
EAA Chapter 32 News

The official publication of Experimental Aircraft Association Chapter 32 - St. Louis, MO (Jim Bower, Editor)

February, 2023

CONGRATULATIONS to our 2023 Ray Scholarship Winners!



Marco Cardenas-Villasenor



Lauren Peca



Angel Obed Carcamo-Leiva

WE HOPE TO SEE ALL OF YOU AT THE FEBRUARY MEETING! 10:00 AM FEBRUARY 18TH AT THE ARC. MASKS ARE NOT REQUIRED IF YOU'VE BEEN VACCINATED, BUT WE'RE STILL PRACTICING SOCIAL DISTANCING.

Newsletter Contributions and Deadlines

Anyone wishing to submit articles, advertisements, rants, etc. to the newsletter should send them to your friendly editor on or before the Tuesday ahead of the scheduled meeting. Send contributions to newsletter@ea32.org.

January Meeting Minutes

Dave Deweese



January's meeting began with the Pledge, Bill Doherty presiding.

November meeting minutes were not published, Jim Hall gave a debrief. We held elections, all incumbents re-elected.

Happy 70th birthday to EAA - we have a special cake for the occasion.

Bob gave the Treasurer's report including checking, savings, and Ray Foundation account balances. Note that he's using our new credit card app/device to collect dues (which are due). Note: we've currently got 110 members. Bob sent emails to everyone who needs to pay up. There's also a PayPal option now, thanks to web designer Laura for getting the link on our chapter website. (17 have renewed online.)

Visitors: Ken, who was here in November, is back: a "rusty" pilot who will share expenses. ?? With husband and grandson. Lou Giordano is helping build a 750 STOL. Jordan Nykiel works at Boeing and is thinking of building a kit. Angela Kapp and Matthew Browning have a Mustang II here at the airport. Grace Knoerr and Sarah Bangham are visitors interested in pilots licenses.

Flood report: river's at 16 feet.

Young Eagles: we submitted our expenses for credits, around \$1,000. We used around 1400 for Air Academy last year, the prior event was the balance. 2022: Samantha is responsible for our formal count, electronic plus forms with written signatures, we also had some 371 flown. 9076 chapter grand total over 30 years. We had 3 private events last year, the other were our regularly scheduled events. Joe Steinman, founder of Gateway Youth at 1H0, is running a class starting today. He'd like to do a private event at the end of the class 3/11, Jon will send out an email to see if any pilots are available. We know that weather is unpredicable in that season.

Our Merit Badge presenter, Laura Million, is retiring from that post after 9 years. We're looking for someone to take over. It's a two to three hour presentation that Laura caps at 25 participants. She has all the materials prepared including a PowerPoint presentation that her replacement can inherit and will go over it with you. A couple of people could do this, and it's a good opportunity for newer members. It's about 7 or 8 presentations in a season.

Ray Foundation: (Chris) We're doing two 50/50's this year: Jim Hall presented Lauren Peca with her giant, cartoonish check and we got a picture. We got our next photo opp with our other future pilot, Marco Cardenas, who got the Victoria Ward Memorial Scholarship. Angel Carcamo got a \$2000 solo scholarship. Chris has decided to do another \$2000 and would like it to go to a girl in memory of Victoria. Chris is going to Leadership Academy next week. Isaac passed his written with a score of 92 and is almost ready for his check ride. Chris is going to debrief Isaac as this has been tricky in the past, though we currently have a 100% success rate with our scholarship.

Explorer Scouts: November: a pilot from Southwest spoke to the group at the Prologue room. Watched Devotion for their December meeting. Last week they worked with Chris on wiring for his 750, it was literally a dark and stormy night, but the group stuck around for hours. One of the groups is a CAP member, we'll have them out to visit the chapter. There's also interest in NASA in particular. Lauren was present and shared some of her experience with other scouts who are interested in becoming pilots. The Boeing engineering group will present in February. Jim notes that there's room for a lot more members, both scouts and advisers. The latter involves some simple online education to be certified. Bill's now on the day schedule and will be attending.

Minorities in Aviation: not much contact in November but Bill's reaching out. He and Chris feel like a tour of Gateway would be interesting and valuable.

Fundraising: Bob's got food cards, had \$100 Dierberg's cards. Raise Right/Shop With Scrip is another program: there's an online app that allows you to buy an eGift Card at the store then pay with that, EAA32 gets a percentage. Note that Amazon Smile is going away. Bob asked Laura if we can get Raise Right information on the website.

New Business:

They're doing the Salt River Car show again this year, April 15. (Conflicts with the meeting so we may push that back.) We'd like to do a food tent again. We learned that these guys arrive early and are hungry for breakfast, so we could make a lot of profit selling pancakes. This has the side benefit of giving us experience for the Camp Scholler pancake breakfast: chapters can come away with \$2,000 or more from that. Bill's gathering equipment we can use, one piece is a griddle that will work with our grill; the rotating pancake gadget seems a bit Rube Goldberg. We'll do parking again, no airplanes this year which will simplify matters. This will be "Maximum Effort": lots of volunteers for lots of profit, we made \$2500 last year with no experience.

International Learn To Fly Day is the second Saturday in May. Bill suggests pushing the regular Young Eagles event back and having a Flying Start event. This is a mentorship program, we'll need a coordinator and a core group of volunteers similar to what we have with Young Eagles. See Bill if you're interested. Scott AFB event is the same day but we don't think it will draw off much attendance.

International Young Eagles day is in June.

Think about what sort of quarterly events you'd like to see this year: build workshops, YE camps, etc.

Meeting speakers: in particular we'd like to get someone who could speak on Missouri's developing insurance situation. March will be the financial presentation. Anyone with unique experiences is welcome to share. Bill hinted at cargo pilot Jim, who mentioned the lights pilots have been seeing off the west coast: he's seen them.

Chris: first Saturday in February will be lasagna and cheesecake for anyone volunteering to help with the Zenith.

Art and Rusty have gotten the OK to bore holes in the sky with their project (and pour money into said holes.)

Jim's Pacer has been signed off, he'll be getting back to work on the Starduster.

Jeff's updated panel and CHT monitors, and therefore the Cessna, are ready.

Don and Derek(?) have been doing a tools inventory. Big tools are easy, but the small tools are a bigger challenge, nevertheless they're getting close. We're going to be doing training for the bigger tools like the drill press and band saw. Bill suggests presentations after the meeting where members can learn save and proper use of tools. (Drill press has been repeatedly damaged, grinder clogged with aluminum.) Suggestion: machinist union might be willing to do presentations.

Jim Hall notes the new flags up, the most recent indicating that we're now a gold-level chapter: thanks to the membership for helping us meet the requirements. It's going to be a busy year, we've got a bulletin board if you have more activities to post.

Dave Doherty notes that there are around 5 chapters in the St. Louis area, we should reach out and form a consortium.

In answer to a question we discussed valuation of a project for tax purposes.

Learners as We Go

“Here We Go With the New Year!”

mr. Bill

Well gang it has been nonstop learning and training since the beginning of the year. January had me in the yearly recurrent training on the Boeing 737 which was over pretty quickly. Four hours of Fires, Failures, and Fumbling through checklists to correct the situation the Check Pilot tossed us into. Now with those **EMERGENCIES** out of the way, I can coast for the remaining months that I have at this awesome DAY job. But enough about the day job,

HOW ABOUT THOSE **CHIEFS!**

Now with the football season over my television will be off so I can study and get ready for the summer of fun of Airshows and Fly-Ins.

First off, will be the PORFESSIONAL ROTOR-CRAFT ASSOCIATION (PRA) FLY-IN in Wau-chula, Florida. This event is March 22-25.

What happens at a Gyrocopter Fly-In you ask?

<https://youtu.be/7BQo9h0cu04>

Sometime during this trip, I will sneak over to Winter Haven, Florida to the JACK BROWN SEA-PLANE Base for some “Splash and Goes” in one of those Piper Cub’s on floats.

What does that look like you ask?

<https://youtu.be/c7t5vZS2si4>

On Sunday, March 26, there will be a short drive over to the WALLABY RANCH in Davenport, Florida. This isolated place is home to the Hang-gliding groupies.

This is truly the most honest flying I have found to date. You are towed up to altitude by an ultralight and at 3,000 feet of altitude, you release, and you fly like a bird!

<https://youtu.be/fdWICp1Ql-A>

How far can you fly?

Here is a little video of a world record flight:

<https://youtu.be/tbo23n7RCgc>



Now that I look at all these events, I guess I need to call this my Spring Break Trip. It has been a few years since my last trip, but pictures will be coming forth.

But just like pilots at the Oshkosh Air Venture Airshow there will be a lot of studying and review of the procedures that one needs to do to be PROFIECENT at these flying devices before one straps into the flying machines. Each machine

FLIES TOTALLY DIFFERENT THAN THE NEXT MACHINE! So, I will be doing my homework and assuring the people I am flying with that I AM READY!

Alrighty then gang. I will see you at this Saturday’s meeting and let me know if I can help with SAFETY PILOT or a Flight Review’s as I did with one of our very own pilots this week.



Q? What is the world record for a Hang glider flight?

A: 222 miles over the great state of California.

Q? To CLIMB in the hang glider what action is required?

A: To climb or ascend in a hang glider the pilot must **PUSH FORWARD ON THE CONTROL BAR.**

From One of Our Ray Scholars

College is going great and my second semester is off to a great start.

I am one of the few freshmen who made the Flying Salukis Flight Team at Southern Illinois University - Carbondale. We compete at NIFA (National Intercollegiate Flying Association). The competition consists of five ground events, and five flying events. The regional competition was held in the fall, at Purdue University.

The Flying Salukis, SIUC brought home a First Place Trophy as a team. Personally, I was the only Freshman who piloted an air event and placed 3rd. We qualified to compete at the National competition in May, which will be held in Oshkosh Wisconsin.

I have passed the transitional PPL class, and I am currently working on my instrument rating and time building for my commercial rating. Classes are going well, and I made the Dean's List for the fall semester.

My passion for all things aviation is very much alive and growing. I hope to be back home sometime this spring/summer and see you all at a Young Eagle Event.

Thank you for your continued support!

*Ray Scholar,
Vassilios Georges*



EAA Chapter 32 Speaker Presentation

"The Ins and Outs of ADS-B" - John Heilmann

John Heilmann is the President of EAA Chapter 1675, which is located in Chesterfield, MO. Chartered in June 2022; Chapter 1675 is the newest EAA chapter in the Greater St. Louis area and is a welcome partner in our EAA aviation family.

Chapter 1675 meetings typically take place on the second Thursday of each month at the Wings of Hope hangar located at 18370 Wings of Hope Blvd, Chesterfield, MO 63005

John has put together a very informative presentation about ADS-B; defining what it is, and the history of why it has been implemented. He also shares details on how it works. He explains some of the technical information and how to make it work best for you. He made this presentation last week at his chapter meeting and everyone enjoyed learning more about ADS-B. We would like to thank him for sharing this informative presentation with us and welcome him and his chapter to the St. Louis aviation family.

Dave McGougan's Kitfox Project

The picture is my engine sitting on a home made stand about 5 years ago. The engine came with a 3 blade prop and spinner from GSC. Kim Nack and I drove to St. Joe, MO to meet the seller from OK. The engine was moved twice to avoid the floods; the prop has been at my house since day one. A couple of years ago I began to do research to find an overhaul shop for these engines, Rotax 2 cycle power plants. Although I didn't really want to fly behind a 582, my research showed me that the first 3 models of the Kitfox/Avid/Raven were all designed with the Rotax 582 as the engine of choice.

I have talked to number of builders of this line and most like the engine but let me know it takes more maintenance than a 4 cycle engine. Somewhere in the neighborhood of 5000 of these kits were sold before the current owners bought the Kitfox plant in Idaho. I have learned that my plane is about 20% Kitfox, 5% Avid, 10% Raven and 65% Dave McGougan. That means I had to design and make more parts than I got. So, I am calling it a RavenFox.

Anyway after all these years I finally have reached the point I can ship the engine to a shop. It took a lot of time to make up my mind on the rebuild shop after a lot of phone calls, conversations with other owners and even a visit to another builder. I talked to Rotax Rick in Naples, FL several times and decided he was my guy. Then they got hit by a hurricane. Finally I sent the engine out last week and a couple of days later Rick called to let me know it had been received. I have 4-6 weeks to finish installation preparations. Stay tuned.



Fire Extinguishers at the ARC

We recently had the fire extinguishers at the Aviation Resource Center serviced. The technician who completed their inspection and re-tagging gave us some information worth sharing with everyone.

Brian came to the ARC and did a service inspection and re-tagged all 6 of our class ABC fire extinguishers. He checked that gauges were in the green and removed/ reinstalled hoses to make sure none were blocked (checking for debris or possible insect nesting materials). He shared that the normal service life on this ABC type expires after about 10-12 years.

Every 12 months, you should have your fire extinguishers serviced, referred to as a “basic service”. This service should be conducted by a third party, accredited fire extinguisher technician, with the correct tools, training and experience.

In the ARC meeting/ assembly room there is an extinguisher hanging on the wall in each corner. If a fire extinguisher is placed on the floor it **may be more susceptible to corrosion**. A standing extinguisher can be knocked over—and corrosion-resistant coatings may be removed if the extinguisher is inadvertently kicked or hit.

Class ABC fire extinguishers are designed to be used on all classes of fires except **Class D fires**.

Black labeled fire extinguishers are CO2 fire suppressers, and they are primarily used for electrical fires. They are also used in computer server rooms. They can also be used in Class B fire types.

His recommendation is that we would not want to use an ABC type on aircraft, or engines, if possible, because of potential damage to metals. Of course, safety for anyone is the primary concern and getting away from, or putting a potential fire out as quickly as possible is the best outcome.

If the fire is on an aircraft, or engine, a halogen type extinguisher; the more expensive type; would be preferable. Although a CO2 type would be less damaging than ABC types and costs less than halogen. Many aircraft builders and pilots keep a small halogen extinguisher in the cockpit at all times.

According to Brian the prices vary a lot, but a 5# Halon extinguisher is approximately \$500 and a 5# CO2 extinguisher may be about \$250.

The CO2 type and the Halon type are not supposed to be harmful to any materials they're used on; but shouldn't be discharged in a small room because it displaces the oxygen and may cause harm to people until it dissipates.

Everyone should be aware of where fire extinguishers are located and how to use them if needed.

		Ordinary Combustibles	Wood, Paper, Cloth, Etc.
		Flammable Liquids	Grease, Oil, Paint, Solvents
		Live Electrical Equipment	Electrical Panel, Motor, Wiring, Etc.
		Combustible Metal	Magnesium, Aluminum, Etc.
		Commercial Cooking Equipment	Cooking Oils, Animal Fats, Vegetable Oils

Aviation Explorer Post 9032 Activities Update for February, 2023

Jim Hall

We have a lot of great plans for 2023; and if you are interested in joining Aviation Explorer Post 9032 as a youth, or an advisor, please send a message from the website and we'll get you on the email list!

<https://www.aepost9032.org/>

During a recent Aviation Explorer Post meeting a round robin panel discussion of six Boeing engineers; three women and three men; most of them relatively new in their careers, was presented and questions were asked by the host and audience. Queries were made about their career choices and experiences. Among the questions and answers:

Q. Why are you an engineer? 'I liked to put things together as a youth.' 'Dad was in the Air Force and being around airplanes looked pretty cool.' 'I didn't know there were types of engineers until I had to choose between electrical, mechanical, or ? I chose mechanical because I thought I could work on my car with what I learned.'

Q. How much math do you do on an average day? 'Most days, none; but some days up to 20% of the time. Boeing actually has a Math Helpline.'

Q. How did you choose a major? 'My high school counselor told me I could get any job I want if I became an engineer.' 'Aerospace sounded like a cool word and I loved aviation and flying.' 'We don't make a lot of cars here.'

Q. Tell us a little about your current job and "a day in the life of" ? One shared that she, 'loves her job and makes digital models online, travels and gets to test F-15 and F-18 aircraft in wind tunnels.' Of course, 'some customers are more delightful than others.' Another says that, 'the testing that we do of the MQ-25 UAS (Unmanned Aerial System) working on AI refueling is amazing.'

Q. Some of the Explorer youth wanted to know; what's your favorite airplane? A couple of the engineers didn't really have a favorite; but the rest did. "My most favorite is the aircraft my father worked on, the C-5 Galaxy; it's just so gigantic and incredible.' Another one said that for him, 'It's the F-15. Just being able to walk down the flight line and see how huge it is and then watch it taking off with twin burners lighting up the sky is awesome.'

It was impressive to see how engaged the AE youth were as they learned about career options and experiences from engineers just a few years older than them.

Upcoming Plans:

- Feb 15th; Airframe & Powerplant (A&P) speakers - learn about being an aviation maintenance technician at Signature Aviation in Spirit of St. Louis Airport. The hangar that we will be meeting in is heated. We are planning to talk and show a few pictures on a large screen TV. Then we can walk to see a couple of airplanes that are in adjacent hangars that are undergoing maintenance.
- February 25th The 41st annual Light Sport Symposium to be held at the SWIC Granite City campus. It is a free event with lots of great speakers from 8 to 3 pm. EAA Chapter 64 is providing breakfast and lunch. Each meal is \$10. We will not have an organized attendance, but if this interests you, it sounds like a great time! Website: <https://www.safety-seminar.com/>
- May 13-14th Scott Air Force Base, Illinois will host a free Airshow & STEM Expo featuring the U.S. Navy's Blue Angels. AE Post 9032 is exploring the possibility of attending and having a table on Saturday for recruitment efforts
- Wings of Hope hangar tour - pending

Not too early to start planning to attend the Aviation Explorer Camp at EAA AirVenture coming up July 24-30, 2023.

Other Opportunities:

- [Gateway Youth Aeronautical Foundation](https://www.youthaerofoundation.org/intro-to-flight) is putting on a free, 8 week "Intro to Flight Course" starting January 21st. When you finish you get a \$500 discount at Piston aviation. To sign up:

<https://www.youthaerofoundation.org/intro-to-flight>
(Ages 14-25)

- Wings of Hope is providing their “SOAR into STEM” program; registration required for 30 students; aviation learning each Saturday starting on March 25th and culminating with a Career Exploration Fair from 10am to noon on April 22nd. They would like to have volunteers from EAA chapters fly youth on that day.
- The next EAA Chapter 32 general meeting is February 18th at 10:00am and Aviation Explorers and all other guests are always welcome to join us.

Recently Completed Activities:

- February 1st 6:00pm at Boeing Building 100 - Prologue Room Auditorium for Engineering in Aviation Panel. We will have a great panel of engineers from Boeing come speak about the roles they have held across Boeing and how they got there. Roles may include Phantom Works, Flight Test, Simulators, Design and more.
- January 19th 6:00pm at EAA 32 Aviation Resource Center to talk about homebuilding aircraft with the people who are currently building them! One of our advisors, Chris Ward, will show us his Zenith project.
 - The Saturday Zenith workshops in the ARC for February are on pause for the time being.
 - EAA Chapter 32 President, Bill Doherty signed ‘A Memorandum of Understanding’ (MOU) which was completed with the Greater St. Louis Area Council to allow EAA Chapter 32 and Boeing to continue their participation in providing Aeronautical Advisors and Career Guidance Activities to Aviation Explorer Post 9032 members, following the “Learning for Life” program guidelines.
- December 14, 2022 @ 6 & 7pm Google Meet: Aviation Explorers Post 9032 Officers and Advisors
- December 7, 2022 @ 6 - 7:30pm Aviation Explorer Post 9032 General Meeting
- November 16, 2022 @ 6 - 7:30pm Visit and tour of the National Weather Service facility in Weldon Springs, MO on 112 Missouri Research Park Drive; 63304

Update on EAA Aviation Scholarships

Are you interested in pursuing flight or a career in aviation or an aviation-related field? We encourage well-rounded individuals who are involved in their school or community and interested in the world of aviation to apply for an EAA scholarship.

Here are the key dates for this year’s scholarship cycles:

- Next Cycle: Opens November 1, 2022 and Closes March 1, 2023 - Flight Training Scholarships & Post-Secondary Scholarships

We also offer (space dependent) EAA [Air Academy Camperships](#).

Questions should be directed to Scholarships@EAA.org.
<https://www.eaa.org/ea/learn-to-fly/scholarships>

Tentative dates for Aviation Explorer Post 9032 meetings and activities are on the website calendar: <https://www.aepost9032.org/>

The AE post officers have a lot of great stuff lined up to start this year and are working on arranging even more.

Proposed Agenda: Each month the usual schedule (flexible around other activities):

- 1st Wednesday; 6-7pm General Meeting in Boeing Bldg. 100 Auditorium.
 - 2nd Wednesday; 6:30 & 7pm Post Officers and Advisors Virtual Online Meetings
- Note:** the AE Post Officers and the AE Post Advisors Virtual Meetings have been combined into the same evening; to enable better synchronization of future activities.
- 3rd Wednesday; 6-7pm Guest Speaker or offsite Activity (day/ date subject to changes)

The 42nd Annual Ultralight/Light Sport Symposium

TAKE A DAY TO LEARN AND GET TOGETHER WITH FLYING FRIENDS,

IT'S TIME TO GET A READY FOR SPRING FLYING!

The Illinois Ultralight Advisory Council, the Illinois Department of Transportation, Division of Aeronautics, and the Federal Aviation Administration, Springfield FSDO, are presenting the 42nd Annual IUAC Ultralight/Light Sport Symposium on Saturday, February 25, 2023, in Granite City, IL. Admission is FREE and pre-registration is not required. Formerly known as the Illinois Ultralight and Light Plane Safety Seminar, we now have a new name and a new location that was already a great success in 2020! The Symposium will cover a broad range of subjects. Along with the talks, there will be ultralight, engine manufacturer, and accessory displays representing UL/sport/recreational type aircraft. Anyone representing any item of equipment used in this segment of aviation and interested in displaying such items should contact Bob McDaniel at dusterpilot@charter.net.

Follow this link to the symposium's website: <https://www.safety-seminar.com/>

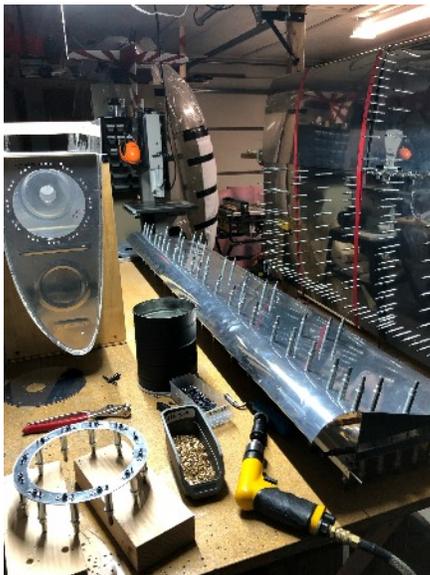
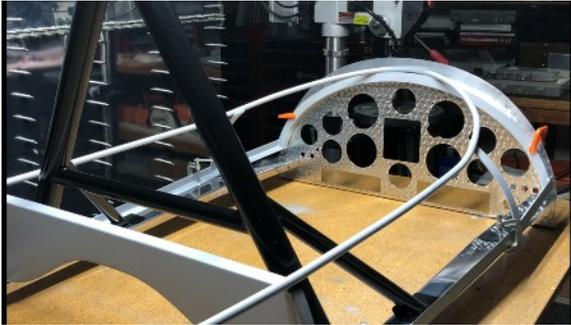
Its Facebook page: <https://www.facebook.com/events/536583508421712/?ref=newsfeed>

Recreation Aviation Foundation page: https://theraf.org/inspire_events/41st-annual-ultralight-light-sport-aviation-safety-symposium-illinois/

Chris Santschi's RV-4 Project

Here are a few pics of my RV4 project I took today, about 2 yrs into the build, also including the fitting of canopy frame to the panel.

It will have steam gauges panel except 1 Garmin G5, Lycoming O 360 A1A 180 hp carb, Catto 2 blade 68 dia-76pitch. And a Smoking Airplanes smoke system.



EAA CHAPTER 32 NEWS
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