

CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

MAY 2013

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: Ken Vandenbelt 589-5051 Vice Pres: Joe Madziar 676-4341 Treas: Al Spalding 676-3370

Secr: Jack Voss 708-7079 Editor: Warren Miller 214-2656 (all Area Code 517) www.EAA55.org



Climb and Maintain Flight Level 55

Hello members ! Here we are in May and it's starting to shape up to be a very busy summer.

More and more events are getting posted on the aviation calendars, in addition to all we are doing here at Chapter 55.

Dr. Pinnell is scheduled as our speaker for this month's meeting. In order to accommodate his busy schedule, our program will start at 9:00am this month and our meeting will follow the program.

Later in the day on Saturday, EAA55 will host our first "Meet & Greet" for the Adult Eagles Program. Pilots and others volunteers will be on hand to talk to those attending who are interested in finding out more about becoming a pilot.

**Board of Directors Meeting
May 8, 2013, 7:00 pm
Chapter Membership Meeting
May 11, 2013
Breakfast 8-9 Meeting 9:00 am**

Last month was the tour of the LAN tower. A big "Thank you" to Joe Madziar for the great idea and

doing all the planning. Joe reported: I think everyone enjoyed the tower tour. There was no traffic so the controllers were able to spend a lot of time with us. There were three people in the upper tower, performing all the tasks; approach, departure, ground etc. The radar room, below the upper tower was not being manned at the time, but they showed it to us and we were allowed to ask any questions along the way. They spoke of their furlough days--two days per month. They also said that they probably will be closing the night shift at the tower. We were up there almost an hour and a half.

Our Pratt & Whitney outing to do talks at their "Bring Your Kid To Work" day was a great success. We did three groups of about 18 kids & parents.



Many thanks to Doug Koons (Young Eagles); Gordon Hempstone (pilot); Dave James (helicopters); Bob Clark (equipment) and Margie Clark (Adult Eagles) for

their time in participating. Vickie & I rounded out the program talking about EAA in general.

Bill Purosky has been our breakfast chief for oh so many years. He has been there early to start the coffee and get the grills going so that our breakfast team members can arrive and easily start working. We have been so fortunate and grateful for his service. But Bill has decided it's time to "retire". Thankfully, Joe Madziar has stepped up to take over so we don't have to hog tie Bill to the post. Please give them both your "thanks"!

Bill Bezdek is on the breakfast team this month and he started a rumor that he is thinking about doing up a yummy breakfast of fried egg sandwiches.

WE NEED VOLUNTEERS. Signup sheets for Young Eagles (each date), Dawn Patrol and Mason Aviation Day are in the meeting room and will be available on Saturday. We need YOU in order for our events to continue to be a success! Hope you will spare a few hours to help your Chapter.

Our events promote the future of general aviation and proceeds enable us to contribute to the Newberry Aviation Scholarship Fund to assist students seeking a future in aviation.

By the way, I'll have my styrofoam cup to pass around for donations for my engine fund - it's even worse than previously reported.

Share the passion,
Ken Vandenbelt, President

Breakfast Teams

<u>May</u>	<u>June</u>
Bill Bezdek	Keith Byrd
Lewis (Bob) Clark	David Cook
Margie Clark	Denise Cook
Ralph Gregus	Dave Groh
Gordon Hempstone	Chuck Hacker
Bill Hensler	Mike Marhanka
	Tim Martinson
	Tom Sheehan
	Ryan Todd



May Breakfast Team: Joe Madziar, Don & Deanna McAlister and Don Frank

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

EAA Chapter 55 Board of Directors Meeting April 10, 2013

→Present: Ken Vandenbelt, Joe Madziar, Jack Voss, Al Spalding, Warren Miller, Steve Houghton, Dave James, Bill Purosky, Ed Search, Jim Spry. Absent: Vickie Vandenbelt Guest: Doug Koons →Called to order at 7:02pm. →Secretary's report for 3/6/13, not yet printed in the newsletter. Treasurer's Report as of 3/31/13; Madziar moved, James supported, accepted as read. →Madziar will coordinate our visit to the KLAN control tower for Saturday →Madziar is searching out vendors to supply china mugs bearing our chapter logo. →We have two tickets available for the EMU "Celebrating You" reception. →Pratt & Whitney has invited us to do seminars at their "Bring A Kid To Work Today on 4/26/13. →Adjourn at 7:40pm. ** Respectfully submitted, Jack Voss

EAA Chapter 55 Membership Meeting April 13, 2013

→Called to order at 9:22am by President Ken Vandenbelt. →By my count, we had 48 folks attending, including a new member and 2 guests. →National Anthem → "Thank you!" to the breakfast

team! And, a hearty thanks for strawberries & cream! →Announced breakfast team for May. →Secretary's report for 3/9/13 was accepted as printed in the April Newsletter. →Treasure's report for 3/31/13 was accepted as read. →Dave James thanked "Anonymous" for a humor poem recently published in our newsletter. →Steve Houghton reported on a YOUTUBE video of a little girl's first flight (Lainey's First Airplane ride) and how we could use that, and some videos of our own production, to promote Young Eagles. →Margie Clark reported on EAA's Adult Eagles (AE) program, and how we're implementing it here at Chapter 55. After next month's meeting, there will be a "Meet & Greet" meeting at 1:00pm. Also, if you have a name of a good instructor (someone you'd send your Mom or Dad to), please pass it along? And, volunteers for the AE program can sign up with Margie. →Joe Madziar is scouting out buying some coffee mugs that would bear our Chapter logo. →Ken Vandenbelt announced that Pratt & Whitney has invited us to talk at their "Bring Your Kid To Work" day on April 26th. →Vickie Vandenbelt announced that the Mason Area Chamber of Commerce (MACC) seeks volunteers for their booth at Mason's Spring Fling on 5/4/13. →Bill Bezdek announced a possible seminar discussing WWII activity in the Great Lakes area. There was some extensive training took place. Bill will provide more information as it becomes available. →Dick Bacon has posters from AirVenture for sale for \$2 each; proceeds will be donated to the Newberry Scholarship Fund. →Karen Meirendorf has a team in the Mason Relay For Life raising funds in the fight to cure cancer; luminaries for sale; \$10 each. →Winner of the 50/50 drawing raising money for Relay for Life - Tom Schroeder, who donated his winnings to the cause. →Respectfully submitted, Jack Voss



TIDBITS

By Vickie Vandenbelt

NEW MEMBERS: Chapter 55 welcomes new member John Vandermolen. John and his son are building a Zenith 750.

EVENTS PLANNING MEETING: Next events planning meeting is scheduled for Wednesday, May 29, at 7:00pm. We need volunteers in all job descriptions to work the event. Sign up sheets are in the meeting room or you can email me which shift(s) you can work and I can fill you in.

"RELAY FOR LIFE" FUNDRAISING: Our first 50/50 at the April meeting raised \$38. The drawing was won by Tom Schroeder, who graciously donated his net winnings!! Bless you, Tom. Combined with prior donations, EAA55 was able to submit a donation in the amount of \$100. "EAA

Chapter 55" will be displayed on a placard at the event. We hope to raise in excess of \$250 before the June event.

AIRVENTURE POSTERS: Dick Bacon has a collection of AirVenture posters for sale at \$2.00 each. Proceeds from the sale will be donated to the Newberry Aviation Scholarship Fund. Check them out!

SPACESHIP TWO MAKES FIRST POWERED FLIGHT: GOES SUPERSONIC: April 29th - quite the headlines. And, our own Elliot Seguin is part of this cutting edge technology. He's a very busy young man but I hope he will pass on some Mohave news for future newsletters. More at

<http://www.space.com/20870-virgin-galactic-spaceship-two-rocket-test-flight.html>

JACKSON COUNTY AIRPORT: Cordially Invites You To Attend - A ceremony to dedicate "The Aviator" monument honoring the men and women who trained through the Jackson Junior College/Reynolds Municipal Field "Civilian Pilots Training Program"; Friday, May 17th, 2013; Noon to 1:00 pm; located in Aviation Heritage Park; 3606 Wildwood Avenue; Jackson, MI

HUMOR:

"BALLS TO THE WALL" IS A TERM THAT PILOTS USE THAT HAS ORIGINS FROM THE EARLIER DAYS OF FLIGHT, WHEN THE THROTTLE, PROP CONTROL, AND MIXTURE HAD KNOBS THAT MADE IT EASIER FOR THE PILOT TO GRIP ... FULL FORWARD TO THE INSTRUMENT PANEL ..."BALLS TO THE WALL."



St Louis Approach control ...

St. Louis Approach to United: "United 123 best forward speed to the outer marker, you're number one."

United 123 (MALE VOICE): "Roger, balls to the wall."

St. Louis Approach to American: "American 4321, you're number two behind a United 737, follow him, cleared visual, best forward speed."

American 4321 (FEMALE VOICE): "Well I can't do balls to the wall, but I can do wide open."

-Radio silence-

Unidentified Pilot (MALE VOICE): "Is American hiring?"



YOUNG EAGLES

By Phil Tartalone

See, I told you that the weather is going to get better--finally. It is definitely time to start thinking about a new Young Eagles season. Our rally dates for 2013 are June 8 (only a couple of weeks away), July 13, and August 10. Sign-up sheets will be available at Saturday's meeting. Please consider helping out. It is going to be a great summer!



NOTES FROM CAPE JUBY

By Terry L. Lutz

Chapter 55 Flight Advisor

Flight in natural icing conditions represents some of the most difficult testing required for certification. Before going into natural ice, test airplanes are flown with heavy foam pieces that approximate the shape of accumulated ice. They are bonded to the leading edges of the wings, winglets, and tail of the airplane. After flying with these ice shapes to determine handling qualities differences, and to determine the critical parts of the leading edges that need to be deiced to retain good handling qualities, the search for natural icing conditions begins.

I asked one of my friends from Boeing where they go to find the best icing conditions. He replied that they don't have to go far. The weather over the Cascade Mountains to the east of Seattle almost guarantees all the ice they need, and then some. From southern France, it is quite a bit more difficult to find good icing conditions, unless you fly hundreds of nautical miles to the northwest of Scotland.

Once in good icing conditions, ice is allowed to accumulate up to a pre-determined thickness. Thickness is measure by a probe mounted on the side of fuselage. The probe is tubular steel about 1.5 inches in diameter and about a foot long. A disk of metal is attached as an endplate, and the disk is marked to indicate the thickness of the ice accumulated on the probe. A small spotlight shines on the probe to improve readability in clouds, and it is heated so it can be de-iced, if necessary, to measure the rate that ice is accumulating. The probe is approved by the certification authorities, and we often have a certification pilot or engineer on board for these tests.

The desired altitude to fly in icing conditions is around 15,000', with temperatures close to 25F. While you want to be in good icing conditions for the test, you also need to be able to exit icing conditions fairly quickly for two reasons. First, you want to exit icing conditions and retain the ice for handling qualities tests and stalls. This means that you have to exit into clear air either at the same temperature or colder to keep the ice from melting while the handling qualities

tests are flown. And second, you need to be able to descend into warmer air to melt the ice and clean the airframe for subsequent entries into icing conditions.

We are doing the final tests of the Rolls Royce Trent XWB engine, mounted on the number two pylon of one of our A380 flight test airplanes, before this new engine flies on the wings of our newest design, the A350. The more difficult and important tests remaining are flights in natural icing. Testing an engine in icing conditions is a lot different than testing the airplane itself in icing conditions. You can't test with ice shapes before flying in natural icing. Additionally, the engine must be tested at different thrust settings. When the engine anti-ice system is turned on, ice shedding can unbalance the engine and cause high vibrations. To test the Trent XWB engine in icing conditions, the A380 and the other three engines are operated with all anti-icing systems ON.

Last week, we certified the functionality of the Trent XWB anti-icing system in clear air, then went hunting for some ice. Unless you live in Seattle, icing conditions are very difficult to predict. If you make the decision to fly based on reports of icing, and you have to fly 1-2 hours to get there, the conditions will have changed by the time you arrive. From experience, we have found that cumulonimbus clouds (CBs) in the building stage have the moisture content to produce good icing conditions. And, they can be reasonably predicted in terms of time of day and region where they will be building.

On Friday, our contact at Meteo France predicted an area of CBs northwest of Basel, Switzerland. The airplane was not maintenance ready until 1500, and we couldn't get to that area about 1630. While there were some CBs to be found on radar, they were already in the process of giving up their moisture. We could see good contouring between green, yellow, and red on the radar, but as we flew closer, we could actually watch them dissipate. We encountered light icing at best.

Since we were being vectored in the area by Basel Approach control, we decided to fly the ILS to a low approach. It's a nice thing to do, so they can see the A380, which otherwise would not operate into Basel. There was a nice rain shower off the departure end of the runway, and in line with our flight path during the departure procedure, which has to be flown precisely to avoid mountainous terrain. I had just transferred control to the other pilot when there was a bright flash in front of us. The engineer in the back confirmed on his instruments that we had been struck by lightning from the dissipating rain shower.

The main risks of testing in active CBs are lightning and hail. In addition to icing, both lightning and hail have the potential to damage the airplane. While the risk of hail damage can be minimized by avoiding mature storms, the potential for lightning is present in most CBs. It is not unusual during tests in natural ice to be struck by lightning multiple times.

Our next opportunity was on Sunday, when the forecaster from Meteo France predicted building CBs over northern Italy. An active Low-pressure system over Sardinia (an island east of the Italian peninsula) was drawing moisture northward, toward the Alps. On satellite imagery, we could see CBs form and dissipate in the area near Turin, Italy. We departed about 1400 and were in the area of interest by 1500. On radar, these embedded CBs showed solid contours, which held their shape as we penetrated clouds. Because we were close to the high terrain of the Alps, the pilot flying stayed focused on the radar while the pilot monitoring switched between the radar display and the depiction of terrain near the airplane.

Testing began with the test engine at idle thrust with Engine Anti-Ice ON. At 15,500', with a temperature about 23F, we encountered strong icing conditions while flying in the yellow portion of the contour. The ice first appeared as frost on the probe, and as it became stronger, it looked like heavy rime ice. Droplets of slush as large as 1/2 inch in diameter covered the windscreen, with the noise to go along with it. We were flying at 180 knots in the Flaps 1 configuration. The technique to remain in icing conditions, since they are in a narrow band of upward moving air, is to react like a glider pilot: turn toward the updraft and try to center it. While this is difficult to do at 180 knots, we were able to sustain 45 to 50 degree banked turns to stay in the ice. The true difficulty is to maintain these turns in IMC, while avoiding the red portion of the CB contour.

When the certification probe was full of ice, we exited icing conditions and maintained altitude (to keep the ice intact on the engine) as we headed south toward the Mediterranean Sea. The engineers began photographing the ice on the probe, and on the engine. Once that was complete, we descended to warmer air at 9,000' to completely deice the engines and airframe before heading back into the ice.

As we headed back toward the Alps, we could see that the CBs were still actively growing, and we were able to accrete ice at about the same rate as before. For the second test, we kept the anti-ice system for the test engine off while ice accreted to a depth of about one inch. Then we switched Engine Anti-Ice ON and continued in icing conditions until the certification probe was once again at the maximum measureable depth of ice. We exited icing conditions, took photographs, and descended again to completely de-ice the airplane and engines.

We had been in the area near Turin for about 2 hours, and when we went back toward the Alps we could see on radar that the CB activity was decreasing. Using the Satcom system onboard the A380, we contacted Meteo France, who relayed lat/long coordinates for some areas of interest near Pisa, Italy. We spent some time there, but in these dissipating CBs, we were struck several times by lightning, while encountering very little ice. No matter how many times you see, feel, and hear lightning from the cockpit, it always makes you jump! So we returned to Toulouse, and after 5 hours and 35 minutes of flying time, about 90% of the test points we needed were complete.

Many things are said in the blogosphere about Airbus and our airplanes. Much of it is written by those who have never flown them. What I can say is this: For these tests with the A380, we were in manual flight at 180 knots in the Flaps 1 configuration. Auto thrust was OFF, and since the test engine was in Idle, we were controlling thrust manually with 3 thrust levers. Flying in the yellow contours of several CBs, we were able to continuously maintain 45 to 50 degrees of bank, while controlling altitude +/- 50 feet, and airspeed +/- 5 knots. Even though we know the A380 very well, we continue to be amazed.

I will be in Michigan the first week in June, and hope to see everyone again at the Chapter 55 meeting on June 8th. Until then, don't let the grass grow under your feet! Get into the air and knock the winter rust off the flying skills. And when you're navigating around the airport, don't forget to lend a hand to your fellow pilot when you know it's really needed.



FROM THE FLIGHT SURGEON **By Gregory Pinnell, MD**

Senior AME/ Senior Flight Surgeon USAFR

A significant change in FAA medical policy occurred recently as the Federal Air Surgeon published new policy on Certificates an AME can issue or "CACI". This change in policy allows AME's to issue medicals for specific diagnosis without the usual Special Issuance required by the FAA. The diagnosis are Arthritis, Asthma, Glaucoma, Hepatitis C - Chronic, Hypertension, Hypothyroidism, Migraine and Chronic Headache, Pre-Diabetes, and Renal Cancer. Certain medical documentation is required to issue the medical but it does not have to be sent in to the FAA. The medical is good for the normal duration of the certificate depending on the class.

More medical conditions are expected to be placed in the CACI program as information is released by the FAA. Fly safe!

April 2013 **THE SANDBAR B-25**

Patrick Mihalek of Legend Of Aces Aviation and Todd Trainor from the Aeronca Aircraft History Museum, both from Brighton Michigan, are planning to rescue North American B-25J Mitchell, 44-30733, civilian registry N9088Z from her crash site in Alaska. For years it has been nicknamed "Sandbar Mitchell" after it crashed on a sandbar in the Tanana River near Fairbanks in 1969.

Mihalek and Trainor are forming the nonprofit Warbirds Of Glory Museum for the express hope of rescuing her from further pillage and to put her into the public trust so she may continue to serve our future generations.

After serving her duties with the USAAF from 1944 to 1959, Sandbar Mitchell continued to serve her country as fire-suppression bomber, Tanker #8.



Owned by Edgar Thorsrud, she was one of several B-25s used in Alaska in the late 1960's to help fight forest fires. On June 27th, 1969 she

was called into duty to help fight the Manley Hot Springs fires. Shortly after takeoff she experienced double-engine failure. Herm Gallaher had very few options, so instead of landing in the river or in the forest he landed gear up on a small sandbar in the middle of the Tanana River. He walked away, but the right wing was damaged and the forward fuselage was wrinkled.

After removing her engines, propellers and wheels she was abandoned. Throughout the next 44 years many people visited Sandbar Mitchell. Unfortunately, many have taken souvenirs and sadly cut off her outer wings, forward and aft section. Fortunately the heart and soul of Sandbar Mitchell, the valuable center section, still remains on the sandbar today.



The recovery efforts of Sandbar Mitchell will occur June 2013. Using parts from other salvaged B-25's and scrounging for the remaining missing parts, the two hope to rebuild her and let her soar again. She will fly as Sandbar Mitchell. They are seeking funding and donations to help rescue and restore her. More information and donation buttons are available at www.sandbarmitchell.org or visit them at www.facebook.com/sandbarmitchell.

Info provided by: Todd Trainor, todd@sandbarmitchell.org, 810-599-4035

CANCER SUCKS

By Karen Meirndorf

Thank you for your generosity in supporting our Relay team. I need just a bit more to cover the cost of a track sign that will have the chapter's name on the top. Also there is still time to get your order in for a Luminary before the event on June 14 and 15 held at the Ingham County Court House.

I've posted forms on the board in the club house for you to fill out and hand in later or by the next meeting in June. Hope to see you all at the event. Thanks again

Karen Meirndorf
Po Box 708
Mason Mi 48854

CHAPTER 55 CLASSIFIEDS

EAA55: Builders Hangar space; Ken 517-589-5051

WANTED:

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

FOR SALE:

Chevrolet Corvair 100-HP flight motor conversion; nearly complete, 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

WANTED WANTED WANTED

One Photo / One Sentence / Ten Members
Every Month !!!

DTV analog or digital antenna; \$20.00
George Moore 517-536-1034

Stearman Rides & new surplus hardware source;
Yesteryear Aviation 517-676-4416

2007 Honda CR-V, Excellent Condition, Many Extras, Low Mileage \$16,900/BO – Warren Miller 517-214-2656

Contact Warren or Vickie to place your ad here!

Gilbert McKessy; Paul Poberezny; Kyle Bradford

with
Gilbert's
Pietenpol
project at
Bradford's
Field ...
1999



POCKET CALENDAR

May 29 = Events Planning Mtg.

Jun 8 = YE Rally 1000-1400

Jun 9 = Dawn Patrol 0700-1100

Jun 15-16 = Thunder Over Michigan

Jun 22 = JXN Dawn Patrol

July 13 = YE Rally 1000-1400

July 29-Aug 4 AirVenture

Aug 10 = YE Rally 1000-1400

Aug 10-11 = YAF Thunder Over Michigan

Aug 17 = Mason Aviation Day 0730-1430

Sep 14 = JXN Dawn Patrol

Dec 14 = Christmas Party; Trippers; 1800

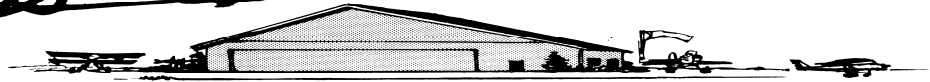


WINGTIPS is published monthly by EAA Chapter 55 of Mason, Michigan, for the use, education and enjoyment of Chapter members and supporters. Accurate information transfer is our goal; however readers should verify dates and times prior to attending an event.

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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Wingtips →



Warren Miller
4066 BonnyView Drive
Lansing, MI 48911