

# CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

MAY 2009



## 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](http://www.EAA55.org)

### Climb and Maintain Flight Level 55

You all received Terry's email offering the possibility of a group photo of Chapter 55 members in front of the Airbus A380 at Airventure this summer. Wouldn't that photo look nice on the wall of your den? Let's make it happen!

Terry and his boss will be bringing the plane in Tuesday, July 28 and leaving Thursday, July 30. The exact schedule of and

not so have

**Board of Directors Meeting  
May 6, 2009, 7:00 pm  
Chapter Membership Meeting  
May 9, 2008  
Breakfast 8-9 Meeting 9:30 am**

display flying events is yet fixed, we'll to be flexible,

but it all begins with our being there. Please plan to attend this Airventure even if you have not been there for a while.

We camp as a group in the area of 14<sup>th</sup> Street and Elm Avenue in Camp Scholler close to the toilet and shower building. Bill Purosky coordinates a group staying in a private residence off-site. Wherever you plan to stay, let's coordinate our schedules and make a list of members and cell phone numbers so we can contact everyone when the proper time becomes known.

We need to know who will be arriving the earliest, so we can gather the necessary materials: stakes, bright colored rope, chapter sign, etc. for those persons to stake out and reserve the camp site large enough for all who are coming. Please talk to your significant other about your vacation schedule this year, and arrange your events as early as possible to include Airventure.

From what we've been reading so far on the EAA web site, the grounds have been rearranged and new roads have been constructed to make attending less tiring. The Fly Market has been moved to the south side of the exhibit buildings, for example, closer to Camp Scholler, to make it easier to

carry your purchases back to your camper. A diagonal road has been constructed leading directly to the Forums areas from the main gate, cutting travel distance by two-thirds.

I'm excited about the coming events this summer. Plan to join us in the Fourth of July parade in Mason and help hand out MAD advertising to the crowds. The Young Eagles rallies may be quite crowded, necessitating many hands to make the load lighter. Come join us.

And whenever you fly take someone with you.

Bill Bezdek, President

### Breakfast Teams

<u>May</u>	<u>June</u>
Jim Cushing	Lynn Brown
Chuck Hacker	David Cook
Cliff Hale	Denise Cook
Gilbert McKessy	Gregg Cornell
Jim Spry	Dennis Hall
Al St. George	Greg Hover
Connie Stewart	Mike Marhanka
	Tim Martinson
	Jack Toman



**April Breakfast Team:  
Deanna and Don McAllister with Dan Schiffer**

## EAA Chapter 55

### Board of Directors Meeting, April 8, 2009

BOD members in attendance: President Bill Bezdek; Vice President Bill Purosky; Secretary George Moore; Doug Koons; Vickie Vandenberg; Al Spalding; David James. In Absentia: Sharron Hacker, Treasurer (represented by proxy), Rick Dallas Guest: Kenneth Vandenberg

President Bill Bezdek called the meeting to order at 2409 Z (7:09 p.m. EST). → **Treasurer's Report:** Doug Koons presented. George Moore moved that the treasurer's report be accepted as presented, motion seconded by David James, carried. → **Hangar Door Project:** Doug Koons has purchased the new passage door for the hangar with a new lock. Door to be installed when weather more agreeable. → **Membership Committee:** Vickie Vandenberg: Nothing new to report. → **Special Events:** Vickie: Next meeting for MAD planning fourth Wednesday, April 22, 2009. → **Other special events:** Bill Purosky reported on the EMU Willow Run Annual Pancake Breakfast Fly-In, May 2. Address: 830 Willow Run Airport. Also included will be the Garmin Glass Cockpit Orientation. → **Christmas Party:** Al Spalding raised the question of whether or not Julie should continue to plan. Consensus agreed that Julie is the one to continue. It was moved by Vickie Vandenberg that Merindorfs should again supply the food. Seconded by Bill Purosky, carried. Vickie: Xmas party was not about Julie continuing - but should she reserve the caterer to fix food. → **New Flag:** Vickie announced the need for a new American flag for our pole. Bill Purosky moved to allocate \$100.00 for the purchase; seconded by David James, carried. → **New Roof?** Discussion followed re: problems with our continually leaking roof. The metal roof is actually metal siding functioning not too well as a roof! Tabled until more information is available. Bill Bezdek to look into material/costs. → **Bridge Project:** Doug Koons to meet with County Drain Commissioner and other county personnel to discuss. More information will be forthcoming. → Vickie brought up the problem that following last month's general meeting, she found the meeting room door left unlocked! Reminder. → **Special Speaker for Saturday, April 11, 2009:** Bill Purosky, subject: Establishing and Running of Flying Club. → Meeting adjourned at 2436 Z (7:36 p.m. EST)

## EAA Chapter 55

### General Membership Meeting, April 11, 2009

There were 39 members in attendance. → President Bill Bezdek called the meeting to order at 1330 Z (9:30 EST). → **Guests:** We welcome Tom Munchbach and Troy Munchbach. → **Secretary's Report:** It was moved, seconded and carried to approve as written. → **Treasurer's Report:** Doug Koons reporting for Sharron Hacker. David James moved to accept; seconded and approved as presented. → **Young Eagles:** Doug Koons indicated that the schedule is ready to be implemented and the three events will be held on the second Saturday of June, July, and August. → **Membership:** Vickie Vandenberg provided sign up sheets for MAD and Dawn Patrol. → Air Venture forms for members

to assist before and during the event presented by President Bill Bezdek. Reservations may now be made. → Of note: Terry Lutz will be occupying the right seat of the Airbus A380 when it lands at Oshkosh this summer for Air Venture 09. → **Web Site:** A commercial company would like to link up with our web site. Craig Tucker to be advised. → **EMU Pancake Breakfast/Fly-In:** Event to be held on May 2, 2009, beginning at 8:00 to 12:30 a.m. at Willow Run Airport. (See minutes from BOD meeting). → **Re: First flight of an Experimental Aircraft:** Al St. George reminded us of the importance of using Tech Counselors in preparation of the first flight of an experimental aircraft and that those builder/pilots who seek their counsel have had no accidents during the first flight. Al has forms to assist in that preparation. → **Reminder: Veterans Day Parade:** Tom Botsford to post day and time and whom to contact so our members will be aware of when to volunteer help. He pointed out that this is a great opportunity for Chapter 55 members to make a favorable impact on the community. This is the kind of activity in which we can participate to help ensure the continuance of Mason Jewett Airport for years to come. → **Thunder Over Michigan:** Yankee Air force hosting Blue Angels and Thunder Over Michigan in July. →

Meeting was adjourned at 1355 Z (9:55 a.m. EST).

### Speaker At April Meet

Bill Purosky, President of Spartan Wings



Bill's subject matter was on how to establish and form a flying association to include information on initiation fees, monthly dues and hourly rates among many other items. Many thanks to Bill for his expert advise and experience in this area.

## TIDBITS

By Vickie Vandenberg

**MASON JEWETT/CRAA MEET-EAT-GREET:** CRAA will host Meet-Eat-Greet on Wednesday, May 20<sup>th</sup> from 5:30pm to 7:30pm at the EAA hanger. All tenants, landlords & renters are welcome to a dinner of BBQ sandwich, sides, & dessert, along with the opportunity to meet & talk with Executive Director Bob Selig and Deputy Executive Director Mike Daigle

**RELAY FOR LIFE:** Our member Karen Meirndorf will again participate in the Mason Area 24-Hr Relay for Life in June. Anyone wishing to purchase a Luminary please contact Karen for info. Or, donations payable to American Cancer Society can be sent c/o Karen Meirndorf, 420 N. Jefferson St; Mason, MI 48854

**CARL DALRYMPLE - OBITUARY:** Carl A. Dalrymple, of Holt, born Feb. 13, 1927, died Sunday, March 22, 2009 at the age of 82. Carl was a car, motorcycle and airplane enthusiast and was a member of the Experimental Aircraft Association, Chapter 55 in Mason, Mi. for many years.

**MEMORIAL FOR DICK WILKE:** Services on June 6, 2009 at 1:30pm at the Plymouth Congressional Church, 2001 E. Grand River, Lansing.

**DAWN PATROL & MAD PLANNING:** Next meeting Wed, May 27<sup>th</sup>, 7:00pm mainly to review Dawn Patrol plans. Final DP plans will be part of the BOD meeting on Wed, June 10<sup>th</sup>.

## Young Eagles

By Doug Koons

Hi everyone, summer is almost here along with nice flying weather. This also means that our **Young Eagle rally dates** are coming soon: **June 13, July 11, and Aug. 8.**

We have started advertising and all the proper insurance forms have been turn in.

Pilots please be aware that headquarters has put out a new booklet on the pilot guidelines. I have copies and will be passing them out on Saturday May 9.

The three YE Rallies this year are our normal summer dates after the June, July, and Aug. meetings. I will have sign up sheets for pilots and ground crews for these dates at the May meeting. Please sign up to help or call me at 676-5001 and remember we always have fun flying the kids.

## From the Flight Surgeon

By Gregory Pinnell, MD

Senior AME/ Senior Flight Surgeon USAFR

Skin Cancer is a diagnosis I frequently see during flight physicals and generates some quizzical looks when I tell the airman that it requires a Special Issuance Medical from the FAA. Most skin cancers, such as basal cell and squamous cell types usually grow slowly and will require only excision and routine follow-up. Malignant melanoma however can be life threatening and can require complicated and long-term treatment. In any case, the FAA needs complete records of diagnosis, treatment and after treatment care to decide whether to certify. In most cases after 5 years of no cancer recurrence the FAA drops their requirement for periodic status reports from your physician. Questions? Call or email at [www.OK2FLY.com](http://www.OK2FLY.com) and I will have happy to provide you with additional information.

## Notes From Cape Juby

By Terry Lutz

To begin this month's article, there will be a quiz on Roman history. It won't be very hard. OK, it was hard for me when I was in grade school. Maybe your teacher explained it better than mine, but back then, I couldn't "figure it out". Below is a picture of the Pont du Gard, a beautiful structure built by the Romans 2000 years ago.



The same picture was in one of my grade school history books. The quiz question is (drum roll, please): The Pont du Gard was an aqueduct. Where did the water flow? (answer at the end of the article)

- Through the second set of arches
- Across the top
- Through the third set of arches
- Underneath, along the river

In March, I was in Miami for my annual proficiency checks.

One of the Airbus instructors is a guy named Brian Garhammer. With the economy in terrible shape, Brian decided to start a flight school at the Tamiami Airport. His timing may actually be perfect. The airline industry is shrinking right now, but some people are predicting that when it recovers, there will be shortage of pilots. Brian and 424 Aviation will be up, running, and ready.

One of the airplanes Brian has access to is a Flight Design CTLS, a carbon fiber, high wing Light Sport Aircraft.



One of Brian's instructors, Chris Benaiges, was available to provide the check out. With a wingspan of 28 ft 2 inches, it fits easily in most T-hangars with room to spare. But more important than span are the aerodynamics of the wing itself. Wing area is 107 sq ft (7.29:1 aspect ratio), and the flaps

can be uprigged at cruise, a combination providing a cruise speed close to 115 kts. By comparison, the Rans S-6S built by Dick Wilke has a span of 34.5 feet, wing area of 155.25 sq ft (7.66:1 aspect ratio), giving a cruise speed of about 100 kts. Both aircraft utilize the 100hp Rotax 912 engine.

If wing design provides greater cruise, what is the advantage of the carbon fiber airframe? The CTLS has an empty weight of 770 lbs and gross weight of 1320 lbs, allowing for 550 lbs of fuel/pax/stuff. The Rans S-6S weighs 610 lbs empty and has a gross weight of 1100 lbs, so you can carry 490 lbs of fuel/pax/stuff. The CTLS airframe is heavier, but it provides greater useful load. In addition, parasite drag is reduced because the wing has no external struts and the fuselage can be shaped for minimum drag, which contributes to the higher cruise speed.

When you look at the CTLS from the front, you realize that it has a nice wide cabin. With a cabin width of 49 inches and large cabin doors that swing up and open, it's easy to climb into. But make sure you adjust the seat before entering. The seat adjust is a cable system that pulls a pin on each side of the dual seat track. The seat does not slide freely fore and aft when you are seated, so if you pull the pins out and try to adjust the seat, you may not be successful resetting the pins, unless you climb out again.

The instrument panel of the CTLS contains two Dynon D100 EFIS displays. One is in front of the pilot for flight instrumentation, and the other is on the opposite side for engine instrumentation. On the smaller panel in between is a Garmin 696 GPS, along with the radio and transponder.

The Dynon D100 is a very nice display, and even though there are two back-up instruments below, a small airspeed indicator and a small altimeter, they are merely backups. The airplane is easily controlled using the digital readouts of airspeed and altitude, although one thing you do notice about the airspeed is that the digits tend to roll back and forth a little while flying in turbulence.

The really nice feature about the D100 is that this airplane was ordered with the Dynon heated pitot tube, which also provides angle of attack to the display. One of the problems with displaying AOA has always been that the indicator can be anywhere on the panel, and the pilot will likely not see it when needed the most – flying approach. But what Dynon did was display the AOA just inboard and below the airspeed tape. That, combined with an aural tone indicating high AOA, is just perfect! Pilots know exactly where to look for airspeed, and with this setup you can instantly cross check AOA.

Now about the other D100. This one is on the other side of the 49-inch wide cockpit. It really is too far away for a good crosscheck. The instruments are nicely displayed, but I couldn't easily pick out individual ones to look at. The whole display needs a little better organization. Even though most airplanes with the radiator cooled Rotax

engines have no coolant temperature instruments, the D100 could easily do that. I think it would be nice to have coolant temperature displayed and a warning, before the engine itself starts to get hot.

The checklist, engine start, and taxi were fairly normal. Interestingly, the CTLS uses simple circuit breakers for the Master and Generator functions. I think they work well, but circuit breakers were not designed to be yanked on and off every day. Switches, or switch breakers would be a better solution.



You use a traditional choke to start the engine, and like older automobiles, the engine rpm will be a little higher than normal idle. The choke will still be on when you start to taxi, and the higher rpm means that you will have to use the brake almost continually to control taxi speed. Braking is accomplished with a single handle that actuates both brakes. Brakes will become a higher than normal maintenance item, since they are used quite a lot. The rudder is directly linked to a steer able nose wheel, and I felt the steering forces were quite high. At the end of the flying day, you know your calf muscles have been busy.

In the run-up area, I noticed a couple of things pilots need to pay particular attention to. First, if you look where the ignition switch is located, you realize you are within the width of your hand to the fuel shutoff, ignition switch, and flap switch. The fuel shutoff is designed so you can't insert the key with the fuel handle in the Off position. But you can move the fuel shut off almost to the full shutoff position with the key inserted. My impression is that these three important items are too close together. It's a good spot to make a serious error if you are not paying close attention.

Another thing I noticed before takeoff was as that the take off trim mark was a small hand-painted black mark on the console. The interior paint finish is black and white spatter paint over grey, and the black spatters looked just like the takeoff trim mark. This is a good place for a nice yellow or green mark instead.

Takeoff was perfectly normal without flaps, and we climbed out of Tamiami to west and over the Everglades at 70 kts. Climb rate was very respectable at 600-700 fpm, and visibility over the nose, and in fact all directions, was great. Despite considerable cloudiness, we found a nice open spot

3-4 miles in diameter, and did our air work there at 3500 feet. When leveling off and above 100 mph, you can select the flaps to -6 degrees, which is an up rig position for best cruise. With 4800-rpm set and the flaps at -6, cruise speed indicated 115kts. On 100 hp, that is very good performance.

When maneuvering at cruise speed, I noticed two things interesting things about the flight controls. First the rudder pedal forces, which at cruise speed, are a bit too high. Combined with small rudder travel, turns are a little hard to perfectly coordinate. The ailerons, while nicely balanced with the elevator forces, had a little bit of friction in them. If you start a roll input and released the ailerons, friction would hold the ailerons slightly deflected and the airplane would continue to roll (noted in both directions). But if you establish a bank angle and neutralize the ailerons, the airplane displayed normal (slightly stable) spiral characteristics.

I slowed the airplane down for some slow flight and stalls. During slow flight at 50 kts, the sweetness returned to the rudder and I found I could easily coordinate the turns, left and right. This is a good thing, since you don't use the rudder much at cruise, but you do rely on it while at slower speed and in the pattern. Stalls were very predictable, with light buffet right before the stall. The airplane has stall strips on the leading edge to provide some buffet at the tail. Recovery was normal with forward stick, and if needed, rudder would easily pick up a low wing in the recovery.

Turning stalls were interesting. The right turning stall, beginning at cruise power, was normal, but the left turning stall consistently took both left aileron and left rudder to keep the airplane in about 20 degrees of bank with ball centered. Usually, you need left aileron and a little right rudder. But it made no difference at the stall, as long as the ball was centered.

With the good fun ended next to towering clouds, we headed back to Tamiami for some pattern work. I found it easy to control airspeed and altitude in the pattern, and the excellent visibility really helps to maintain situational awareness with other traffic. Final approach with flaps at zero is flown at 70 kts, and with flaps 15 at 62 kts. You can use more flaps and slow further to 54 kts. The flare requires light forces, assuming you are properly trimmed. Touchdown on the single piece composite landing gear provided positive contact without rebound.

Normally, flaps are retracted on the roll during a touch and go, but on one takeoff I retracted them about 100 feet off the ground, and found a noticeable change in pitch attitude requiring a smooth nose-up pitch movement to compensate.

On my final landing, I was trying to adjust flight path to make a specific turnoff, and used a slip to lose a little height. The slip was precisely controllable, but we noticed after taxiing to parking, that fuel had run out of the vent on

the left side. Not a serious problem, but the airplane uses auto fuel, and auto fuel can stain the gel-coat. So you have to stay ahead of that with a rag.

Chris and I discussed whether or not the CTLS would be good as a training airplane. There are pluses and minuses. On the plus side, it has a good proven engine, modern instruments, good performance, a range of flap settings to learn, and great visibility. You can easily teach the technical and procedural aspects of flying. But is the CTLS too light in terms of construction to withstand the beating it might take from students? We're not sure. But one indication of toughness may be that in Europe, the CTLS is used for towing gliders. That's fairly tough use of the airplane, so maybe it does have the resilience to be a trainer.

Now for the answer to the quiz. The Pont du Gard was part of a 31-mile long aqueduct to carry water from the Fontaines d'Eure springs to the city of Nimes. When in operation, 5 million gallons per day passed through a channel *across the top* of the Pont du Gard. In 1743, a bridge was built against the lower level of arches to allow traffic to pass over the river. The bridge is so well integrated that one can hardly tell the difference in construction from the material and methods used 1700 years earlier. The bridge was engineered by Henri Pitot. That's right, Henri *Pitot*. It was he who conceived the design and use of the pitot tube for speed measurement, some 160 years before the first airplane ever flew. And now you know.....(with respect to the late great Paul Harvey).....and now you know the rest of story of the Pont du Gard.

Well, it's official. The world's largest passenger aircraft will visit the world's greatest aviation event, Air Venture '09. Claude Lelaie will do the flying, and I'll be in the right seat yanking the gear up and down (believe me, there's a lot of gear to yank!). I hope to see you all there, and the goal is to organize a chapter photograph with the A380 in the background. Until then, enjoy the improving weather, fly safely, and keep up your efforts to help your fellow pilot when they really need it.

## **ELLIOT'S ADVENTURES**

Drew Sequins son, Elliot keeps on flying, no matter what it is. He borrowed a friends Air Bike and flew around the Mojave in Calif. Is there a rule against riding motorcycles and flying airplanes without shoes?





Elliot is working on the White Knight 2 and is in charge of a project to add a research pod to this aircraft. It is hoped to test flown in the Mojave later this year.



## CHAPTER 55 - CLASSIFIEDS:

OSH KOSH: seats available to fly over. \$110 each. Dave James 517-410-4959

OSH KOSH: room(s) available in rented house. Bill Purosky 517-655-1432

### **FOR SALE:**

DTV antenna; this new, awesome-performing DTV antenna from Moore Energy Conversion Systems connecting with either a converter for analog TV or new digital TV is available. MECS will deliver for wholesale price of 18.87 + 1.13 sales tax = \$20.00. Why pay \$1,000.00 for a new TV? Why purchase an antenna for \$100.00 or more? This one is affordable. Contact George Moore 517-536-1034

Telex ProCom 200 noise canceling headphones w/boom microphone. New; must attach plugs for your particular radio to plain wires. Negotiable. Bartlett Smith 517-676-2146

Burning barrels; 55 gallon drums. \$5.00 Dave Groh 517-676-4416

Generator; Generac 4000w. \$350.00. Greg Hover 517-676-5126

2 Lots (approx .40 acres ea); Sugar Springs Residential Community; about 10 miles north of Gladwin MI; on 3500 ft. grass airstrip; many extras. \$15,900.00 Doug Simons 517-626-6790

2 Wicks one-inch seat cushions, blue, w/front map pocket. \$120.00. Pat Salow 517-565-3178

New surplus hardware. Save on hose clamps, Dzus, spark plugs, bolts, & more. Dave Groh 517-676-4416 or [www.yesteryearaviation.com](http://www.yesteryearaviation.com)

WILLING TO LOAN: Jigs & fixtures for Zenith 701. Chuck Hacker 517-740-9222

FOR SALE: Avon Products & Natural Beauty Soaps. Deanna McAlister 517-596-2506 or visit [www.naturalbeautysoaps.net/deanna](http://www.naturalbeautysoaps.net/deanna)

PLACE YOUR AD HERE! Contact Warren or Vickie for the next edition!

## IN CASE YOU NEED A LAUGH

Deadheading Crew: Have you ever been on a plane and seen some uniformed pilots sitting in the passenger cabin? This is not at all uncommon, since most airlines at one time or another need pilots to cover a flight at an airport other than the one at which they're based. When pilots ride this way as passengers, this is known in the industry as "deadheading." In some cases, due to weather, mechanical problems, or crew flight-time legalities crews are called out at the very last moment to catch a deadheading flight. And so begins our story...

While taxiing out for takeoff, the Boeing 727 suddenly came to a stop. With the aircraft still on the taxiway, the flight attendant in the back began to lower the aft stairway. Behind the plane, a van with flashing lights came to a screeching halt and out jumped three deadheading pilots. They grabbed their bags and ran to the plane.

As they ran up the stairs, the pilot in front continued running up the aisle shouting, "I can't believe the stewardess got the plane this far. I didn't know she even knew how to start the engines!"

For a number of passengers it took quite some time before they realized they had been had by these jokers, you couldn't believe the startled looks on their faces!

Emergency Tool Kit  
Brian Lee (EAA 149802)  
EAA Chapter 441, Kent, WA

Recently, I found me stranded at an airport with an engine which would not start...and me without any tools. I do have an “airport” tool bag packed and ready for those times when I’m going to work on the airplane, but at 25 pounds, I don’t carry it along if I’m just going on a short flight. After trying to undo safety wire with my fingernails and a pocket knife, I resolved to assemble a small number of “essential” tools which I would leave in my flight bag—so they’d always be available when I am flying. I sat down and deliberately considered what the bare essential list of “what it takes to get home” items might be, then assembled a kit. Your list might be different, and you might argue about the “essential” nature of some of it, but it works for me. Here’s my list:



- 4-in-one screwdriver
- adjustable pliers
- adjustable wrench (which will open wide enough to fit spark plug caps) (mine is attached to a Leatherman tool)
- spark plug wrench (deep well socket and breaker-I chose a slider rather than a ratchet for weight considerations)
- wire cutter
- safety wire pliers
- magnifying inspection mirror
- magnetic pick-up tool
- awl/dental pick
- small file
- small flat blade screwdriver
- hex wrenches: 5/32” for avionics; 0.05” for setscrews on knobs
- assortment of #8 and #10 screws, nuts, and washers
- assortment of cotter pins
- assortment of zip ties
- safety wire
- electrical tape



(and, yes, there’s part of a roll of duct tape which lives in the baggage compartment)

I dug around in the basement and found a scrap of canvas which my wife had left over from another project, spent a couple of hours with her sewing machine (you can tell I’m no tailor), and the result is a convenient if not pretty kit which fits neatly in the side pocket of my flight bag. At 3-1/4 pounds, it does add a bit of weight, but the peace of mind is worth the extra weight.