes - we may have been obnoxious. It's a good thing the other patrons were pilots attending the SportAir workshops. At dinner we all agreed that we were lucky to have Dick as an instructor, and shared stories of our projects and our flying. Some of them were even true! Well, maybe...

Sunday came a little too early, and more coffee was required. Everyone was there before 8 am - a motivated group of builders! We began the day with lots of banter and conversation - it was fun to see the group bond in such a short time.

On our Sunday morning break, several of us wandered out into the EAA museum. It was shortly before opening time, and we found ourselves alone among some of the historical treasures housed there. It was a memorable moment as we stood there in awe of the history surrounding us, and we knew the experience was special.



EAA Museum on a Sunday morning

Day two was focused on more lecture, much of which involved radio, transponder, ADS-B and antenna wiring. It was familiar territory for me and brought me back to my Navy training.

All of this led to a bigger project at the end of the day - we were done by 3:45 pm. As we wrapped up the class, I reflected on all I had learned. Stripping wire, crimping connectors, soldering techniques, good wiring practices, and circuit protection among other topics reminded me that the basics remain the same. Knowledge and understanding, high-quality tools, and carefully planned and documented work all make for a great result.

# EAA Celebrates 70 Years of Sharing The Spirit of Aviation

https://youtu.be/ QTw1tHNdzow

EAA, organized with three dozen Milwaukee-area aviation enthusiasts on January 26, 1953, is celebrating its 70th anniversary with more than 270,000 members (the most ever) and 900 local chapters focused on growing participation in aviation by sharing The Spirit of Aviation.

"EAA's founder, the late Paul Poberezny, often said that he never expected this little Milwaukee airplane club to grow into what it has become, but it tapped into a basic aspiration — the freedom to fly," said Jack J. Pelton, EAA's CEO and Chairman of the Board. "For seven decades, EAA has allowed people to passionately pursue that dream with imagination and innovation, as they found kindred spirits that created an aviation movement that has no equal in the history of manned flight. It is an anniversary that we celebrate EAA as an achievement of the individual as part of a greater group that supports those efforts."

More information is here.



If you are interested in building a kit aircraft, learning how to weld, wire, or work on fabric, among many other skills, I would highly recommend a SportAir workshop. You will learn new skills, meet new friends, and have a lot of fun. More information can be found by clicking <u>here</u>.

## IFR/VFR Safety Seminar

By Robbie Culver

Saturday, January 28th, the <u>Chicago area chapter of the ninetynines</u> hosted the 2023 Aviation Expo and IFR/VFR Safety Seminar at the Renaissance Suites Hotel in Glenview, IL from 8 am to 4:30 pm. The seminar features both VFR and IFR sessions, and also a separate room for flying companions.

Several of EAA 461's characters attended, as well as a bunch of the SMBC crowd. We caught up with friends from Aurora, Waukegan, Lewis, Kenosha and Lake in the Hills as well as several DPE's.



## FAA ECG Policy Fits Pattern of Positive Reform

In late October the FAA changed its standard on electrocardiogram (ECG) findings for medical applicants, decreasing the types of results that would lead to a medical deferral. While Class II and III medical holders are not subject to routine ECG testing, the FAA also mirrored the change in its protocol for heart arrhythmias, which all airmen are required to note if diagnosed.

The change allows airmen with a "First-degree AV (atrioventricular) block with PR interval less than 300 ms (0.30 sec)" to receive a medical certificate without deferral. This change was actually known informally to the aeromedical community as far back as 2018 but was formalized in the October change to the FAA's list of 18 "normal abnormal" ECG findings that do not require medical deferral.

For more information, <u>click</u> <u>here</u>.

The morning VFR sessions included presentations on avoiding hazardous attitudes, everything you want to know about systems but were afraid to ask, and "What's your clearance, Clarence?" (runway incursions). Each was well presented with lots of audience interaction.

The afternoon sessions included a presentation on situational awareness and a combined VFR/IFR/Flying Companion presentation on winter weather decision making.

A separate area for vendors provided attendees with lots of aviation swag and plenty of brochures to take home. As is true every year, this was a fantastic seminar to attend! It seems every year the seminar is held on a cold, snowy Chicagoland weekend when we would all rather be flying, but the weather dictates otherwise.

## Hangar Night

Robbie Culver

EAA 461's Thursday evening "Hangar Night" has been proving to be a popular event! We have had over 20 members, youth and guests on several occasions, with topics and speakers covering many aspects of aviation.



EAA 461 Youth

While not official ground instruction, the intent of Hangar Night is to provide enough background and discussion that our young folks and interested adults can understand the concepts, rules,

## Winter Flight Fest Returns

The annual Winter Flight
Fest will bring family
activities and the popular
skiplane fly-in to the EAA
Aviation Museum on
Saturday, February 11, from 8
a.m. until 4 p.m.

The day is designed for all ages and is a family-friendly series of activities through the museum and at its Pioneer Airport facility.

Hands-on family activities:

Wright Flyer simulator — Take the controls of the first powered airplane at Kitty Hawk.

Paper airplane launcher — Fold your best creation and see how it flies.

X-Planes — Create your own X-Plane and test it through various obstacles.

A Pararescue challenge where kids design a miniature parachute and test it in a wind tunnel.

Indoor model airplane flying — Discover what it takes to build and fly a radio-control model.

Clothespin airplanes — Make your own airplane refrigerator magnet.

Click <u>here</u> for more information

regulations and procedures involved in being a pilot. The goal is to prepare them for further education and learning.

Attendees have learned about flight planning, Standard Terminal Arrival (STAR) Procedures, airspace, communications, and procedures. Each is based on official FAA documentation, the FAA Regulations and Aeronautical Information Manual (FAR/AIM), FAA Advisory Circulars (AC's), and online sources.

Discussions have included airline pilots, air traffic controllers, aviation enthusiasts and both pilots and builders. A recent runway incursion incident at JFK airport in New York followed a discussion of radio procedures and runway safety at the previous week's Hangar Night, and was the subject of follow-up discussions including an analysis of the known facts in the incident.



Hangar Night with not one, but TWO airline pilots!

We hope you will join us on Thursday evening from 7 pm to 9 pm in the EAA 461 hangar, every week except the first Thursday of each month when the chapter membership meeting is held. No membership requirement exists to participate or attend, and all are welcome to join us, listen, learn and enjoy the camaraderie and fellowship of flight!

## EAA 461 Celebrates 50 years!

EAA 461 is celebrating our 50th anniversary in 2023. Vice President Al Bally designed a special logo in celebration of this anniversary.

# New Programs Added to Young Eagles Online Registration

Young Eagles online registration has been a hit for chapter-hosted Young Eagles rallies and one-off Young Eagles flights. By allowing parents to preregister youths, coordinate volunteers, email participants, etc., the system has made it simpler to host Young Eagles activities.

EAA is excited to announce that Young Eagles online registration is now compatible with a number of other EAA youth programs!

Young Eagles Workshops

Young Eagles Build and Fly

The addition of these programs will allow chapters to pre-register youths and event volunteers, promote the event online, and submit the event to EAA HQ. Youths that register for these new events can also opt in for their EAA student membership, AMA membership, as well as EAA AeroEducate. Youths that register for AeroEducate will also receive credit toward their AeroEducate badge progress.



## **Pre Solo Preparation**

Dina Romanova

Chapter 461 Influence is certainly a thing. The debate could be made whether it's bad influence or good. It influenced me enough to pull the trigger and enroll in a PPL program last August... And now, 5 months and 39 flight hours later, I am getting ready to solo!

FAR requires only an endorsement from your instructor. But I go to a part 141 school, and they have additional requirements and stage checks. My school has its own pre-solo checkride (written quiz, 2-hour oral test and 2-hour evaluation flight). I finished the first two parts and am now getting ready for the flight with the check airman. I've already done one before (it was a stage check after 15 flight hours). It is like a checkride flight - you need to demonstrate all maneuvers: take off and landing, flying the pattern, slow flight, stalls, ground reference maneuvers, and radio communications.

There were a couple of questions that surprised me on the quiz and during an oral knowledge test. I didn't think I was supposed to know that before the solo. Let's see if you can answer them:

When is dropping objects from an airplane permitted?

Who can perform a 100-hour inspection vs annual inspection?

What documents should be aboard an airplane flying internationally?

#### Are you a member?

As we step into the new year, we want to gently remind you that chapter membership annual fees are due.

We are 501(c)(3) non-profit charitable organization. We rely on annual fees and donations to cover the expenses.

Your membership dues help EAA 461 host Young Eagles, Hangar nights and monthly presentations, and also build a flight simulator lab!

Membership dues for EAA Chapter 461 are \$25 per person per year and are due on the first of January each calendar year.

You can pay at <a href="https://www.eaa461.org/donations-dues-fees/">https://www.eaa461.org/donations-dues-fees/</a>. Scroll down to EAA Chapter 461 2023 Annual Membership Dues \$25.00. Please note that there's \$1.01 extra to cover PayPal if you pay online. You can also write us a check and give it to Chad, Brenda or any of the board members.

To be a chapter member you are required to have an active EAA membership first. Please make sure your EAA membership is current. It is \$48 per person per year, or \$60 per family. You can check the status of your EAA membership and renew it here: <a href="https://www.eaa.org/eaa/eaa-membership">https://www.eaa.org/eaa/eaa-membership</a>

Another pre-solo requirements my school has are 8 night-time full stop landings (nailed them all in one lesson), and landing at 3 different untowered airports. I landed at Clow and DeKalb before, so needed one more.

It's been a month since the last time I flew outside the KDPA traffic pattern because of the low ceilings. The weather grounded many VFR flights this month. Three out of four runways at DuPage airport have been closed since the real winter started. Snow, low clouds, icing conditions... When the temperature is just a couple degrees away from dew point, you can accumulate ice in flight very quickly. Ice is an insidious killer. Even a thin layer of ice on the wings can disrupt the airflow and stall the plane. Ice on the taxiways plus crosswind make for an interesting taxi...



I got lucky on Sunday - the snow stopped for a few hours, just in time for my lesson, and we finally flew to Schaumburg. It was cool seeing O'Hare's parallel runways so close. I wish I'd taken a picture, but I was busy, you know, flying the plane... The traffic pattern altitude is 1600 feet, and the Bravo airspace starts from 1900 feet. The runway at Schaumburg is longer than at Clow, but it seemed shorter and narrower because of the snow on the sides.

I am planning to complete the necessary requirements and do my first solo next month. It's time to think what T-shirt I want to wear for the big day! Any suggestions?

## Ice is not Nice

Anonymous

Editor's note - if you are a new pilot, an experienced pilot, a student pilot or an aspiring pilot, read this article. It was submitted anonymously and is an important lesson.

# Young Eagles Year-End Wrap-Up

As 2022 comes to a close on the Young Eagles program, it's hard not to look back and be proud of the entire Young Eagles volunteer workforce.

The program continues to rise out of COVID-19, as flight activity is moving closer and closer to prepandemic levels.

In a normal year, approximately 60,000 Young Eagles take flight. 2020 and 2021 certainly took a toll on the program.

Annual Young Eagles Flight Activity

2019 - 59,016

2020 - 8,006

2021 - 35,590

2022 - 47,400 (YTD)

For more information, click here.



Earlier this month I embarked on a flight from the suburbs of Chicago to western Michigan to visit family during what felt like one of the longest stretches of MVFR/IFR weather in recent years. After weeks of cooling my heels and avoiding flying due to weather I was getting the itch to get back up there, and I was even beginning to chide myself for perhaps being overly conservative in avoiding winter MVFR weather.

The day of departure was no exception to the streak of objectionable weather, with conditions being thoroughly overcast, ceilings ranging from 1800 to 2400 AGL, visibility at 6 miles, surface winds being 20 kts from the north, and with winds aloft blowing from the northeast. During preflight I had noticed a handful of icing PIREPs and there was a Zulu AIRMET that covered the area, but at altitudes a few thousand feet above my cruise. My thought process was that if I stay below those altitudes and clear of clouds then I should be fine. And frankly clear of clouds is a given – because despite having several hundred hours I'm still only VFR rated.

And while I recognized conditions were not ideal for this trip they still permitted cruise at an altitude that would keep me clear of obstacles, and where most of the trip would be done outside of busy airspace. There was going to be some ugly MVFR to start but by the time I halfway through Indiana it should be VFR conditions, with only about 50 miles of MVFR flying in total. I also recognized that if the weather was poor I could do a 180 back to DuPage, and if the weather enroute was really treacherous the flight-path would offer multiple airports to stop off at (LOT, IGQ, GYY, 3Ho, MGC, VPZ, BEH – to name just a handful).

While getting ready to takeoff from my home airport of DuPage (KDPA) I was comforted to see multiple 172s flying the pattern. I wasn't really worried about the weather to begin with and seeing students in the pattern reinforced that sense of safety, if they were up there then of course it was a fine day to fly.

I departed KDPA without event and got a turn on course almost immediately. I climbed to 2400' MSL (500' below clouds) and began the cruise southeast. In between KDPA and KLOT a couple specks popped up on the windshield, but no more than a handful of them. I recognized it instantly as some form of precipitation, though unlike the light rain I'd encountered in previous flights -- these specks were staying in place. That was a new experience but not particularly ominous.

I continued to cruise and didn't accumulate any more of these

## EAA 461 Young Eagles Summary

2022 by the numbers from Dina Romanova - Young Eagles Coordinator

April - cancelled

May - 54 kids, 6 pilots

June - 23 kids, 6 pilots (weather made us finish early)

July - 32 kids, 9 pilots August - 48 kids, 10 pilots September - 45 kids, 8 pilots

October - cancelled

TOTAL: 202 kids this season

Huge thank you to our awesome YE pilots:

Al Loek

**Zook Williams** 

**Austin Dolan** 

**Bob Moore** 

**Chad Carlson** 

**Cristopher Grear** 

**Dennis Barfuss** 

Jorge Gonzalez

Josh Krecek

Robbie Culver

Bob Kopeika

**Ron Miles** 

Ron Monsen

Steve Russell

until about 2 minutes after leaving the Lewis delta airspace, where again I was comforted by the many 172s hanging out in the pattern. I was still headed towards the southeast when I began to notice specks appearing all over the windshield at 2400'. I'd flown in drizzle and light rain showers before while maintaining VFR so the small droplets didn't worry me much, but the fact that these weren't clearing off the windshield made me uneasy.

I still had near perfect visibility through the windshield but I could easily picture how that'd change if I kept adding to it. To make sure I didn't add any more of them I decided to descend to 2000' to leave more clearance from the clouds. During the brief descent I also peeked at the wings to see if there was any icing — thankfully there was none (that I could see). It was also at this time that I decided to turn on pitot heat to eliminate the risk of a faulty airspeed indication from an ice-clogged pitot tube.

At my new altitude the accumulation of these annoying, translucent specks didn't cease and I decided to do 1 more altitude change – I went down to 1800' and turned slightly more south aiming for a point where ceilings were a bit higher. I figured I'd take a longer route but one that afforded safer passage (always a good trade). This new altitude would still provide obstacle clearance and, as I reasoned with myself again, this stretch of nastiness should be over soon as I get halfway through Indiana. By going south a bit and then cutting over I should be able to safely avoid any further problems.

I was only on this new course to the south for about 2 minutes when I realized I was developing a serious issue. What before was a couple dozen translucent specks on the windshield was now becoming hundreds and the growth across the windshield was exponential. The speed of accumulation was so rapid, happening over the course of a couple of minutes that it became clear to me that I needed to land immediately.

In the span of only 2-3 minutes the opacity of the windshield went from nearly perfect to pretty opaque from the pilot's seat. I had to maneuver my head around to try and find clear windshield to see out of. Luckily the side windows were still totally clear, affording me some situational awareness. But going 160mph with difficulty seeing out of your windshield is not a situation you want to be in for VFR.

I used ForeFlight to find the nearest airport: it was C56, Bult. I'd never landed there before so I verified the length was acceptable for my Cherokee and then made an immediate turn towards the

EAA Celebrates
70 years!
January 26th,
2023 marks EAA's
70th anniversary!
The January 2023
issue of Sport
Aviation has a
great article - 70
Years and
Counting!

The <u>digital version</u> of the magazine has an accompanying video.

Visit <u>this link</u> to watch it on *YouTube*.

Look for the celebrations to continue all year!

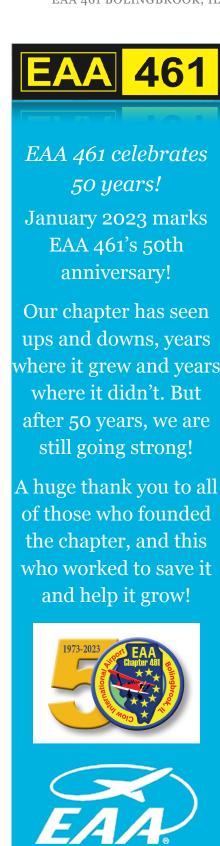
airport. While it only took about 3-4 minutes to reach Bult Field those minutes were deeply worrying. The windshield continued clouding up with ice making the sight picture from the pilot's seat even more difficult to see through. Thankfully there was a small patch towards the bottom that I was able to see through by changing posture (I believe this was due to the heat/defrosters being on full-blast and the vent being right in front of the windshield). On final it became clear that I was going to be dealing with a significant cross wind as Bult only has an E/W runway. But I'll tell you, I'll take a challenging cross-wind any day of the week over icing. So, I cast those concerns out of my mind and focused on just getting the plane on the ground.

On final I still couldn't discern any ice on the wings but I was confident if the windshield had accrued this much ice the airframe would have, too. That encouraged me to keep my speed up and I was doing a solid 15-20kts above normal approach speed on final with no flaps. That might have been overkill but I wasn't in the mood to take chances. Thankfully the cross-wind abated some as I descended below the rows of trees that run parallel to the runway. I touched down at nearly 80kts and then began a slow brake. It wasn't the prettiest landing I've done, but there was no damage to me or the airplane, so that's a success.

I'll admit, I breathed a sigh of relief when the wheels touched the runway, and an even deeper sigh upon reaching the taxiway. Once arriving at the ramp, I shut down the plane and hopped out while noticing much of the windshield ice had melted (as pictured). Shortly after I noticed the solid ice layer that formed around the leading edge of the wings and elevator in flight.

It was rough and uneven in feel, but nearly completely clear and running the entire wingspan leading edge. From a few feet away it'd be hard to see it and especially challenging in afternoon overcast lighting conditions. I couldn't feel any aluminum underneath the ice, so the coverage was nearly complete. I don't want to know how much worse it would have been if I'd decided to "soldier on" through it and keep heading east.

So, as my first in-flight encounter with ice has taught me: Take icing risk seriously and realize the speed at which it can become a problem. This whole episode from KLOT to C56 was less than 15 minutes! And if icing is in the forecast it's definitely one of the days where I'd rather be on the ground wishing I could fly than being in the sky and wishing I was on the ground.



#### Lessons

Negotiating on cruise altitude minimums in flight is a sign something is wrong. In retrospect I should have turned around when a descent to 2000 MSL became necessary, and certainly when testing 1800'. At some point you need to recognize you're scud running just to make the flight work. Every foot that you descend reduces your options later on.

The visible moisture required for icing might be subtle. I was clear of clouds and with solid visibility in every direction and I still encountered icing. I will be MUCH more cautious of this from now on and be more cognizant of early warning signs (e.g., the specks on the windshield which should serve as an excellent indicator that icing is definitely there).

You need to leave yourself an out at all times and have the proficiency to execute on that exit-strategy. When things start to go poorly you don't want to spend much time fumbling around thinking about what to do next. You need to be decisive. That's where knowing your priorities comes in handy: always aviate first.



Icing on the windshield at Bult Field (C56). This is minutes after landing after about 25% of the ice had melted off.

Once you know it's time to end the flight for safety, find the nearest airport and do it. Be decisive. Don't continue testing the weather and debate whether or not the flight should go on, get yourself on the ground and then your options in the warmth and safety of the FBO.

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