



EXPERIMENTAL AIRCRAFT ASSOCIATION - CHAPTER 55

DECEMBER 2018

Meetings are the 2nd Saturday of each Month

EAA Chapter 55 Hangar; Mason Jewett Airport; 643 Aviation Drive, PO Box 443, Mason, MI 48854

→President: Drew Seguin 517-333-4531 →Vice-President: Margie Clark 517-853-1418

→Treas: Al Spalding 517-881-8757 →Secr: Vickie Vandebelt 517-589-5051 →Editor: Deanna McAlister 517-795-8171

www.EAA55.org



PRESIDENT'S MESSAGE

by Drew Seguin

(president@eaa55.org)

Well, today I had to clear off the ramp in front of the hangar for the first time this winter. Not sure why I did it since I'm not going to fly in this weather. I think it was more of an opportunity to get the plow on the front of the tug. Two things about using the tug to move snow. First it's fun to see what I can do with it. Second, it gets old pretty quick, so I have lot of respect for the guys who get up in the wee hours to do it over and over through the Michigan winter.



Meanwhile I've finished with Phase I flight test in the Carbon Cub. TaDa! It took longer than planned but I decided to focus on learning the airplane rather than just logging hours. I put the Bushwheels on too. It sits taller and kind of feels like I'm landing on marshmallows. Now I'll try to limit my pavement landings and landing speeds in order to make them last. Dan Schiffer tells me I need to get some wheel-skis. Hmmm.

The new plane has ADS-B in. That's a whole new flight experience in itself. In-flight weather, Notams, Terrain, and on and on. Seeing other aircraft in the vicinity takes a bit of getting used to. First because who knew there were so many other planes around. Second is that even when you know "where they are" it's awfully hard to see them out there. Makes a strong case for cruising altitudes and cockpit vigilance.

Congratulations to Doug Koons and Bill Purosky for soloing in their Glastar. Now they too will have to find another project to spend time on. As my mother once told me, "An idle mind is the devil's playground".

If you haven't made reservations for the Christmas party be sure to get it done. It's sure to be the not-to-miss party of the season and I hear they're planning to give away some nice tables as door prizes. I can't wait.

I hope to see you at the December Saturday meeting !

BOARD MEETING: 7:00pm: Wed; Dec. 5th
MEMBERSHIP MEETING: 9:30am; Sat; Dec. 8th
with Breakfast served from 8:00am to 9:00am

CHAPTER 55 CHRISTMAS PARTY
SUNDAY, DECEMBER 9th
Reservation Form Attached

UPCOMING BREAKFAST TEAMS:

December

Stan Chubb
Ken Drewyor
Wm. (Bill) Long

January

Errick Baker
Lloyd Brown
John Caron
Michael Rosencrans
Judith Pierzynovski



November Breakfast crew: Bruce VanFarowe, Connie Bobcik and Michelle Potvin.

SCHEDULED PROGRAMS:

DECEMBER:

Chapter Volunteer Awards

CONTACT DAVE COUREY or DREW SEGUIN WITH YOUR SUGGESTIONS

EAA 55 Chapter 55 Board of Directors Meeting November 7, 2018 → Meeting was called to order by President Drew Seguin at 7:00pm. → Present: Drew Seguin, Margie Clark, Al Spalding, Vickie Vandenbelt, John Bobcik, Bob Clark, Doug Koons, Bill Purosky, Ken Vandenbelt & Jack Voss. Absent: Mark Bathurst, Dave Courey, Warren Miller. Guest: Jeff Shaud (late) → Secretary's Report 10/10/18; Doug Koons made a motion to accept; Bill Purosky supported; motion carried. → Treasurers Report as of 10/31/18; Vickie Vandenbelt made a motion to accept; Margie Clark supported; motion carried. → 501c3 status; Bill Purosky reported still pending. → Programs; Mark Bathurst has things set for Saturday; still need 2019 program roster filled. Jeff Shaud had emailed about a "Youth Group" presentation; Drew will resend for discussion at next Board meeting; Jeff Shaud will ask Dave Courey to

contact & set up date. Election; slate of names on board plus nominations will be accepted at Saturday meeting. → Newberry Aviation Scholarship-EMU; Vickie Vandenbelt reported that EMU awarded scholarships of \$600 each to two students in April. She is working to secure names to set up as Honorary EAA55 members & have them come to a meeting for introduction to EAA55. EMU has now marked the Newberry account to only be awarded at EAA55's instruction; current account balance is \$120. → Newberry Aviation Scholarship-LCC; application for LCC students was reviewed; Jack Voss made a motion to proceed with the form; Margie Clark supported; motion carried. Mark Bathurst will distribute to the LCC students. Noted that the application can also be made available to any student in a Part 141 or 147 program. → Membership Meeting Close-up assignments; Bill Purosky February; Jeff Shaud March; Ken Vandenbelt April; Joe Madziar May. → Terry Lutz has donated some hangar lights for use in our storage hangar; Doug will coordinate installation. → Doug Koons asks for help Saturday to bring the picnic tables into winter storage. → Meeting adjourned at 7:23pm. → Respectfully submitted, Vickie Vandenbelt, Secretary

EAA 55 Chapter 55 Membership Meeting

November 10, 2018 → Meeting was called to order by President Drew Seguin at 9:30am with approximately 37 members and 5 guests present. → Following the National Anthem, Drew Seguin thanked the November breakfast team (great pumpkin muffins, Michelle!) and announced the December team. → Guests and visitors were introduced. → Secretary's Report 10/13/18; motion to approve; supported; motion carried. → Treasurers Report 10/31/18; motion to approve; supported; motion carried. → YE; Margie Clark announced EAA55 has flown 255 kids so far this year; next year there will be a separate date set just for the Wilson Talent Center Aviation Academy students; June-July-August rally registration will only be from 10am-noon. → Christmas Party; make your reservation. → Some hangar lights have been donated to EAA55 by Terry Lutz; Doug Koons coordinated installation. → Doug Koons requests help getting picnic tables into storage. → Newberry Aviation Scholarship application form is available for any student in a Part 141-147 school; January 1, 2019 is the deadline for this year's applications. → Programs; what do you want in

2019? Funnel your suggestions to Dave Courey or any Board member. →Bob Clark announced Todd Cotter would be willing to come to TEW to do prop balancing for a group; let Bob know if interested. →Warren Miller announced that Ray Airport has a grill for sale; \$125; will get more details to Bill Purosky. →Vickie Vandenbelt announced that the link to the EAA National Member Survey has been emailed to all; hope everyone uses this opportunity to express ideas. →Bill Bedeck showed a book about history of the flight simulator/Link trainer he had read. →Terry Lutz showed a book about the CirCri trip to AirVenture and also some Iceland aviation books. Elections; Nominating Committee Mark Bathurst/Warren Miller announced previously nominated candidates Ken Vandenbelt, Joe Madziar, Bob Clark, Jeff Shaud, Warren Miller, Mark Bathurst and John Bobcik. Nominations for Doug Koons and Bill Purosky were made from the floor and accepted. Vickie Vandenbelt made a motion to approve and elect the slate of nine directors as presented; Greg Hover supported; motion carried. Congratulations to our new and returning directors. →Meeting adjourned at 10:04am and program by Jim MacKay; LCC instructor; followed. →Respectfully submitted, Vickie Vandenbelt, Secretary



YOUNG EAGLES
by Margie Clark
(margie@eaa55.org)

So far, Chapter 55 has flown 255 this year; grand total to date 4,656



ADULT EAGLES
by Greg Rheeder (greg@eaa55.org)

Good December to everyone. Some of you know the Rheeder family is moving out of state. It is with a sad heart I have to set aside my duties as Adult Eagle coordinator. I have had a great time with all the new people this has allowed me to meet. I believe that I and my associates have offered many individuals an opportunity to explore the joys of aviation. My hope is that the next person to step in my former position has as much fun as I did with this responsibility. I still plan on being a member of Chapter 55 and attending as many meetings and events as possible.

Thank you for letting me serve.

ADULT EAGLES
To mentor, inspire, motivate and
monitor aspiring pilots.



NOTES FROM CAPE JUBY
by Terry L. Lutz
(terry.lutz@attglobal.net)

The presentation by Jim MacKay about composite structures was very interesting and left a lot of us wanting to know more about the subject. An important observation I have is that the LCC Aviation Technology Program has an experienced, hands-on expert on this very important subject. It is good to know that LCC students will leave the classroom very well prepared for the aircraft of the future.

Can you imagine the discussion over the years regarding the various methods of aircraft construction? First there was wood and fabric, with lots of experimenting with different types of wood, different types of fabric, and different types of coatings on the fabric. Designers and maintainers hit stride during WWI, when techniques for maintaining and repairing became commonplace. The Curtiss Jennies and other aircraft that barnstormed after the war used those techniques to keep flying.

Then along the way a few people began experimenting with steel tube fuselages. They were lighter than their wooden counterparts, but required additional skills for welding and bending. Although wing spars were still being made from wood, internal structure was transitioning to steel compression struts and aluminum ribs. The “all wood” folks held on to what they were used to, but airplanes became lighter and more damage tolerant with the introduction of metal in the structure.

Although aluminum was already being used for cowls and fairings and fuel tanks, in 1915, Hugo Junkers developed the J1, the world’s first all-metal airplane. As a technology demonstrator, the J1 proved 2 important concepts: an all-metal structure light enough to give reasonable performance, and the introduction of a fully cantilevered wing without external bracing. Junkers conducted his own wind

tunnel studies and noted that similar lift and drag characteristics could be achieved with a thick airfoil, compared to the thin, relatively sharp-edged airfoils used in most WWI aircraft.

The construction techniques used in the J1 would be followed by corrugated skins made of duraluminum, which would later evolve to the various types of sheet aluminum we use today. The first successful aluminum airplanes built in the US were the iconic Ford Trimotor (1926), and the Hamilton Metalplane (1928). Hamilton would later be absorbed by Boeing. Other all-metal airplanes were built by Vultee, and later models of the Lockheed Vega were built with an all-metal fuselage. While the “tube and rag” folks held on to what they were used to, airplanes became more efficient, lighter in weight, and easier to maintain with all aluminum structures.



The Boeing 247 first flew in 1933, followed by the DC-2 in 1934. Those airplanes proved the concept of the all-monocoque construction, with stringers and bulkheads forming the structure to carry the loads produced by what was described as “stressed skin”. Mass production of the DC-3 and perhaps the B-17 signaled the beginning of aluminum aircraft construction worldwide that would continue for at least 70 years.

The first production airplane made entirely of composites was actually a sailplane built by Pilatus in Switzerland in 1964. This was followed by the Wassmer WA-52 Europa built in France in 1966. Then the Windecker Eagle 1, which was an all-fiberglass airplane first flown in the US in 1967, was the first all-fiberglass airplane to be FAA certified. Two prototypes and 6 certified Windecker Eagles were produced. It is interesting to note that there was a variant called the YE-5 that was one of the first airplanes evaluated by the US military as a stealth aircraft. N4198G (s/n 007) was rescued from Canada and restored in 2016. The Windecker company is now owned by a Chinese investor.



Not to be forgotten are the designs of Burt Rutan, beginning with the VariEze, developed and offered as a plans built airplane in 1976, or the all carbon fiber Learfan. I was kicking tires in Mojave when Voyager was being designed and built by Dick and Burt Rutan. The all-carbon fiber airplane was piloted by Dick Rutan and Jeana Yeager and became the first airplane to fly around the world non-stop and unrefueled in 1986. While the “all aluminum” folks held on to what they were used to, airplanes became even lighter, more efficient, easier to build, and more damage tolerant.

But it wasn't easy for Boeing and the B787. Although secondary structure of carbon fiber had been used for years, they took the bold step of building a commercial airliner completely of carbon fiber. The very first B787 rolled out for the press on 7-8-2007 “7-8-7”, but a B787 would not fly until late in 2009. That first airplane had fuselage sections that simply did not fit, so it was made to look really good for the rollout with grinding and fillers. That airframe would never fly. With an aluminum airplane, if the sections are off by a few fractions of an inch, they can literally be forced into place. No so with carbon fiber. Boeing spent a lot of time getting the production process down to perfection.

Despite delays and some difficult problems with lithium batteries, the B787 is an incredible airplane. So is the Airbus A350. But the construction techniques are different. The B787 has large fuselage barrels that are joined together. The A350 is built in a more traditional manner with carbon fiber bulkheads and stringers. The carbon fiber skin is fastened with traditional metal fasteners. Two different techniques, but the results are equally amazing.

When the cockpit design for the B787 was revealed in 2005, the Air Line Pilots Association was invited to the party. Mike Carriker, Chief Test Pilot on the B787 test team, a terrific guy and true out of the box thinker, was up to his usual tricks. He had a large photo of the B787 cockpit made up, which was pasted on a slab of ¼ inch carbon fiber material. Then they cut it up into 3”x5” rectangles and put them in a pile on a big table. The attendees were then asked to reassemble the photo to get our first look at the cockpit of the B787. Each of us got to take one of those pieces home.

The following year, I attended a meeting of the Aircraft Design and Operations Committee of the International Federation of Air Line Pilots Associations (IFALPA). I took that piece of carbon fiber material with me. We borrowed a hammer from the hotel staff, put that piece of carbon fiber on the curb, and wailed on it for all we were worth. Although we could see marks where our blows hit the target, it kept its shape and we could not break it. Carbon fiber truly sets a new standard for damage tolerance.

The November chapter meeting brought up two interesting subjects. First, it was mentioned that we could fly more Young Eagles if we had more airplanes and pilots. I looked at the EAA55 website and came up with the following numbers:

	5	Cessna 172
5		Zenith, different models
	1	Cessna 170
2		RV-6A
	3	Cessna 182
1		RV-7A
	1	Cessna 177
1		RV-8
	3	Beech Debonair/
1		Kitfox
		A36/Bonanza
1		Carbon Cub
	1	Mooney
1		Luscombe 8A
	1	Cessna 340
1		Ercoupe
	2	Piper PA28
1		Stearman

That’s 31 airplanes, and if every airplane flew once, it would represent 65 seats that could be filled with Young Eagles. But there are limitations. Sometimes the wind is out of limits for the lighter, slower airplanes. Sometimes the pilots are needed as volunteers on the flight line. Some of this can be managed, and perhaps there could be a means of “flexing up” to allow more airplanes and more pilots to fly. Thinking about 35 airplanes, another really cool thing we could do is get all of our airplanes together on the grass in front of the chapter hangar, gently hoist Carol Spry up to the roof and get a great chapter picture. It would be a nice challenge just to sit down and see how all the airplanes could be arranged!

Then there was the question to Bob Clark about the propeller balancing that Todd Cotter did on his Cessna 172. “Smooth as silk” was Bob’s response. Todd said that if there were more pilots at Mason who would like to have their propeller balanced, he would bring the equipment over and do the balancing. Thinking beyond that, why not organize a specific weekend where we could invite a lot of airplanes in to have their propellers balanced? What about asking Beacon Aviation to come over for specific weekend for pitot-static checks? Or have all the J-3 Cubs in the state of Michigan fly-in for lunch? There are a lot of possibilities if we think a little outside the current comfort zone.

Notes From Cape Juby has been in the pages of the Chapter 55 newsletter for just about 25 years. It began simply as a way of talking about interesting subjects related to airplanes and flying, but it evolved into much more. Within that time, I built an airplane, changed jobs, and lived out of the country for 7 years. Notes From Cape Juby was written from France or in whatever country I was in when the article was due. Some of those 84 articles were written while a passenger on long over water flights.

It takes time, thought, and energy to properly put together the articles. Deadlines are never much fun, and often things that have a higher priority get pushed to the side to complete them. One of them is development of my own website where similar material can appear. I have secured the domain name “Notes From Cape Juby”. As 2018 draws to a close, this will be my last newsletter article. While putting them together each month has been as much a learning experience as a reflection of my thoughts at

the time, it's time to spend that energy in other directions. What should endure is the thought that we've made a lot of progress in light aviation over the years, and it's because we pay attention and help each other when the help is needed – something to keep in mind for the future.

THE EAA MISSION:

To grow participation in aviation, by inspiring people to fly, build, volunteer and outreach to promote aviation.



TIDBITS

by Vickie Vandenberg (vickie@eaa55.org)

CONGRATULATIONS: to Doug Koons and Bill Purosky. Each has become fully checked out and flown solo in their recently completed GlaStar project. Fingers crossed for blue skies and tailwinds as they complete their Phase 1 test program.

CONGRATULATIONS: to member Kurt Immekus on his upcoming retirement the end of this year.

THANK YOU: Terry Lutz for the donated light fixtures for our storage hangar and to Doug Koons for coordinating installation.

SPEEDY RECOVERY WISHES: to members Karen Hover and John Kuchar, who each broke a wrist recently (and it don't think it was in a fight with each other !?) Hope you both are now on the mend !!

CHRISTMAS PARTY: Last day to sign up is fast approaching. Reservation payments need to be in Treasurer Al's hands by Monday, December 3rd. And, YES - there will be a White Elephant Gift Exchange again this year. Don't miss out !! (reservation form attached)

DIRECTORS ELECTED: Congratulations to our elected Directors for the next two year term starting with our December membership meeting. Many thanks to Mark Bathurst, John Bobcik, Bob Clark, Doug Koons, Joe Madziar, Warren Miller, Bill Purosky, Jeff Shaud, and Ken Vandenberg for agreeing to serve our Chapter.

2019 EAA55 CALENDARS: We should have a supply of extras and they will be for sale at the end of our December meeting. Price yet TBD.

FROM THE MASON AREA CHAMBER OF COMMERCE:

Be a part of the annual MACC Holiday Party & December Mixer! Please consider supporting the Mason Area Chamber of Commerce's annual holiday party mixer which will be held on Thursday, December 6, 2018 from 5:00 to 7:30 PM at the Ingham County Fairgrounds Community Building, 700 E. Ash Street. The proceeds of the event are used for our "Mason Values" program, which help us promote local businesses and the importance of keeping money in our community. Again this year, at the close of the mixer, we will also be doing our MACC Raffle drawing. The MACC Raffle benefits our community too, especially with Mason's Christmas decorations. Cordially, Don Kill *Mason Optimist Club* 2018 Chamber President and Jeff Haueter *Mason A&W Restaurant* 2018 Event Chair

FLY-OUTS:

Big Rapids - Soup Lunch; 11am-1:00pm; ea. Sat.
Brighton - Breakfast; 9am; each Saturday
Hillsdale - Breakfast; 8am-11am; 3rd Sat. ea. month

FLIGHT TRAINING AT TEW:

Great Lakes Air Ventures; Dale Foerschler;
<http://greatlakesairventures.com/>
Cloud 9 Flight Training; Tracy Tillman;
<http://cloud9flighttraining.com/2017/09/20/web-site-up/>
Spartan Wings Flying Club;
<http://www.spartanwings.com/>
Deanna McAlister; zirconmoons@gmail.com

HANGARS FOR RENT AT TEW:

Lloyd Brown; 517-589-8619
KBS Trust; Deanna McAlister; 517-795-8171
Tom Tuttle; 734-216-7532
Jacque Carlson; 517-881-6174

CARDS & MEMORIALS: Do you know of a member who is ill? Or, who has had a death in the family? Please contact me at 517-589-5051 or vickie7463@gmail.com so that the Chapter can send a card. (and my sincere thanks to those who have alerted me in the past.)



LCC - MASON JEWETT CAMPUS

By Mark Bathurst

(bathursm@star.lcc.edu)

LCC's Aviation Maintenance Technology program was pleased to provide presentations by two of our instructors for the October and November chapter meetings. For those of you not able to attend, Todd Cotter gave a presentation on propeller balancing in October, and Jim MacKay gave a presentation on composite materials for November. Todd and Jim exemplify the experience, presentation skills and dedication to student knowledge and success that all of our instructors possess.

LCC's program is fortunate to have an exceptional instructor corps. Their average industry experience exceeds 35 years, and one of our instructors has over 50 years' experience in general aviation. They know airplanes. Given that we teach our students everything the FAA requires for licensure as A&P maintenance technicians, our instructors' subject mastery has to be extensive.

One of the ways our instructors maintain currency in industry developments is attending seminars on various subjects. Bringing back to the program the latest trends keeps our course material at the leading edge of the aircraft maintenance, and has enabled us to provide our students opportunities such as the Delta Air Lines' partnership that distinguished our program from many others in the United States.

Based on our reputation and student accomplishment, employers from as far away as San Francisco, Grand Junction (Colorado), Atlanta, Dallas and points in

between come to our facility and make presentations to students. These presentations help students gain a complete understanding of what aircraft maintenance opportunities exist and the types of jobs about which they may be interested.

Airlines, manufacturers, major repair facilities, corporate aircraft operators and smaller repair facilities all are interested in hiring our students. Starting salaries now exceed \$60,000 a year, and the bar continues to move higher as completion for highly skilled, technically competent workers increases. Having approximately 20 job opportunities prior to graduation is now the norm for our students, and based on industry trends, the demand for aircraft maintenance technicians is expected to remain strong for the foreseeable future



EDITORS PROLIX

By Deanna McAlister

(zirconmoons@gmail.com)

Wanted!!! We need words. As you have read the Notes From Cape Juby has come to an end in WingTips. This means our newsletter is losing a very interesting section, a huge section. We can fill this void with your help! In the next few wintery months reflect on some of your personal flying experiences and share with the chapter. Big or small we want to read them all!

Contributions to "WingTips" are welcome and can be made by contacting Deanna McAlister (zirconmoons@gmail.com)
Deadline: 1st of each month.
Jeff Shaud "Breakfast Teams" (jlshaud@wowway.com) and Dave Courey "Monthly Programs" (dcmi@reagan.com)



This photo was taken by Walter Xavier Brennan. It is of a SPAD S.XII and an S.E.5 that was flown in the Victory Loan Flying Circus.

- submitted by Lynn Towns, guest writer

CHAPTER 55 CLASSIFIEDS

FOR RENT: Builders Hanger Space; \$115 per month plus gas; EAA members only; Drew Seguin; 517-333-4531

FOR SALE:

EAA55 Books; Library Overstock Sale; box on the table; \$1 hardbacks & 50 cent soft back.

Pietenpol Sky Scout; single seat; Lycoming O-145; 65HP; good compression check; all new plugs; runs good and lots of fun ! \$5,500.00. Margaret Bradford; 517-663-3083

Aircraft tire bead breaker; \$5.00; George Moore; 517-536-1034

Garmin 696 \$650.00 includes ext. ant.; AC wall charger; DC charger; panel/yoke mount; battery; Dave Courey; 517-331-7097; dcmi@reagan.com

Nine pieces- 1/8" 3-ply, Mahogany faces w/Popular inner plies, MIL P6070, \$15 ea; One piece-1/4" 5-ply Birch faces w/Popular inner plies, MIL P6070, \$30 ea; .040, 2024-T3, 2'x4', \$15 ea; upholstery fabric; abt 2 yds; Voltage Regulator, Cessna PN C6110010201, \$100; Telex 100TRA Hand Mic \$50; Graco Series 700, HVLP paint sprayer w/several nozzles & accessories & 3M respirator; make offer. Prices negotiable. Gary Nicola; glnicola@att.net or 517-898-6387.

Maple Syrup; Pints, Quarts, and Half Gallons; John & Connie Bobcik 517-543-8238; jbobcik@gmail.com

Contact Deanna or Vickie to place your ad here!

Mason Jewett Field FBO:
Great Lakes Air Repair
517-525-3673
Maintenance - Painting - Upholstery - Engines

POCKET CALENDAR:

Dec 9 = EAA55 Christmas Party

**FLYERS FROM OTHER AIRPORTS
POSTED IN TEW TERMINAL**

WEB EVENT CALENDARS:

<http://www.eaa.org/en/eea/events>
<http://www.fly-ins.com/>
<http://www.michigan.gov/aero/>

BE SURE TO LIKE "EAA CHAPTER 55"
ON FACEBOOK !!



WINGTIPS is published monthly by *EAA Chapter 55 of Mason, Michigan*, for the use, education and enjoyment of Chapter members and supporters. Accurate information transfer is our goal; however readers should verify dates and times prior to attending an event.

DEADLINE FOR SUBMISSIONS is the last Saturday of the month. The Editor reserves the right to edit all submitted material. Photos, sketches or artwork sent by email must be in JPEG or BMP format. Text must be in a Word format or copyable from the email. Submissions may be sent by regular mail and must be accompanied by prepaid postage if you want them returned. Submissions should be sent to: Deanna McAlister, Newsletter Editor.

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