

CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

DECEMBER 2007



Meetings are the 2nd Saturday of each Month

EAA Chapter 55 Hangar - Mason Jewett Airport – 643 Aviation Drive, Mason, MI 48854

Pres: Bill Bezdek 351-0448 Vice Pres: Bill Purosky 214-2729 Treas: Sharron Hacker 740-4647

Secr: George Moore 536-1034 Editor: Warren Miller 214-2656 (all Area Code 517) www.EAA55.org

Climb and Maintain Flight Level 55

As your 2008 incoming president I'd like to share a little of my background. I want you to get to know the person you have so confidently elected to office.

I learned to fly while in my early 20's with the Winged Spartans flying club at Michigan State University, and obtained both my commercial and instructors licenses. This led to instructing part time in the club for ten years, and I often took my students to Mason when it was only a single grass strip with a couple of old tee hangars and a trailer at the west end of the field. I owned a 1967 Cessna Skyhawk bought slightly used that same year, and eventually sold it when I was flying mostly in other people's planes and not enough in mine. I've been attending conventions in Oshkosh since they moved from Rockford in 1979, and have been an EAA member since 1984.

As a professional engineer, I work with architects from several states in designing new buildings, involving HVAC, plumbing, electric power and electrical lighting design to complement the architectural and structural portions. After working in the MSU Engineering Services Division designing alterations to campus buildings for 25 years I retired in 1989. In 1980 I started doing moonlight work with architects and went full time after my retirement from MSU. In an earlier life I spent 5 years helping build a 32 foot wooden ketch (sailboat) that I never sailed on. I designed and built a 3700 square foot home. I should say, "am building". I've only been at it for 32 years. It is still a work in progress, and now needs frequent repair.

I was born and raised in the Lansing area, and have been married twice. The first time for 27 years, and now to my present keeper for 11 years. Marilyn's first life was raising two children as an Air Force wife. When we were first married I was about to start construction of a Seawind. She has traveled in small aircraft, and she said, "fine, you can build an airplane. One requirement, however: It must have

a toilet." So now we travel in a motorhome. I have no children of my own, but am a step-parent to Marilyn's two grown kids, and now am a step-grandfather.

Over the years I have come to the appreciation that Chapter 55 has tremendous resources within the membership. In the coming months I wish to showcase these individuals, their accomplishments, and abilities. EAA already has Technical Counselor and Flight Advisor programs. I want to go further with educational programs such as the forums we all enjoy at Oshkosh. Can we do something like that at Mason? I read that other chapters have. If you are building or restoring an aircraft would you like to show off your accomplish-ments? Think

about a 15 minute photo presentation at a meeting, with plenty of time for questions. If you are a veteran, you may have moving stories to tell. Would you share them with us?

**Board of Directors Meeting
December 5, 2007 - 7:30 pm
Chapter Membership Meeting
December 8, 2007
Breakfast 8-9 Meeting 9:30 am**

We have been fortunate to have

inspiring leaders help our chapter to its present level of success. We have a nice hangar, comfortable meeting room, financial stability, a vibrant Young Eagles program, and well attended monthly chapter meetings. We are gaining respect in our community through our participation in the Mason Chamber of Commerce and our regular Mason Aviation Days. I hope to be able to continue and enhance that record.

Bill Bezdek, President

Parting Shots

I take this opportunity to thank those in the association for the support given me as President of the Chapter. As you all know, no single person can make this chapter a success. It is the people who are on the Board of Directors, the Committee Chairpersons, The Event Planners, and most of all the members who come out to work our events as well as support them in many different ways.

I also take this opportunity to pledge my support to the incoming President, Bill Bezdek. And in like manner ask that you, as members, do all that is needed to make his efforts successful in the coming years. I am not going far from the leadership of the organization and hope to be occasionally pinch hitting for Bill as he sees fit. Possibly as Vice-President, I can take a step away from the everyday activities and appreciate more the great association that we have. As always, I am always open to conversation and suggestions as to ways to make our association run better. Please take advantage of that position and let me know any concerns or suggestions that may help us continue our success story in the near future. Again thank you all and may all of you enjoy the happiest of holidays this Christmas season.

Bill Purosky, Past President/Vice-President

BREAKFAST W/CHAPTER 55



November breakfast cooks: Kevin Cozik and Rick Dallas

Breakfast Teams

<u>December</u>	<u>January</u>
Kirk Curtiss	Kyle Bradford
Carl Dalrymple	Lloyd Brown
Max Hall	Ken Drewyor
Bob Noelp	Gordon Hempstone
Pat Salow	Donald Keith
Ralph Taggart	Steve Kent
Jon Wiesinger	Del Johnson
Steve Meyer	Jim Sawyer
George Spencer	
Carl Woodard	

Call for Presentations

By Al St. George, Meeting Programs Coordinator

Based on the success of the November meeting, all WWII vets are cordially invited to present their WWII stories. Repeat presentations from the past years is OK. Contact me for scheduling.

Also, Tech Counselors (TC) and Flight Advisors (FA) are encouraged to make presentations on areas they feel need coverage. TC's and FA's need to collect points towards EAA re-certification every two years, so a presentation now and then builds points for them.

Everybody has an area of good experience that would be worth sharing with the Chapter, one that comes to mind is auto engine conversion for aircraft. In addition, there are modern cloth covering pointers, welding, weight and balance, success in riveting, crosswind landing tail wheel pointers, composite construction, painting, etc. A presentation with samples and digital photos would be ideal. A video projector is available for presentations. Thank you.

EAA Chapter 55

Board of Directors Meeting, November 7, 2007

Bill Purosky called the board meeting to order at 7:30pm. Attendees: Bill Purosky, Bill Bezdek, Al & Julie Spalding, Chuck & Sharron Hacker, Vickie & Ken Vandenbelt, Dave James, Tom Botsford and Del Johnson. →The Board minutes for October were approved with two name corrections: Rick Dallas, Karen Merindorf and it was to be noted that Sharron Hacker had nominated Julie Spalding to fill the vacated Director's position. →Sharron reported a net income for the month of September of - \$1,298.27. Mason Aviation days resulted in a net profit of \$4,572.91 and the Mason Aviation Air Tour luncheon resulted in a net gain of \$396.61. A motion to accept the Treasurer's report was approved. →A motion was made and accepted to appoint Al Spalding to fill the Director position vacated by Debbie Groh. →Doug Koons proposed 6/14, 7/12 and 8/9 as the Young Eagle dates for 2008. Also, it was reported that EAA is eliminating the family membership and replacing it with new youth and spouse membership at \$10/year. →After discussions of the Christmas Dinner plans and budget, four motions were made and accepted: (1) The Chapter will pick up the \$550 cost of the hall rental and decorations, (2) The Chapter will underwrite \$15/person for the cost of the dinner, (3) \$350 is authorized to be spent for appetizers and (4) the cost of the dinner will be set at \$15/person. →Deb Groh resigned as EAA 55 Director effective October 10, 2007. →Vickie Vandenbelt and Chuck Hacker each bid \$25 on the small and large MAD banners respectively. Separate motions were made and were passed to accept each of these bids. →EAA is sponsoring a Chapter Leadership Academy January 11-13 2008. Bill Bezdek and Dave James expressed interest in attending it. A motion was made and accepted to cover the gasoline expense for Bill and Dave's travel to and from the Oshkosh to attend the Leadership Academy. →Vicki made two motions to authorize the purchase of a lateral 3 or 4 drawer file cabinet at a cost not to exceed \$50 and to purchase a crowd control rope and stands not to exceed \$50. Both motions passed. →A motion was made and passed to authorize the \$80 payment to the Mason Area Chamber of Commerce for our membership renewal. →Letters were received from Eastern Michigan University and from Rick Dallas thanking the Chapter for the scholarship donations. Vickie, Al and Doug were named to a committee to review and the EMU scholarship applications and to make recommendations to the Board for selecting this years recipients. →The meeting adjourned at 9:05 pm.

EAA Chapter 55

General Membership Meeting – November 10, 2007

→Bill Purosky called the meeting to order at 9:30 am. →The program speakers, Leon Dombroski, Jack Shingleton and Dr. Gene Bleil were recognized as visitors. Dr. Bleil was a survivor of the Bataan March. Jack Shingleton piloted C-46 planes in the Pacific and Leon Dombroski was a gunner and bombardier in the Pacific. →The American Flag, that accompanied Leah Volker's squadron, on a mission in Iraq, was flown in commemoration of Veteran's Day. →The October General meeting minutes, as published in the newsletter, were approved. →Sharron Hacker reported a decrease in net monthly income of -\$1,298 for the month of October. A motion was made and passed to accept the Treasurer's report. →Doug Koons presented the Young Eagle ground crew volunteers with pins and certificates. He also announced the 2008 Y.E. dates (June 14, July 12, and Aug 9). →Warren Miller, the Nomination Committee Chairperson, presented the candidates for the November 2007 election. The candidates are: Bill Bezdek – President, Bill Purosky – Vice President, George Moore – Secretary and Sharron Hacker – Treasurer. A motion was made to cast a unanimous vote for the nominated candidates. The motion passed. →It was announced that Connie had set up a waste oil collection barrel that people could use to drop off their auto engine oil. The meeting adjourned at 9:40 am.

TIDBITS 2007

By Vickie Vandebelt

2008 MEMBER DUES:

It's so hard to believe that yet another year is drawing to a close and in a few short weeks we will start 2008. Annual membership dues are payable on January 1st. Paying at the December or the January meeting helps our Treasurer Sharron Hacker. And, it saves the chapter money and supplies when we don't have to mail out renewal invoices.

YEAR-END TAX DEDUCTIONS / NEWBERRY AVIATION SCHOLARSHIP FUND:

Do you need more contributions to write off for 2007?? The Newberry Aviation Scholarship Fund is a 501c3 and contributions can be made directly to the fund. Checks should be made payable to: EMU Foundation and mailed to: Attn: Mary Cooperwasser; EMU Foundation; 1349 S. Huron Street; Ypsilanti MI 48197. Please reference that the monies are for the Newberry Aviation Scholarship Fund. It would also be helpful to the chapter if you would send a copy of your cover letter &/or check to our Treasurer Sharron Hacker for record keeping.

2008 BREAKFAST TEAMS:

I'll be working up the new schedule and post a copy in the meeting room for your review. If you have a preference of the month you would like to serve, please let me know ASAP.

DON'T FORGET TO SIGN THE AIRPORT REGISTER wherever you may travel !!

Young Eagles

By Doug Koons

We still have a few 2008 EAA Calendars for sale at \$7.00 each.

Notes from Cape Juby

By Terry L. Lutz, Chapter 55 Flight Advisor

A long time ago I owned a 1983 Ford Ranger. The little four-banger in that truck had a carburetor, with an induction system designed to reduce emissions as much as possible. It was probably the last of the carbureted trucks, because fuel injection became widespread just a few years later. The trouble was that the little truck would just not run very well.

Major surgery was required. I began removing anything that didn't look like it was part of the basic engine. Air pump –gone. Recirculation hoses – gone. All air driven feedback loops to the carburetor – gone. It ran better, but it was still not right. The carburetor was not mounted on the top of the engine, like in many earlier designs. It was mounted to a manifold on the left side of the engine. The carburetor was heated by water flowing through a spacer between the carb and the manifold.

I was living in Buffalo, NY at the time, and there is always a lot of water in the chilly air around Buffalo. There were times when I would drive to the 136th FIS at Niagara Falls, and the engine would begin to run rough within about a mile of the main gate. I would downshift and keep going. It ran worse. I would downshift and keep going, often getting to full throttle just to go 10 mph. The desire to fly fighters is strong!! And then, it would quit within view of the airport.

Finally, after quite a number of these episodes, I pulled over, opened the hood, quickly removed the air cleaner, and peered down into the carburetor. The throat was completely white and clogged with frost, just like you find in your freezer at home. The problem: carburetor ice. The engine and the heated spacer could not provide enough heat to keep the carb from icing up.

In those days, most air cleaners had an air duct down to the exhaust manifold, with a butterfly valve at the opening to redirect warm air to the carburetor. The problem was that most of the sheet metal cover on the exhaust manifold had long since rusted away. So I went to the local Ford works and bought another one. Then I ran a duct from the manifold cover to the air cleaner and blocked the normal opening. This provided heated air to the carburetor from the moment the engine was started. It was good, hot air, too. Problem solved!! It went from an unreliable dog, to a really sweet running truck.

The November issue of AOPA Pilot had an interesting article about a Piper Archer stuck solidly in a tree. When I first saw the picture, I thought, "How in the world did they get that airplane up in the tree?". The picture looked like the tree was actually growing around the airplane. I also thought, "It's an interesting way to attract attention, but I doubt it will promote the local flight school all that much".

But as it turns out, the airplane crashed into the tree after engine failure on a simple night proficiency flight. The pilot was very lucky. The airplane and the flight school were not so lucky. The suspected reason for the accident: carburetor icing. There are likely a lot of pilots who actually doubt this is true, since the airplane was equipped with a trusty Lycoming engine. The truth is that even though the Lycoming induction system is a great design for keeping the carburetor warm, the possibility of carburetor icing remains.

A long time ago, I was involved in some FAA-sponsored flight tests to investigate carburetor icing. We used a Piper Apache and actively sought the worst conditions possible, which required us to do the test in the clouds. We did the flying in a holding pattern over the airport, so if we lost both engines, we could glide to a landing.

One of Lycoming engines was instrumented with temperature sensors, and we ran the other one with full carburetor heat at all times. Beginning with power settings at 23 inches MP and 2300 rpm, we would let the test engine lose power with carburetor ice until it was down to about 18 inches MP, then apply heat to recover the engine. We also found that if we let the engine degrade to 15 inches, we could not keep it from quitting, even with full carburetor heat applied. Carburetor icing can and will occur with the Lycoming induction system design.

But the real point I want to make is that avoiding an engine failure due to carburetor icing is a matter of good operating procedures. I know, I know, it's really boring to pull the carb heat knob before each approach, and even more boring because nothing ever happens. But it did happen to the guy who ended up in a tree out in Colorado, and it will happen again to others.

Several years ago, jetliners were taxiing for takeoff in freezing fog conditions in Stockholm, Sweden. Even with engine anti-ice selected, conditions were severe enough that 18 JT-8D engines sustained damage due to induction system icing. A few years later, a jetliner taking off in similar conditions experienced a double engine failure and made a forced landing in a field.

Icing conditions for jet engines are usually defined as a temperature less than 10C, with visible moisture (fog, rain, or snow, mist, drizzle), or with a temperature/dew point spread of less than 3C. In those conditions, engine anti-ice is required on the JT-8D, and every 15 minutes the pilot must run each engine up to 70% N1 to clear any accumulated ice in on the compressor face.

I mention these real-world examples because they point out two things. The first is that extreme conditions, while

uncommon, do exist and you never know when they will be encountered. The second is that even with good anti-icing systems, good procedures must be used to protect the engine and yourself.

The Luscombe Silvaire Bullet was probably the best carb ice teacher in the world. When I started flying it a mere 37 years ago, it had an old carburetor air box, which was just a straight scoop into the air – no filter. It was very prone to icing, and you had to spend a lot of time watching the rpm to avoid carburetor ice. Luckily, I only had one engine failure!. I was landing at Owosso on a moist day in March. After an idle power descent into the pattern (a really dumb move, I admit!), I opened the throttle and – nothing. Zip, zero, nada. I managed a dead-stick landing on the runway, and had to push the airplane onto the ramp. Fifteen minutes later, water began dripping out of the air box. Aha!

I replaced the air box with one that held a filter, and the situation improved a lot. I'm not sure why, but I suspect it was because the air was slowed down and became turbulent before entering the carburetor throat. Still, I recall encountering carb icing when flying along the eastern shore of Lake Erie. The wind was blowing off the lake, and for about 50 miles, I had to work pretty hard to keep the carb clear of ice. It was one of those days when the air coming off the lake held a lot of moisture, and the temperature was low enough to allow ice to form.

What is important is having a good set of procedures, and use them every single time you fly. Know the limits of your airplane and engine. Know how the system in your airplane works. Know when conditions are conducive to carburetor icing. You can use the same parameters the airline guys use to know when conditions are right for carb ice. Keep in mind also that as you climb, even though conditions are good at the surface, the difference between temperature and dew point decreases. So you may be vulnerable as you climb toward the cloud bases.

Finally, if you bought one of those whiz-bang engine analyzers, install a carb temperature gauge and program the system to warn you if the temperature falls to a preset limit. The manufacturer can tell you what those temperature limits are. Flight tests have shown that a carb temperature gauge is the best means of determining when conditions are right for the formation of carburetor ice.

It's beginning to look a lot like winter. Some people are sharpening skis for their airplane, and everyone else is sharpening their snow shovels. Winter weather and snow means that airplanes will slide around, people will slide around, and if you aren't considerate, you can make someone's life considerably worse by leaving a big wind row in front of your buddy's hangar while plowing out your own. So it's a really good opportunity to lend a hand to fellow pilot when they really need it. And in the winter, you really need it most of the time. Fly Safe!

Guest Speakers told of their experiences while fighting in the South Pacific during WWII.



Doctor Eugene Bleil of East Lansing, was sent to the Philippines in December, 1940 as an A & E mechanic. He was captured and spent many months at hard labor in a Japanese prison camp.



Jack Shingleton of East Lansing was sent to New Gunnies in 1944 as a Pilot, flying a C-47 troop carrier.



Leon Dombrowski of Holt was sent to the So. Pacific as a Gunner/Bombardier in a Navy B-24D

These Veterans told of the terrible conditions and loss of so many US soldiers. We as a Chapter, thanked and applauded them for their action and that we are all free people because of it.

Chapter 55 also applauded nineteen of its members who are War Veterans.



November 30, 2007

TO: ALL EAA CHAPTER PRESIDENTS,
NEWSLETTER EDITORS

When I read through the history of your EAA, living every day for half a century plus, I truly know how time flies.

I want to share with you some of the thoughts of our members as they appeared in our *Sport Aviation* magazine back in 1963. The organization of dreamers, homebuilders and fellow aviation supporter's building/designing their aircraft under the CAA/FAA 51% rule we worked so diligently for and earned is something to be treasured. One can build his or her airplane for educational and recreational purposes and friends can work with you for their own educational value. Really, we can build one half of it – the other half, such as engines, propellers, wheels, brakes, instruments, radios, items not normally within the capabilities of those who work with hand and mind can be purchased. Now we are faced with a situation of the FAA amateur building program being used for commercial purposes – from building complete aircraft or well over the half mark ... not within the intent of the program given to us by those CAA/FAA folks who believed in us. *Let's hope we don't lose this privilege.*

Sincerely,
EXPERIMENTAL AIRCRAFT ASSOCIATION
Paul H. Poberezny
Founder and Chairman of the Board

Link to the Article: "Experimental Or Not" by [the late]
Joe Kirk, EAA 2023

http://www.eaa.org/sportaviation/2007/november/1963_02_kirk.pdf

Published in *Sport Aviation* magazine; February 1963

POCKET CALENDAR

12/8/07 Chapter 55 Christmas Party
Vevay Township Hall

www.mdot.state.mi.us Events Calendar and
www.flyins.com