

CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

SEPTEMBER 2014

Meetings are the 2nd Saturday of each Month

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

→Pres: Steve Houghton; 290-7528 →Vice Pres: Margie Clark; 853-1418 →Treas: Al Spalding; 676-3370

→Secr: Vickie Vandenbelt; 589-5051 →Editor: Warren Miller; 517-214-2656 (all Area Code 517)

www.EAA55.org



Climb and Maintain Flight Level 55

Driving across America - there's no place like home. I have spent the past week driving my daughter out to graduate school in Southern California. We drove through nine states largely followed the path of old Route 66.

We passed many airports along the way and it was interesting to pull up the airport data on these fields and imagine what it would be like to fly out of each place. They were very diverse in terms of geographical features, size and activity. Some were set in beautiful locations with scenic mountain views greeting you on takeoff while others were old, tired airports, partially abandoned, with only a few dilapidated airplanes sitting out in the sun.

Ludlow and Dunton were two tiny private airports we passed both located in the Mojave Desert. The advantage these airports have is perfect visibility

almost every day. The disadvantages are that as we were driving by the temperature

**Board of Directors Meeting
September 10, 2014, 7:00 pm
Chapter Membership Meeting
September 13, 2014
Breakfast 8-9**

was 108 degrees and you can fly for three hours in any direction and see essentially the same scenery.

Flagstaff Pulliam airport has an amazing view of the mountains and at our final destination of Santa Barbara, the airport is located next to the ocean. I would love to land at either of these two airports although Flagstaff can be tricky due to the elevation and winds while Santa Barbara is typically fogged in until mid morning almost every day.

There are also all the numerous MOAs and restricted areas in the Mojave desert to deal with and Southern California airspace can be very challenging to navigate to say the least.

Despite all the interesting airports we passed and all the amazing scenery we covered in our 2400 drive, there is still no place like home.

Mason may not have the most spectacular views or the fanciest facilities but it will suit me must fine thank you.

Steve Houghton, President (steve@eaa55.org)

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



August Breakfast Team

Greg Rheeder; Chuck Hacker; Ron Gorsline

BREAKFAST TEAMS

September

Dick Bacon
Barb Bacon
John Bobcik
Connie Bobcik
Mike Franzago
Ron Goodnoe
Ernie Lutz
Mike Lutz
Ronald Pearce

October

Rosie Duckworth
Fred Honhart
Terry Lutz
Roger Reeve
Drew Sequin
Connie Stewart
Craig Tucker

EAA Chapter 55 Board of Directors – August 6, 2014

→Meeting called to order at 7:06pm. →Present: Steve Houghton; Al Spalding; Margie Clark; Vickie Vandenbelt; Doug Koons; Ken Vandenbelt; Bob Clark; Jim Spry; Dave James; Bill Purosky. Absent: Warren Miller; Ed Search; Jack Voss. →Secretary's Report 7/9/14; Doug Koons moved to accept; Dave James supported; all approved. →Treasurers Report 7/31/14; Dave James moved to accept; Ken Vandenbelt supported; all approved. →Fire Extinguishers; Steve Houghton is handling. →YE; discussed pilot briefing; use of landing lights; routes by "speed range"; pilots must be at "briefing" before allowed to fly; a briefing for ground crew also. Prepped for Saturday. →Membership; per newsletter. →Need program ideas for October, December and 2015. →55th Anniversary was a great success; board is in favor of celebrating with a potluck each year and will start planning for the 56th anniversary. →Builders Hanger repairs; discussed options for fixing ceiling drywall and insulation \$150-\$200; peak of roof needs to be fixed to block snow & water \$40-\$75; Vickie Vandenbelt made a motion to proceed with repairs at a cost not to exceed \$275; Dave James supported; all approved. →Builders Hanger; discussed need for a winch for the hanger door; Jim Spry reported on one available from Harbor Freight for about \$175. Doug Koons made a motion to purchase at a cost not to exceed \$175; Dave James supported; all approved. →Vickie Vandenbelt reported that our portable grill is not working properly. Margie Clark made a motion to buy a new one at a cost not to exceed \$130; Bill Purosky seconded; all approved. (NOTE: we were subsequently able to fix the grill and new purchase not necessary.) →Doug Koons acquired two new rolling office chairs for use at YE & events - Thank you, Doug. →MAD; scout troops are coming, along with some CAP; still need parking & other volunteers. →Vickie Vandenbelt suggested we consider laminate or something for the tabletop the grills sit on. →Vickie Vandenbelt asked where we stand on expenditures for YE supplies; can submit for our reimbursement credits as soon as purchases have been made. →Mike Marhanka donated a Weather Center kit; board discussed using as a prize; contest TBD. →Jim Spry made a motion to adjourn; Bill Purosky supported; adjourned at 8:30pm. →Respectfully submitted, Vickie Vandenbelt, Secretary

EAA Chapter 55 Membership – August 9, 2014

→Vice-President Margie Clark called the meeting to order at 9:16am with approximately 45 members and 4 guests present. →Following the National Anthem, we thanked the breakfast team & President Houghton announced the September team and introduced guests.

→Secretary's Report 7/12/14; moved to accept; supported & accepted as printed in the newsletter. →Treasurer's report 7/31/14; supported & accepted. →YE; ready and kids waiting. →55th anniversary potluck was a huge success; membership enthusiastic about an annual event; board will plan for a 56th and future annual potlucks (practice parties for our 60th anniversary). →MAD volunteers still needed; set up on Friday. →Nominating Committee; Dave James seeking nominations for Directors for our November election. →Margie Clark presented 2013 YE certificates not yet passed out. →Meeting adjourned at 9:23am. →Respectfully submitted, Vickie Vandenbelt, Secretary



TIDBITS

By Vickie Vandenbelt (vickie@eaa55.org)

NEW MEMBERS: Chapter 55 welcomes new members Cody & Jackie Welch. Cody serves on the EAA national Board of Directors. We also welcome new student members Matthew McCormick and Scott Sharkey.

FREE INFO: We have lots of "FREE INFO" items left. Pick up Trade-A-Plane; catalogs; extra copy of the 2013 Airport Directory; magazines; plus a box of donated music CD's at our September meeting.

LOST & FOUND: A few jackets, shirts have been left at the hanger over the course of the summer; are you missing anything??

EGGS FOR SALE: We still have a few left that should be used soon - \$1.50 a dozen helps our chapter.

BREAKFAST LEFT-OVERS: We often have extra pancake mix, orange juice and/or sausages left over. If you are interested in taking some home, please let me or Joe Madziar know. We can package it for take-out. A "jug" of pancake batter is excellent for Sunday breakfast with the kids, grand-kids and others!! (Token donation to EAA55 welcome but not necessary.)

ANNUAL EAA55 CHRISTMAS PARTY: Shudder to think it's coming fast !! **Plan to attend Sunday, December 14th.** Hope to have menu and cost information at our Saturday meeting.

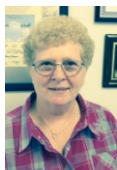
NOMINATIONS FOR DIRECTORS: Chapter 55 is seeking nominations for election of chapter directors. It is the duty of the Board of Directors to conduct and control the business and property of the chapter. Meetings of the Board are scheduled for 7:00pm the evening of the Wednesday immediately preceding the second Saturday of each month. Meetings generally last one to two hours depending upon the amount of business to be conducted.

The nominations will be presented to the membership at the October meeting and posted on the board. Elections of the

Directors will take place at the November meeting. If necessary, our chapter Secretary will develop and implement a process that will offer absent eligible voting membership opportunity to vote by proxy. All newly elected Directors shall assume their responsibilities at the December Chapter membership meeting.

If there is a member that you feel would be a good candidate for this position, please encourage him/her to allow you to make a nomination. Additionally, if you would be interested in serving your Chapter in this capacity, please contact Dave James or any current officer.

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



YOUNG EAGLES

By Margie Clark (alpha 153@att.net)
Another great day of flying! Thanks to our pilots and ground crew for assisting in flying 122 Young Eagles.

The weather was great, the youth in abundance and a great group of volunteers! **THANK YOU ALL!**



Without each and every one of you these youth would not get the experience

and opportunity to get close and personal to a real airplane. This was all possible due to your sharing and caring.



Hopefully you will all be ready next June to do it again. If you have not attended one of our rallies please consider doing

so next year. We invite all of our members to come out and see the smiles on the youths' faces when they climb aboard and depart from the planes. As my grandmother always said, "Many hands make light work". We appreciate any and all volunteers for these events.

CONGRATULATIONS to Doug Koons (400) and Pat Salow (100) on their Young Eagle missions this year! It takes Pat a long time to get to 100 doing one youngster at a time!



If you know of any groups that would like to set up a special flight day be sure to contact me with a name and phone number. We try to accommodate large groups on separate days from the Young Eagles Rallies as long as pilots are available.

Happy Flying!

ADULT EAGLES

By Margie Clark (alpha 153@att.net)

No report for this month.



NOTES FROM CAPE JUBY

By Terry L. Lutz

Chapter 55 Flight Advisor

J. Mac McClellan recently published an article titled: "Pilots Killed Piston Engine FADEC Advances". Just to put it into focus, FADEC stands for Full-Authority Digital Engine Control. FADEC was first tested in an F-111 with a highly modified TF-30 engine mounted in the left position. Unless the commercial airplane you're riding in is a DC-9, B-727 or earlier, FADEC will be installed on the engines. **(from the blog of J. Mac McClellan / EAA e-Hotline August 28, 2014).**

For turbine engines, FADEC provides a lot of benefits, including a quantum leap in the safety and reliability of the engines that power the commercial aviation industry. It provides enough fuel to meet the demands of the pilot, while at the same time protecting the engine from reaching temperatures that would reduce engine life and increase the risk of turbine failure.

When I flew the Lockheed T-33, we had to be very careful when advancing the throttle on that first generation, centrifugal flow turbojet engine. You couldn't just slam it forward. You had to move it no faster than the turbine temperature was rising, and stop moving it before the limit. In a sense, you had your hand on the needle in the turbine temperature gauge. By comparison, the good old J-79 engine in the F-4 Phantom II, with its hydro-mechanical fuel control, would take throttle about as fast as you could slam it forward, without fear of an overtemp.

Then came turbofan engines. In fighters, the bypass ratio was fairly low, but the fan added mass to the turbo machinery, and the hydro-mechanical fuel controls were challenged. During the time it took to the fan to come up to full speed, the fuel control had to carefully meter fuel to avoid an overtemp. The result was slightly slower engine acceleration. Those of us who transitioned from the F-4 to the F-16 had to learn a different throttle technique, particularly when flying in formation. This improved somewhat until even without FADEC, you could slam the throttle on either the PW F100, or GE F110, and the engine would respond almost as fast.

FADEC compensates for all the deficiencies of a hydro-mechanical fuel control. In fact, there is no "mechanical". The only connection between the thrust levers and the engine in a modern airliner is a wire. Reliability is achieved by dual channel electronics. If one channel fails, it automatically switches to the other channel. The engine-driven

generators normally provide electrical power to the FADEC. But if all electrical power is lost to the engine, FADEC has an internal alternator that powers it in a degraded, but safe mode.

So what does this have to do with piston engines and Mac McClellan's article? You can read a lot of comments on EAA's web site, but here are my thoughts on it. One of Mac's points is that modern automotive engines have electronic fuel injection and electronic ignition, with lots of sensors and very reliable components. There are still a few of us who remember simple ignition systems and carburetors that had manual chokes. Yes, they worked, and worked well, but what we have today works so much better, and is so much more reliable, that we aren't going back.

There are several problems with incorporating FADEC into aircraft piston engines. One of the first is that most aircraft engines are air-cooled. Cylinders do not run at nearly constant temperature, as do the cylinders in an automotive engine. Control of oil temperature, which contributes to engine cooling, is also a concern, compared to an automotive engine.

There are several very successful electronic ignition systems for our truly old-technology aircraft engines. Pmags have an internal alternator for power in the event that the aircraft electrical system fails. Electronic fuel injection systems have also been developed for light aircraft, and work quite well. But only a few designs integrate digital electronics for both ignition and fuel delivery, and there is always the question of system redundancy, in the event of electrical power loss.

Mac's article mentions that pilots like to fiddle with the prop and mixture controls, and there is running argument among pilots about the advantages (or lack thereof) of operating these old technology engines rich of peak or lean of peak. I like the ability to fiddle and tweak my Lycoming engine, but given a reasonable choice, I would choose the equivalent of FADEC on my engine.

A few years back, I flew three airplanes manufactured by Diamond Aircraft at their home airport in Austria. The twin-engine DA-42 that I flew was powered by two water-cooled Thielert diesel engines, equipped with FADEC. There were no propeller or mixture controls, just power levers (Thielert is now out of business, and Diamond now produces its own Austro diesel engines). For the engine run-up, you press a button and FADEC automatically runs up power, checks itself, and cycles the propeller.

Aircraft engine technology needs to leap into the future, much the same as aircraft structural technology leapt into the future with the development of the Cirrus all-composite aircraft. By itself, the potential increase in engine reliability will have a significant affect on the GA accident rate. It will take the vision and commitment of an engine manufacturer to develop a completely new engine concept. This concept will likely be liquid-cooled and very likely it will be diesel technology. Diesel technology solves two problems: it does not require an ignition system, and it will run on aircraft turbine fuel, eliminating this endless debate we are having about the future of 100LL.

So was piston-engine FADEC killed by pilots who like to endlessly tweak their propeller and mixture controls? Not really, because the concept isn't dead. While there will be some success with integrating electronic ignition and electronic fuel injection on our old-technology engines, serial production is unlikely. The turning point will be the development of a family of liquid-cooled, diesel engines ranging from 100 to 350 hp (think Lycoming O-235 to IO-540).

Here we are, close to the beginning of Fall, and it seems like Summer passed by all too quickly. Looking back, we accomplished a lot as a Chapter. Maybe we can relax a bit and enjoy the quality flying that Fall allows, before the return of the white stuff. On those crisp and calm days ahead, remember to lend a hand to your fellow pilot because sometimes they really need just a bit of help.

NEWS OF OUR MEMBERS - SEPT 2014

First, a note. I am trying a new column "NEWS OF OUR MEMBERS" with items specifically about our members. My hope is to encourage our members to post pictures or news about themselves.

Please share - call or email any noteworthy news bit; or picture; about what you are working on, where you have traveled, things that are happening, etc.

CONDOLENCES to Joe Madziar, who lost his brother in August.

CONDOLENCES to Grant Dowell, who recently lost his father.

CONDOLENCES to the family of Don Lockwood, long time friend to many in the chapter, who passed August 12th.

SPEEDY RECOVERY to Gloria Purosky (Bill Purosky) who is recovering from back surgery.

CONGRATULATIONS to Karen Hover (Greg Hover) on her recent retirement.

CONGRATULATIONS to Gary Nicola on the acquisition of the Grumman formerly flown by Mike Marhanka and now undergoing repair.

Dave & Deb Groh made a recent trip to Charlevoix with their daughter, Helise, & her husband (not shown) Chris Long.



Ken Vandenberg working on the Stearman fuselage



BEST WISHES to Wasabi Racing. Elliot Seguin has the plane packed up and ready to go to the Reno Air Races.



Elliot Seguin's air racer

BLAKESBURG (Antique Aircraft Assn. FlyIn) was attended by Jack Voss & Julie and Tom Botsford & Karen Meirndorf. Thank you, Julie, for the great picture of Tom & Karen in front of a civilian Stearman owned by a Mr. Doyle.



Tom Botsford & Karen Meirndorf at Blakesburg

FURTHER Tom & Karen suffered truck damage from Friday's storms. You can read about it at

<http://www.lansingstatejournal.com/story/news/local/2014/09/06/storm-cleanup-continues-eaton-rapids/15212201/>



Truck for sale cheap. Modified for short people.



Members gather Friday at the local A&W for 9 am coffee!



FROM THE FLIGHT SURGEON

By Gregory Pinnell, MD

Senior AME/ Senior Flight Surgeon USAFR

Unfortunately it appears another fatal aircraft accident happened on September 5 likely caused by hypoxia from cabin depressurization. For those who regularly fly above 10,000 feet it is very important to make sure you know your personal hypoxic signs are so you can recognize them early and either descend or get on supplemental oxygen quickly. We provide high altitude hypoxia awareness training at Western Michigan College of Aviation. The training only takes a few hours and could save your life. For more information please go to our website

<http://www.airdocs.net/lab.html>. Fly safe!



CHAPTER 55 HUMOR

This CFI and his Student are holding on the runway for departing cross traffic when suddenly a deer runs out of the nearby woods, stops in the middle of the runway, and just stands there looking at them.

Tower: Cessna XXX cleared for take-off.
 Std: "What should I do? What should I do?"
 Inst: "What do you think you should do?"
(think-think-think)
 Std: "Maybe if I taxi toward him it'll scare him away."
 Inst: "That's a good idea."
(Taxi toward deer, but deer is macho, and holds position.)
 Tower: Cessna XXX cleared for take-off, runway NN.
 Std: "What should I do? What should I do?"
 Inst: "What do you think you should do?"
(think-think-think)
 Std: "Maybe I should tell the tower."
 Inst: "That's a good idea."
 Std: "Cessna XXX, uh, there's a deer down here on the runway."
(long pause)
 Tower: Roger XXX, hold your position. Deer on runway NN cleared for immediate departure.
(Two seconds, and then--I presume by coincidence--the deer bolts from the runway, and runs back into the woods.)
 Tower: Cessna XXX cleared for departure, runway NN. Caution wake turbulence, departing deer.
 - It had to be tough keeping that Cessna rolling straight for take-off...

CHAPTER 55 CLASSIFIEDS

HANGAR FOR RENT: one space in Common Storage Hanger \$70; one space in Builders Hanger; \$115 plus gas; Steve 517-290-7528

HANGAR FOR RENT: Skyway Estates; 60G; Eaton Rapids. Pete Chestnut 517-663-3118.

WANTED:

Serviceable ELT, model AK 450, 121.5 megahertz, with accessories; Kyle Bradford 517-663-3083

FOR SALE:

Pure Michigan Maple Syrup; 10% of member sales will be donated to Newberry Scholarship Fund; Half Gallon \$21; Quart \$12; Pint \$6. John & Connie Bobcik 517-231-0506 or jbobcik@gmail.com

Garmin GPS 96 w/Col Bracket \$95;
Ernie Lutz 517-676-4601

Lathes & other equipment; Jeff Shaud 517-712-6482

Pietenpol Air Camper Light Sport; \$6,000;
Kyle Bradford 517-663-3083

Chevrolet Corvair 100-HP flight motor conversion; unassembled; \$5,000/negotiable. Greg Harris 517-775-4563 or gkharris1974@gmail.com

Zenith Zodiac XL/650 Corvair motor mount; Greg Harris 517-775-4563 or gkharris1974@gmail.com

Honey; various sizes; Gordon Hempstone 517-515-1454

DTV analog or digital antenna; \$25.00 George Moore 517-536-1034

Contact Warren or Vickie to place your ad here!

THE CHARLIE REUNION FACTOR

By Jack Voss

Maybe 20 years ago, I met Charlie Parmelee. He was leading canoe trips for a paddling club based in Lansing. He's as easy going a fellow as ever come down the pike. He's also a world class paddler who's paddled over 50 miles a day, and all the way across the state of Michigan several times (that's UPstream half of the way), and pedaled the Dalmac Bicycle run (about 450 miles) every Labor Day weekend from Lansing to the straits of Mackinaw for about 20 years.

Work and family have preoccupied him for a few years, and we got out of contact for a while. Today, we reunited, had a hearty breakfast, and flew to Hell. It was Charlie who first showed me the canoe route to Hell and back. He was able to name each of the lakes through which our route traversed. And, stories of different trips with groups of paddlers. There was Joslyn, Bruin, Patterson, and Moon lakes. And more yet, on the way to Hell.

Sunlight shown off of algae beds around edges of lakes, wavy wakes behind fishing boats, and sandy beaches. This is the territory of the Pinckney Recreational Area. Lots of boating and biking going on down there, a quarter of a mile below us.

Before we flew, while I was doing the preflight walk-around inspection, Tom Botsford strolled into the hangar. Tom is an 80 year old that you'd swear was 60. After introductions, I continued the preflight. Tom and Charlie started talking, found out that the plane Tom flies (a 1946 Cessna 140) is the same model Charlie used to own. AND, Tom's home in northern Michigan is kitty corner across the road from Charlie's Grandpa and Grandma's farm. Such is the world of aviation, rife with connections back and forth. And, this all helped set the stage for our reunion. It all felt really good.

The first time I flew this route, I had told Detroit Flight Following we were doing a photo shoot, and it would be about a 15 minute run. It's a 2 1/2 to 3 hour paddle, but we flew it in only 5 minutes! A real surprise to me, how quickly we flew it.

After flying to Hell, we returned to the Mason area, and circled Charlie's house. Then a routine landing and we congratulated ourselves on having cheated Death again. Now - off to the Bestsellers Coffee Shop.

POCKET CALENDAR

Sep 27 = Warbirds Over Elkhart IN

Oct 18 = STEM Teachers Conference LAN

Dec 14 = **Christmas Party; Eldorado; 4pm**

SAVE THE DATE 2015:

Jun 13 = YE Rally

Jun 14 = EAA55 Dawn Patrol

Jul 11 = YE Rally

Jul 12 or 18 = 56th Anniv Potluck

Jul 20-26 = Airventure

Aug 8 = YE Rally

Aug 15 = EAA55 MAD

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: Warren Miller, Newsletter Editor.

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