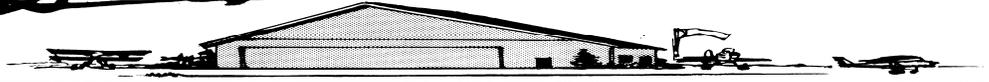


CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

JULY 2012



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

What a difference great weather makes !! 89 pilots signed the airport register for the Dawn Patrol. We did roughly 415 breakfasts (which is the highest of the 10 years we have been tracking). Big thanks to our event planning team and our crew of volunteers. Non-member spouses, parent, grand-children volunteered too and we owe them special thanks. Our CAP student members lent a hand on the field and their help is appreciated.

**Board of Directors Meeting
July 11, 2012, 7:00 pm
Chapter Membership Meeting
July 14, 2012
Breakfast 8-9 Meeting 9:15 am**

On that Saturday, we had a good turnout for our Young Eagles rally. The flow was pretty steady and the kids had big smiles.

Al Spalding spent a couple of days sweeping & mopping our meeting room - thank you, Al. The floor needed to be spiffed up and looks much better now. The windows, sills & mini-blinds could use some work if a volunteer cares to step up (hint, hint).

I was lucky enough to have been at the airport to witness the first flight of Dave Cook & Greg Hover's RV-6A by test pilot Terry Lutz on June 14th, 2012. The smiles on the faces of Dave, Greg and Terry were great to see. Congratulations !!

We are gearing up for Mason Aviation Day. Our events planning folks have done a lot of hours of prep work. Whatever you can do to publicize our event helps. And, of course, volunteers for the set up; the event; and the tear down are the backbone of our success. Any contribution you can make is appreciated and we can fit you to the job that needs doing. The signup sheet lists the major jobs but there is always more behind the scenes. It's a great time to join in with other members to share our enthusiasm for all the wonders of the world of aviation. And, it's a great way to help your chapter!!

Share the passion,
Ken Vandenbelt, President

Breakfast Teams

July	August
Gary Bauer	Pete Chestnut
Nancy Bauer	Jim Palmer
Paula Corsi	Dave Paul
Ed Crouse	Gregory Rheeder
Mary Gowans	Skip Russell
Greg Harris	Roy Thelen
Ellen Webb	Bruce Thorburn
	Bruce VanFarowe



June Breakfast Cooks
Tim Martinson, Dave Cook and Dave Groh

EAA Chapter 55

Board of Directors Meeting, June 6, 2012

Ken Vandenbelt, Joe Madziar, Al Spalding, Jack Voss, Steve Houghton, Doug Koons, Warren Miller, Bill Purosky, Vickie Vandenbelt We had a quorum ** Others: Phil Tartalone ** Meeting was called to order at: 7:04 pm ** Secretary's Report; approved ** Treasurer's report; Vickie moved, Doug seconded, approved ** Old Business Young Eagles – Phil Tartalone Ready for rally. ** Membership No report ** Fly Out coordinator No report ** Program Coordinator – Vickie Programs are set through October ** New Business Al St. George memorial donations for Young eagle candidates. \$50 toward a scholarship in the future. ** Dawn Patrol discussed details ** Adjourn. At 7:35 pm ** Respectfully submitted, Jack Voss

EAA Chapter 55 General Membership Meeting, June 9, 2012

Called to Order – 09:20. National Anthem (always uplifting) ** Thanks to the Breakfast team! ** Announced next month's breakfast team – Gary Bauer, Paula Corsi, Ed Crowse, Mary Gowans, Greg Harris, William Long, Tom Scheehan, & Ellen Webb ** Guests were introduced (28 members and 5 guests) ** Secretary's and Treasurer's reports were approved ** Coordinator's reports – Young Eagle (YE) pilots are ready. ** Announcements: Last minute details for YE. Sign-up sheet for Dawn Patrol (DP) is still available. Last minute details for DP. Mason Aviation Day (MAD) – we can still use more volunteers (can you ever have TOO MANY volunteers?!) YE volunteer sign up available (and needed) for July and August We are still missing the movie "Pearl"; if you have it please return it to the loaning library? thanks ** New Business: Biil Purosky has information for rooms at Oshkosh. Dave James is holding an open house on July 7 ** Warren Miller and Jim Spry demonstrated proper marshalling signals for directing taxiing aircraft. ** Adjourn 9:41.



TIDBITS

By Vickie Vandenberg

MEMBER NEWS: Chris Long has left the area to report for work at the Boeing Corporation in Seattle, WA. We are hoping he will come by to tell the chapter about it on a future trip back to Michigan.



Dave Cook & Greg Hover are very excited about the first flight of their RV-6A by test pilot Terry Lutz on 6/14/12.

The RV-6A N655HC was completed on 11/19/10.



SNACK SALES: Just a note to let you know that all the snacks & pop are now fresh stock!! Bad news is the sale is over and all regular prices have been resumed. Sadder news is that the Klondike bars are gone but I hope to buy a small supply to keep on hand due to popular demand. Your prompt payment assures future purchases.

EAA55 ACCEPTS POP CAN DONATIONS: Deposit in the "Pop Can" container.

"PEARL" MOVIE: Our library DVD copy of the movie "Pearl" has been out for a long time and the card was not left in the box. Others would like to borrow it.

OFFICER & CHAPTER CONTACTS EMAIL: Email for chapter officers, editors & advisors can be quickly accessed by using the links in the member section of our website www.eaa55.org

AIRVENTURE FORUMS: Elliot Seguin will present *Mojave: Where It Happens-From rockets to electrics, homebuilts happen in Mojave*; on Wednesday, 7/25/2012; Forum Pavilion 08 NATCA; 2:30pm-3:45pm. Phil Tartalone will present *Decision Making & Perceptions* on Tuesday, 7/24/12; FAA Center; 4:00pm & Wednesday, 7/25/12; Seaplane Base; 1:30pm. Check them out. Plus, member Rosie Duckworth will be working in the Vintage Hanger most of the week - stop in and say "Hey".

AIRVENTURE ROOMS, CAMPING, RIDE SHARING: Compiling a list on the meeting room board of anyone who has rooms; or plans to camp; or ride sharing seats (car or plane) available.

ALMA/GRATIOT AIR SHOW: We have received information that the airport will be closed to air traffic from Friday evening until after the show on Sunday. Further details as they become available.

2012 YE OF THE YEAR: Pilots & Ground Crew please be on the lookout for potential candidates for our YE of the year award. We're looking for an enthusiastic youngster to sponsor. Let Phil know so that he can mark their permission slip and retain their contact info.

EAA55 – CHAPTER APPAREL:

Sports Stop Sportswear; 124 W. Ash Street; Mason (just north of the post office) is the only place to purchase your EAA Chapter 55 apparel. The "Chapter 55" logo is on file. Buy clothing there or bring in your own hat, shirt, jacket etc. The logo can be embroidered for as little as \$7.00.

EAA55 PILOT FLY-OUT LIST: Our Chapter Fly-out coordinator, Ed Crouse, asked that I compile a list of our active pilots who might be interested in group fly-outs to designated airport for events such as Dawn Patrols, restaurants, etc. I will also use the list to forward notices of events that I receive from other airports and chapters. If you have not received an email from me about future fly-outs and would like to be on the list (whether you fly or drive) - drop me note.

EVENTS "FREE INFO": I will be setting up the "free info" tables once again at our YE & MAD events. This has been very popular with our patrons. If you belong to any community or civic groups with events you would like to promote or publicize, please bring your flyers or posters to me or the chapter meeting room. We also accept commercial advertising materials from sponsors who make a monetary donation to the EMU Foundation - Newberry Aviation Scholarship Fund (501c3) or donate "goodies" for YE or Pilot Bags spread

the word if you know of anyone who might be interested or let me know if there is someone you think I should contact?

EVENTS PLANNING MEETING: Final planning meetings for MAD will be held on Wednesday Aug 1st; Aug 8th (w/BOD meeting) and Aug 15th at @ 7:00pm. We will also have a "banner raising" to put the big banner on the old Hart building probably on Aug 1st just prior to the meeting (will email details as we draw closer).

ARTICLE: With the approach of AirVenture, I have submitted a copy of an article that first appeared in the Dec 1996 issue of *Sport Aviation* entitled "Chance Encounter". Goes to prove you never know who you might run into in OshKosh!

NTSB ISSUES SAFETY ALERT TO PILOTS ON LIMITATIONS OF IN-COCKPIT WEATHER RADAR DISPLAYS:

Washington; June 20, 2012 = The National Transportation Safety Board (NTSB) yesterday issued a Safety Alert to warn pilots using in-cockpit FIS-B and Satellite Weather display systems that the NEXRAD "age indicator" can be misleading. The actual NEXRAD data can be as much as 20 minutes older than the age indication on the display in the cockpit. If misinterpreted, this difference in time can present potentially serious safety hazards to aircraft operating in the vicinity of fast-moving and quickly developing weather systems.

NEXRAD mosaic imagery depicts weather conditions from multiple ground radar sites. The NEXRAD "age-indicator" on the cockpit display indicates the time that the mosaic image was created, not the time of the actual weather conditions. The NEXRAD image is always older than the actual weather conditions.

The NTSB has cited two fatal weather-related aircraft accidents in which NEXRAD images were displayed to the pilot that were presented as one-minute old on the age-indicator, but contained information that was up to five to eight minutes behind the real-time conditions.

In addition to raising pilot awareness on this issue, the Safety Alert also reminds pilots of the importance of obtaining a thorough preflight weather briefing. The Safety Alert is available at <http://go.usa.gov/v0Z>.



YOUNG EAGLES
By Phil Tartalone

Our first Young Eagles rally of the summer was outstanding! Of course, it was my first time in charge, but I just watched (errrr, supervised) while everyone got the job done. Thank you to everyone who helped at the rally. We flew a total of 58 kids.

Our pilots for the June rally were Bob Clark, Fred Hunhart, Doug Koons, Ernie Lutz, Terry Lutz, Pat Salow, Tom Schroeder, and Dave Siegers (a visitor from Holland, MI).

Of special note . . . Ernie Lutz flew 8 kids at the rally and had an additional flight last week. Ernie's career total is now at 389—the 400 mark is within reach!

Following are a few pictures!



Ernie Lutz and group

In addition, Doug Koons flew 9 at the rally. With a 280 career total, Doug is shooting for 300 by the end of the summer.

Pat Salow



Bill Purosky et al

The next rally is this Saturday, July 14. I just checked the weather, and the extended forecast is sunny and 90 degrees, with a 10% chance of rain—it is going to be a hot one!!

The volunteer sign-up sheets are on the table in the Chapter room. There are still plenty of opportunities to help out.

Keep your calendars marked for August 11, the last Young Eagles rally for the summer.



NOTES FROM CAPE JUBY

By Terry L. Lutz

Chapter 55 Flight Advisor

When it comes to homebuilding, you can't talk about hours, you can't talk about days, and you can't talk about the months it takes to create an airplane. It is always measured in years. You can answer the inevitable question "when will be done?" by simply saying "Thursday". You just don't know what year! The big airplane boys aren't much better.

The first time I saw the RV-6A recently completed by Greg Hover and Dave Cook, it was sitting rather unceremoniously in Greg Hover's workshop. It was so many years ago, I don't remember exactly when I saw it. I do remember that some of the rivets in the fuselage needed some help. It was going to be OK as is, but TLC would be required from there. In the years up until June 2012, TLC was the order of the day.

Dave and Greg have done a terrific job completing their airplane, which is now N655HC with air under its wings. Here's the part of the story of getting this well-built airplane in the air. As many of you know, 5HC is powered by a two-rotor Mazda rotary engine. It takes quite a bit of courage to install an automotive engine in an airplane. Once the decision is made, engine installation and systems integration must be tailored to the flight environment, without compromising what the engine needs to keep running.

When Greg and Dave asked me to accomplish the first flight in their airplane, I made plans to inspect the airframe as I normally do prior to a first flight. Enough panels are opened to be able to inspect the flight control system for integrity. Every bolt, nut, and cotter pin must be in place, and during control movement, there can be no binding of the controls through full control travel. Having been close to several RV aircraft (including Sweet Nancy Lynn), I know where the potential problems are. I usually carry around an oil can during this inspection, and place a discreet drop of oil in any junction of the control system that moves.

The engine was so radically different from the Lycoming's I had flown behind that I asked EAA Technical Counselor Carl Franz to put some eyes on the engine in ways that I could not. Before he was an A&P mechanic, Carl worked a full career in the automotive industry at General Motors. He knew what made cars and car engines tick long before he began turning wrenches on airplanes.

Near the end of the day, when our inspections were complete, Carl and I were both satisfied that the airplane and engine were correctly prepared and that the airplane would be safe to fly. I think we were both quite pleased with what we saw. The care and patience that Dave and Greg put into the airframe produced an RV they can be proud of in any group of RVs. And equally as important, the engine installation was completed to a high aviation standard, and their overall knowledge of what makes it tick will help them immensely during Phase I flight testing.

From a piloting standpoint, I like the way the switches and controls are laid out. Dave told me that they tried not to deviate from the standard switchology found in most aircraft. In a few minutes, I was comfortable with the sequence of switches to get the airplane ready for flight. Dave explained redundancy in the

fuel system, and how to activate the aux pump should the primary pump fail.

Dave and I started the airplane and did some taxiing so I see what the electronic instruments were telling me, and to know how the airplane handled on the ground. Generally speaking, the nose wheel models from Van's Aircraft handle quite well. It simply takes a minute or two to learn how much brake it takes to initiate a turn, then how much rudder it takes to maintain a track down a taxiway or runway.

Satisfied with the airplane and the engine, we briefed for the flight and asked Greg and Dave what their primary objectives were. Mainly, they wanted to know if the airplane itself was sound, and once in the air to see how the engine integration was performing. We never really had any doubts about the engine itself, but cooling of both coolant and oil were high interest items for everyone. We made a special point of agreeing what the limits were, and that we would return to land if the limits were reached. It helped a great deal that Greg and Dave had programmed their engine monitor to provide a warning when the limits were exceeded.

When I started to taxi for takeoff, the coolant temperature was already rising. The outside air temperature was in the low 80s, which didn't help a lot. By the time Carl had taken off in the chase airplane (which is always optional, but useful to call out leaks and to crosscheck airspeed) the water temperature was climbing and getting close to the limit. As airspeed increased during takeoff, coolant temperature stabilized, and it looked like there was good chance to climb to an altitude of around 3000 feet. But at a climb speed of 110 mph, coolant temperature began to climb again, and passed the limit we agreed on.

I called on the radio that I would simply fly the pattern, and pulled power back a bit when I leveled at 2000 feet. With partial power, coolant temperature began to fall, and once it was in limits, there was the possibility I could remain in the pattern, so I turned upwind again and flew over the runway at pattern altitude. But at reduced power and airspeed, the oil temperature began to climb. It turned out to be an unfavorable combination of reduced power to keep coolant temperature in limits, and the resulting reduction in airspeed caused the oil temperature to climb. As oil temperature began to climb toward limits, I decided to turn downwind again and land.

From the chase airplane, it appeared as if I had turned a 45 degree angle to the final after a normal base leg. He saw it correctly. With this engine and electronic control system, there is a change in fuel scheduling when the throttle is brought back, causing the engine to run slightly rough. Although I could repeat the roughness by moving the throttle in and out near idle, it was enough to make me turn toward the runway to insure a power off landing, if needed.

Final approach was flown with full flaps, 80 mph, and a little power on. Even with what should have been a little extra speed, there was no float at touchdown, and with light braking, I was able to turn off at the first taxiway. It will probably be necessary to carry a little extra speed on subsequent flights until a good airspeed calibration can be performed.

Dave and Greg have already made some changes to the engine, including removing the thermostat, which both restricts flow and targets a specific coolant temperature. In an automotive installation, coolant temperature is regulated by both the thermostat and cooling airflow through the radiator. That balance is determined by years of experience and hours of ground testing. In an airplane installation, the balance must be determined by flying, and can be affected by coolant flow, by the ratio of inlet air to exit air through the radiators, and of course airspeed. It will take time and patience to determine the correct balance, but they will.



Overall, this was a successful first flight. We know that the airplane flies just fine. If there were any adverse rolling or yawing tendencies, they were too small to be noticed considering the attention necessary for the engine. The trim worked fine, and so did the flaps. In some ways, Greg and Dave have it a bit easier than those of us with Lycoming engines. Once they get the cooling problems tuned the way they want them, there is no engine break-in. They can move on to the airspeed calibration, performance testing, and development of the operating manual required during Phase I testing. In other words, they can start to have some fun!



Summer has not started the way we would like, and I have two sad stories to report. One of our support engineers, Guilhem Alquier, was killed in the crash of an autogyro, along with the owner of the aircraft. They were taking off from a farm field on a hot day with no wind, and with two people on board, performance was marginal. They hit a tree at the edge of the field, and on ground impact, the fuel tank ruptured. There was a post-impact fire that took their lives.

A few weeks later, Trevor Roche, an experienced test pilot, died in the crash of a 1923 DH 53 Hummingbird owned by the Shuttleworth Trust at Old Warden Aerodrome in the UK. The DH 53 was designed to be carried and launched from a dirigible. It was powered by a 26hp Blackburn Tomtit two-cylinder engine. While turning final on a bit of a gusty day for this aircraft, the airplane was observed to quickly drop a wing and descend nose-down to impact.

We share the grief of the passing of these two pilots, and wish the best for the families who have lost so much. And what can we do in our own experience as aviators? Just remember: the man or woman standing next to you may not have all the answers. You might just have the right set of eyes, or the right bit of knowledge to help someone at just the right time, and in doing so prevent an accident. Make sure to step in and help when someone really needs it.



FROM THE FLIGHT SURGEON By Gregory Pinnell, MD

Only a few weeks till Oshkosh! Many of us will be taking our aircraft over Lake Michigan flying at high altitudes for safety. We all know the FAA rules for oxygen usage. Flight crew must use oxygen above 12,500 feet when the time at altitude is 30 minutes or longer. At 14,000 feet or above all aboard must use supplemental oxygen. The reality is that hypoxic symptoms can start as low as 5000 feet at night and 9000 feet during the day! Additional information on hypoxia and hypoxic signs are available on the web and other sources but if your trip takes you high consider renting or purchasing a portable oxygen system to increase your safety and make the trip more enjoyable!

Personal flotation devices, a good life raft and a review of ditching procedures are a must and don't forget to take advantage of flight following at least while you are over water. Fly Safe!

CHAPTER 55 CLASSIFIEDS

EAA55: Builders Hangar space; 517-589-5051

AIRVENTURE: Rooms available; \$40 night; contact Bill Purosky 517-655-1432

FOR SALE:

Open cockpit Stearman biplane rides; starting at \$125; and new surplus hardware source; Yesteryear Aviation 517-676-4416

Spartan Wings membership for sale; available at 30% off; Steve Houghton at 517-290-7528

Chevrolet Corvair 100-HP flight motor conversion; nearly complete, unassembled. Many custom conversion parts William Wynne/FlyCorvair.com. Includes starter, alternator, prop hub, nitrided crank, distributor, and more; with all receipts. Needs carb, oil cooler, intake pipes, exhaust, block halves work etc. \$5,000/negotiable, will deliver within 2

hours of Lansing area. 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

MH in Zephyrhills, FL in Rainbow Village RV Resort; 12x37;
\$14,500; Dick Bacon 517-230-7808 or rhbbb27@comcast.net

KIS TR-1, Subaru Legacy engine; GPS nav/com; many extras;
George Moore 517-536-1034

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

WANTED:

Donations of Box Fans (we thank Dave Cook for his donation of two but we could use 2 or 3 more); Dish Drying Racks (we use these when washing trays in the cafeteria area); Kitchen Towels & Dish Clothes (your old ones are probably better than our good ones); Rags (for the dirty jobs around the hangar)

Contact Warren or Vickie to place your ad here!

Tales From The Log Of The Ruptured Duck

By Jack Voss

My plane, an old 172, is named the Ruptured Duck. My stories are named after it. (All my stories are true. Over two hundred years ago, Cap'n Meriwether taught me to be honest - and I have been ever since.)

There are many accomplished pilots out there. Our Chapter is blessed with a bit more than our fair share; I'm not one of them. I'm an older pilot, not a bolder pilot. But, I'm older only in years (about 10 1/2, in dog years), not in piloting experience (only about half a dog year there).

I have 15 years of experience in managing aircraft maintenance in the Air Force. Some of that was with tactical, jet fighters; some with KC-135 tankers and B-52 bombers. About twenty years out of that 15 was with F-100's in Viet Nam. When the fellow wrote the biblical passage about there being two kinds – the quick and the dead – he wasn't just a woofing. We moved quickly, and accurately; we lived. We never lost an aircraft due to maintenance deficiency or materiel malfunction. Three were shot down, and all three pilots were recovered – unhurt, but in need of a stiff drink.

I also had some duties as a crash recovery officer. When an F-100 goes in, it ain't pretty. What is euphemistically termed as “the debris path” is a field/hillside/sea bottom strewn with shredded pieces of fuselage and engine – and sometimes pilot too. We picked them out of the sea, snow, and trees.

The above is to provide a setting for the next statement. I have a healthy respect for the risks and dangers in flying. Sometimes, it may *border* on (really, more like *tromps right down through the middle of*) anxiety. This is coupled with a deep love of flying. Helluva dichotomy.

What this translates to in practice is – I think about, plan, and dream about long, cross country flights – and then take a lot of shorter sorties lasting between 0.5 and 1.0 hours aloft. I do not like to fly in turbulence. Getting my butt kicked by turbulence or

thermals (I call'em “buzzard elevators”) takes a lot of the fun and enjoyment out of an otherwise nice flight. Right now, some readers are thinking “Sissy!”, and, I wouldn't argue. I can rationalize a lot, but no argument.

I'm stretching my wings - longer flights, new fields, wider roaming. But doing it cautiously. I often feel better with someone along than if flying solo. I really enjoy sharing flying with family and friends. And, it can get boring up there all by myself – no one to talk with.

So, when you see me flying, getting ready to fly, recovering from flying, puttering around the hangar, etc. please extend me some patience? I'm coming along, slowly.

Kayak Jack

Doing what you like is **FREEDOM**

Liking what you do is **HAPPINESS**

I spent most of my money on whiskey, and women - I'm afraid I just wasted the rest.

A man should spend his time flying, or resting up from flying.



POCKET CALENDAR:

July 14 = EAA55 Young Eagles
July 14 = Hasting DP
July 15 = Sparta DP
July 23-29 = AirVenture
Aug 4-5 =Thunder Over Michigan

Aug 11 = EAA55 Young Eagles
Aug 18 = Mason Aviation Day
Aug 25-26 = Alma/Gratiot Air Show
Aug 25-26 = MERFI Regional-Urbana OH
Sept 8= EAA55 MDOT Seminar
Dec 9 = Chapter Xmas Party
Jan 25-26 = Gr Lks Internatl Aviation Conf

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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