CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION OCTOBER 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

Wow - we were overwhelmed by the enthusiasm and attendance at last month's meeting. Some came for the great breakfast, some came just for

the MDOT seminar.

We had 67 people attend the MDOT seminar and I'm sure the great weather had a lot to do with it. It was just a great day to fly.

Board of Directors Meeting October 9, 2013, 7:00 pm Chapter Membership Meeting October 12, 2013 Breakfast 8-9 Meeting 9:30 am Several of our members and other who attended were

lucky enough to head out to Forest Hill or Alma for lunch. We planned to join them but fouled plugs set us back. By the time we taxied down to take off - everyone else was returning! Hopefully, Steve & Jim will plan a few more flyouts before the cold of winter settles in.

We love to hear news of our members. This month I am aware of four (4) special achievements !!

Congratulations to member Margaret Schiffer who did her first solo on 9/17/13. Congratulations to Grant Dowell who did his first solo on 9/26/13. Congratulations to Terry Lutz on being made a fellow of the Society of Experimental Test Pilots at a ceremony in California on 9/28/13. And, special congratulations to Ernie Lutz receiving the Legion d'Honour from France recognizing his missions during WWII. (I think there is going to be a special ceremony honoring Ernie at the Mason American Legion Post.)

Just a note that Christmas is closer than you think. Plans are being made for the Chapter gathering. We are trying something new. Jim Spry has booked a reservation for us Trippers (Frandor, Lansing) for Saturday, December 14th at 6:00pm. We will be ordering individually off the menu (which you can look up online). We do need to give them a head count. Please let Jim or I know by December 1st if you plan to attend.

Election of officers takes place at our November meeting. It's not too late to contact our election committee (Steve Houghton) and express your interest to serve as President, Vice President, Secretary or Treasurer.

This month's program will be presented by member, Phil Tartalone: *Maintaining a Healthy Mind and Body as a Maturing Aviator* - This program will assess the relationship between age and performance. I will discuss vision, hearing, endurance, and other physiological factors that may affect performance deterioration in older pilots. Additional factors such as cognition, decision making, communication, and reaction time will be examined in terms of safety. With each of these factors, I will provide recommendations to support and aid the maturing

Hope to see you Saturday, Ken Vandenbelt

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

Breakfast Teams

<u>October</u>	<u>November</u>
Rosemary Duckworth	Tom Botsford
Fred Honhart	Kyle Curtiss
John Karlen	Ken Drewyor
Doug Koons	J. Morris Hickman
Terry Lutz	Karen Meirndorf
Roger Reeve	Dick Riisberg
Drew Sequin	John Vandermolen
Connie Stewart	Bruce VanFarowe
Craig Tucker	Joe Whitesides



September Breakfast Team: Connie & John Bobcik, mike Lutz, Mike Franzago and Ernie Lutz

EAA Chapter 55 Directors Meeting September 11, 2013

→ Present: Ken Vandenbelt, Joe Madziar, Al Spalding, Jack Voss, Bill Purosky, Jim Spry, Ed Search, Steve Houghton, Vickie Vandenbelt. Absent: Dave James, Warren Miller. → Meeting called to order at 7:02pm. → Secretarys Report dated 8/7/13: Houghton moved, Spry supported & motion passed to accept. >Treasurers Report date 8/31/13: Madziar moved, Purosky supported & motion passed to accept. >> Flying activities: Houghton announced Roscommon Fiesta & Alma Chili Cookout on Sat. 9/14 & will announce Saturday. →55th Anniversary celebrations: Voss reported that for the celebration here at the EAA Hangar, we can have a large smoker come in, and (with a minimum of 40 people) have freshly smoked pork sandwiches, wicked baked beans, and cole slaw for \$8 a dinner. During discussion, we considered using our plates, service, and selling cold drinks too. For the celebration at a restaurant, Voss recommended returning to Clara's in Lansing. We can easily order off the menu. We will have limited guests (limits not yet discussed or decided) for both celebration parties. > Audit of the books: Ken Vandenbelt has contacted Joe Pirch to do this. > Mason Aviation days (MAD) Wrap Up: Sales of breakfasts & lunches proved quite lucrative. → Young eagle (YE) credits: Vickie Vandenbelt has submitted forms. Final purchases were new folding tables & "goodie bag" stuff. (old broken tables will be retired). Nominating Committee: Houghton is accepting nominations. A discussion followed about future leadership for our chapter. > Vickie Vandenbelt announced that EAA Insurance plan should accept the ground school Paula Corsi is planning for February. A group called STEM is resurrecting the teachers conference & asked EAA55 do to breakout sessions & have a booth; 10/26/13. → Purosky moved, Madziar supported, and motion passed to adjourn at 9:00pm. → Respectfully submitted, Jack Voss

September 14, 2013

→ Called to order at 9:16am. → Attendance, By my humble count: 57. A moment of silence in respect for passing of Paul Poberezny. >Following the National Anthem, a huge "Thank you!" to the breakfast team and next month's breakfast team announced. → Secretary's report as published in newsletter was accepted. Treasurer's report was presented by Al Spalding, and accepted. → Steve Houghton is seeking nominations for office of President, VicePresident, Treasurer and Secretary. Please contact him. Announcements: We've had a great year - especially weather – for our Dawn Patrol (DP). Young eagles (YE). and Mason Aviation day (MAD). At MAD, we had 90 planes, MANY meals, and parking was very well done. Thanks to ALL! →Extra pop, steak sauce, and Klondike bars are for sale. +Sparta Build off: Congratulations to Steve Houghton for 3rd place, and to Terry Lutz for a 1st place awards. An 80th birthday party for Tom Botsford will be at the EAA Hangar on 10/13/13. → MSU is selling old VHS tapes. Some nice flying related movies for \$1. →Dart Container participates in a program to fly toys to kids. See Tom Botsford to participate. → Fly outs today: Chili at Alma. → If you own a private airfield, you are invited to join Michigan Private Airport Association. They have been influential in legislation to help privately owned airfields. > Meeting was adorned at 09:33am.

→ Respectfully submitted, Jack Voss



TIDBITSBy Vickie Vandenbelt

<u>NEW MEMBERS</u>: Chapter 55 welcomes new members Gary Nicola and Hank Markison.

EAA55 - MAD SPONSORS: Chapter 55 owes a big "thank you" to the following local sponsors who made generous donations to our EMU-Newberry Aviation Scholarship Fund: Aircraft Tool Supply Co. (Oscoda); Hayes Green Beach Hospital (Charlotte); Independent Bank (Mason); Laux Construction (Holt); Mason Ins. Agency (Mason); QoE Consulting, PLC (Lansing). We also thank the following local businesses for items donated for the pilot bags: CASE Credit Union; Dart Container Corp; Paul Davis Restoration; Huntington Bank; Mason State Bank; MasonToday.com; McLaren Health Care; MSU Federal Credit Union; Rapid Refill; and Wolverine Engineers & Surveyors. When taking care of your personal needs, think of these folks and please thank them for their contributions to the success of our event.

CHAPTER 55 CHRISTMAS PARTY: We are trying something new this year. Jim Spry has booked us a room at Trippers (Frandor, Lansing) for Saturday, December 14th at 6:00pm. We will be ordering individually off the menu (which you can look up online). We do need to give them a head count. Please let Jim or I know by December 1st if you plan to attend.

EAA Chapter 55 Membership Meeting

<u>FREE HANGING FILE FOLDERS</u>: Thanks to Margie, we have several boxes. Please feel free to help yourself if you can use some.

<u>BOOKS</u>: Duplicate books from our library are for sale at the meeting room. I will also be transferring some of these to the airport terminal for visitors to have additional reading material. More than a few times pilots have been there the greater portion of a day waiting for passengers or contacts.

<u>WANTED</u>: EAA55 has some VHS tapes of events and programs that we don't want to lose. Can anyone volunteer to transfer these to DVDs for the chapter??

TOP 10 REASONS TO BE A CHAPTER 55 MEMBER: If you were asked to compile a list - what would you put on it?? Send your suggestions to vickie@eaa55.org

THINGS TO DO FOR YOUR CHAPTER: Little things; big things. Some currently handled by folks who might wish to have assistance. Others just need someone to take them on. This month's list ...

- → Laundry currently Vickie Vandenbelt
- → Recycle cardboard currently Karen Meirndorf
- → Recycle Styrofoam currently Vickie Vandenbelt
- → Return pop cans currently Vickie Vandenbelt
- → Shovel Snow (that time is approaching)



YOUNG EAGLESBy Phil Tartalone

I think that it is safe to say that we had a very good Young Eagles summer. The weather was

great . . . no, exceptional . . . and we finished the summer with 260 Young Eagles flown.

Here are the stats:

Bob Clark flew a total of 40 kids, Steve Houghton flew four in August, and Doug Koons flew the most with 59. Ernie Lutz finished with 46 kids, and Terry Lutz flew three in June while he was visiting. Pat Salow flew a total of 30 kids, Dan Schiffer flew 21 in July, Tom Schroeder finished hot on Doug's heels with 56, and Drew Seguin picked up one flight in August.

Overall, this summer's activities were an incredible effort by our pilots and ground support staff. Everyone deserves a big attaboy / attagirl! The additional 260 kids participating in our Young Eagles program this summer brings our Chapter total to 3,188 Young Eagles flown. Great job, everyone!



NOTES FROM CAPE JUBY

By Terry L. Lutz Chapter 55 Flight Advisor

Test pilots gathered in Anaheim, CA during the last week in September to attend the 57th Symposium and Banquet of the Society of Experimental Test Pilots (SETP). The Society was formed in September 1955 for the purpose of sharing flight test techniques and lessons learned, so that future flight-testing could be conducted safely, even while pushing the envelope. A total of 27 technical papers were presented at this year's symposium, ranging from "Development and Certification Flight Tests of the Thrush S2R-H80 Agricultural Aircraft" to "F-35 Short Take Off". The Symposium was attended by nearly 300 test pilots from many different countries, and papers were presented by test pilots from the US, Brazil, Australia, Japan, and China.

While there were many very interesting technical papers, undoubtedly the one capturing the most attention was a paper titled "SpaceShipTwo – The Road to Rocket Powered Flight Test". As many of you are aware, one of Burt Rutan's dreams was civilian access to space. He conceived the idea of sub-orbital flights in a pressurized, all-composite rocket-powered spaceplane, and the idea of a carrier vehicle that would act as the first stage by taking the spaceplane to high altitude and high Mach number before launch.

SpaceShipOne and White Knight were the vehicles used to capture the Ansari X-Prize, a \$10 million award to the first non-government team to launch a manned, reusable spacecraft into space twice within two weeks. The first of 5 proposed SpaceShipTwo spaceplanes is being tested in Mojave, CA. They are being developed for Richard Branson's Virgin Galactic, and will carry passengers on sub-orbital flights from Spaceport America, a purpose-built spaceport 45 miles north of Las Cruces, NM. The state of New Mexico is licensed by the FAA's Office of Space Transportation (did you know this office even existed?) for both vertical and horizontal launches into space.

Among the companies leasing facilities at Spaceport America are Virgin Galactic and SpaceX. While you probably know about Virgin Galactic, you really should know about SpaceX. The company was founded by Elon Musk, who is also the man responsible for developing the Tesla electric car. In many ways, Elon Musk is as visionary as Burt Rutan.

Within the last year, SpaceX has been launching resupply vehicles to service the International Space Station. When one US astronaut soared through the resupply vehicle, he remarked that it was built with the quality necessary to carry people. At the SETP Symposium, I asked Doug Shane, who took over Scaled Composites when Burt Rutan retired, if SpaceX would eventually carry people into space. His answer was "Yes, and it will be sooner than you think". Burt's dream of civil access to space is close to becoming a reality.

But the road to getting there is much like the road our early aviation pioneers had to travel. You can't just install a rocket motor in the back of an airplane and go into space. When Xcor was testing the rocket motor for SpaceShipOne at Mojave, it exploded, killing two technicians. Then there are unknowns in terms of both high Mach number aerodynamics and the heat generated by atmospheric entry.

The paper about testing SpaceShipTwo was presented by test pilots Mike Alsbury, Clint Nichols, and Mark Stuckey. Mark Stuckey and Clint Nichols were the pilots for the first unpowered launch of SpaceShipTwo. Just after release, Mark was having difficulty trimming in pitch, and discovered that the primary trim system had failed. Before he could switch to the back up trim system, the spaceplane pitched up, rolled inverted and entered an inverted spin. Saw the video and yes, it happened about that fast.

Mark quickly realized that he could not recover from the spin with aerodynamic controls alone. In a purely unplanned and intuitive move, he selected "feather mode", which is normally used at much higher altitude to stabilize the aircraft during atmospheric entry. Feather mode is where the twin booms rotate up so that the horizontal and vertical tail surfaces are aligned with the velocity vector during atmospheric entry. Mark reasoned that this super stable mode would bring the spaceplane out of the spin, and it did. Once stable and upright, he unfeathered the tail, and regained control. The next problem was how to fly that high-speed glider back to Mojave, since they were well off the planned flight profile. In the video it looked like a completely normal landing.

The Symposium concludes with an Awards Banquet on Saturday evening. It is an elegant black tie affair. The paper about SpaceShipTwo received an award for best paper, and Mark Stuckey received the Iven C. Kincheloe Award. Sponsored by Lockheed Martin, and presented by the present day family of Iven Kincheloe, the award has a Michigan connection.

Air Force test pilot Iven Kincheloe was a native of Cassopolis, Michigan. On September 7th, 1956, he became the first pilot to cross 100,000 feet, reaching an altitude of 126,200 feet while flying the rocket powered Bell X-2. For this flight, Kincheloe was awarded the Mackay Trophy.

How fitting it is that Mark Stuckey should received this award for a flight in a rocket-powered spaceplane. Tragically, Iven Kincheloe would lose his life flying an F-104 Starfighter. What is today the Chippewa County International Airport near Sault St. Marie was once named Kincheloe Air Force Base, in honor of Captain Kincheloe.

This year, my family was in attendance at the SETP Awards Banquet. In addition to awards for exceptional flight testing, SETP upgrades the membership of 10 test pilots to become Fellows in the Society, the highest grade of membership. The ranks of SETP Fellows include Scott Crossfield (a founding member), Neil Armstrong, Bob Hoover, and many highly experienced test pilots and astronauts.

This year, my membership was upgraded to Fellow, and I was very pleased to cross the stage and receive this upgrade with my entire family present.



Well, I always told my kids that if I ever became a Fellow, we would all be going to Disneyland – and we did!

Carl Franz and I were looking for a guy to dynamically balance the propellers on our RV aircraft. Even though we could have found someone locally, we decided that it would be fun to do some flying and make a new friend. After searching online, I contacted Jon Hubbell, who lives near Indianapolis. After a few minutes on the phone, I quickly realized that he was the right guy to balance our props. First, he is a helicopter technician, and second, he owns an RV-3, RV-6, and RV-10. I figured if anyone knew about vibration, a helicopter guy would be the expert!

Last Friday morning we skipped the 10 o'clock coffee (which seems to begin about 0915), and launched for the Indianapolis Regional Airport, located just east of the city. We had to deviate to the west to avoid a large CB between Albion and Jackson, and then it was mostly smooth sailing at 4500 feet until just north of Indianapolis, where the clouds were a down around 2500 feet.

We met Jon at the two hangars where the airplanes he owns with a partner are kept. As it turns out, we work for the same parent company, EADS. I work for Airbus, and he works for American Eurocopter. With the top cowl removed, Jon used a DynaVib to balance our propellers. This involved putting a piece of reflective tape on the back side of the propeller, plus an accelerometer and light on top of the engine. Jon installs everything very securely, and moves the baffle seal in front of the engine so the light sensor can "see" the reflector.

I imagined that it would take several high rpm runs to complete the balancing, but it only took 3. With the airplane chocked and the cable to the sensor draped aft and over the wing, I ran the engine to cruise rpm. It only took 10 seconds before I was signaled to reduce to idle and shut down. The initial reading at 2450 rpm was 0.2 inches per second (ips). Jon said this was the upper limit for normal operation.

Then some weight in the form of a 3/16 bolt and some washers was installed through one of the holes in the flywheel. I did a second engine run, which allowed Jon to precisely gauge the final weight needed. After the third engine run, my propeller was balanced to 0.045 ips, which is quite good. In total, it took just 3 engine runs of 10 seconds each. Since Jon is also an A&P, he was able to record the propeller balancing in our logbooks. If you have a Lycoming engine, with either a fixed pitch or constant speed propeller, Jon would be a great choice to balance your propeller. He can be reached at (317) 201-8517, or by email at j700jl@msn.com

The return flight to Michigan was much more interesting than the earlier one. The CBs were growing, and were plenty thick around Ft. Wayne. But we were able to stay VMC and at the end of the day were happy with the smoothness of our engines, and with the new friend we had made.

We had some great weather for a couple of weeks, and even though we are headed for a few cool and windy days, there is still a lot of color in the trees and some great flying to do. Whether it be new friends, or the ones around you, always remember to reach out and lend a helping hand when you can..



!!CONGRATULATIONS!! Margaret Schiffer Solo Flight 9/17/13



General Meeting September 14, 2013





FROM THE FLIGHT SURGEON By Gregory Pinnell, MD

The FAA continues to make changes in aeromedical certification policy to make medical certificates easier to obtain.

Probably the most common form of cancer in men is prostate cancer. The FAA has long required yearly documentation of the status of the cancer up to 5 years after diagnosis and 2 years if the prostate has been removed.

Now, as long has the cancer is confined to the prostate the FAA is allowing a normal duration certificate to be issued which could be as long as 5 years for a 3rd class in pilots under 40. If the condition worsens obviously it would be a good idea to consult with your aeromedical specialist to see if there are implications to safe flying.

Fly safe! Gregory Pinnell, MD Senior AME/ Senior Flight Surgeon USAFR www.airdocs.net

Aviation Humor

Controller: "USA353 (sic) contact Cleveland

Center 135.60. (pause)

Controller: "USA353 contact Cleveland Center

135.60!" (pause)

Controller: "USA353 you're just like my wife you

never listen!"

Pilot: "Center, this is USA553, maybe if you called her by the right name you'd get a better

response!"

CHAPTER 55 CLASSIFIEDS

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

WANTED:

Inside storage space with concrete floor for a 38' Alpine Motor Coach which is 12'6" high. Needed Nov.-May. Call Jim Blair 517-487-0059

Someone to transfer our EAA Chapter 55 VHS tapes to DVDs.

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

FREE: Hanging folders at the hanger.

FOR SALE:

Books for Sale: at the hanger.

Steak Sauce; just \$3.00 a bottle; pay EAA snack can.

New Gasolator; \$60.00; Kyle Bradford 517-663-3083

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

Honey; Gordon Hempstone 517-515-1454

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

New surplus hardware available & Stearman rides; Yesteryear Aviation 517-676-4416

Contact Warren or Vickie to place your ad here!

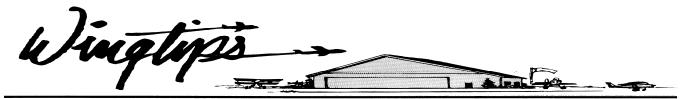
POCKET CALENDAR

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 <u>last Saturday of the month</u>. 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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