

# CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

JULY 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

Chapter 55 had a “float” in the Mason 4<sup>th</sup> of July parade once again. We did not have a full size airplane this year, but had two pedal planes riding Gary’s trailer. Many thanks to Gary Nesbitt, Vickie Vandenberg, Al and Julie Spalding, Karen Merindorf, and all the volunteers who helped to make this happen.

Airventure is coming up soon, and we are coordinating the chapter photograph in front of the Airbus A380 that Terry is bringing over from France. At the last chapter meeting I passed around a sheet for members to list their cell phone numbers so we can call everyone when we figure out a schedule to assemble in front of the plane. If you did not attend last month’s breakfast meeting and are going to Oshkosh this year please call me, e-mail me, or otherwise let me know your phone number to be added to the list. I’m going to print the list as we have it on Friday night to hand out this Saturday so everyone can have a copy for reference at Airventure.

**Board of Directors Meeting  
July 8, 2009, 7:00 pm  
Chapter Membership Meeting  
July 11, 2008  
Breakfast 8-9 Meeting 9:30 am**

We still have serious roof problems, and all of the rain this year has made roof repairs top priority. We have mold on the ceiling around a light fixture in our meeting room, and another light fixture has water puddling on the lens. We have wet insulation above the ceiling that will cause serious damage if we don’t get it fixed soon. Even with Doug Koons’ tireless help it is beyond what us volunteers can accomplish. We need professional help, and that will make a big dent in our finances.

This Saturday is another Young Eagles rally, from 1000 until 1400. Come and help out however you can, whether flying the kids, herding the kids and families, parking cars, or greeting and registration. Last month we had eight pilots and planes and flew 70 kids. And this was on a day that started out with rain! Let’s do it again.

Bill Bezdek, President

## Breakfast Teams

<u>July</u>	<u>August</u>
Ed Crouse	John Kennedy
Mary Gowans	Gary Long
Warren Miller	Jim Palmer
Tom Scheehan	Dave Paul
Ralph Taggart	Rocky Stone
	Roy Thelen
	Bruce VanFarowe



**June Cooks:**  
Dennis Hall, David Cook and Greg Hover

## EAA Chapter 55

### Board of Directors Meeting, June 10, 2009

Members in attendance: President Bill Bezdek, Vice President Bill Purosky; Secretary George Moore; Treasurer Sharron Hacker; Young Eagles Director Douglas Koons; Membership Committee Chairperson Vickie Vandenberg; Al Spalding; and Rick Dallas. Member in absentia: David James. President Bezdek called the meeting to order at 7:07 p.m. (2307 Z). Secretary’s report: Two corrections to the May BOD minutes: correct “Hartwell Drilling Company” to “Hart Well Drilling Company.” Also, change “Sharron Hacker to purchase sympathy card.” to “Vickie Vandenberg to purchase sympathy card.” sent to the widow of Carl Dalrymple and another to the widow of Dick Wilke. It was moved by Bill Purosky and seconded by Vickie Vandenberg to accept the revised

secretary's report, carried unanimously. A discussion followed re: our policy for sending sympathy cards and return of membership dues to family members of those of our members who have become deceased. It was decided that contingent upon BOD approval that a sympathy card to any family member is appropriate, but in lieu of sending flowers a donation of \$50 to be sent for the Newberry Scholarship to honor a deceased member. Vickie so moved, seconded by Doug Koons. Discussion followed to amend this to read deceased member or spouse of a deceased member. Vickie then restated her motion and motion carried. Treasurer's report: Sharron Hacker reporting. It was moved by Al Spalding, seconded by George Moore to accept, motion carried. **New business:** Nominating committee should be formed immediately for selection of candidates for officers of our Chapter to replace those now holding those positions. Membership committee: Vickie reported no new members; however, she presented a proposal for free memberships for adults for a period of six months and has applications. Young Eagles: Doug Koons announced the next YE rally to be held Saturday, the 13<sup>th</sup> of June at 9:00 a.m. As our general membership meeting begins at 9:30 a.m., the meeting will be cut short with only most important concerns addressed. Doug reports that all is in readiness. For the July YE rally Doug indicated that a Boy Scout Troop with 25 scouts have volunteered their services for the July rally. Old business: 1. The roof over the main storage hangar leaks! Bill Bezdek has contacted two contractors but has yet to receive a reply for repairs. 2. MAD banner has been approved by Dart National Bank to be displayed on the former Hart Well Drilling building wall. Dawn Patrol: Sunday, June 14, 2009. Bill Purosky says we are ready with permit obtained and well having passed inspection. Food and beverages also purchased. There is the question re: the Porta Potties for the Dawn Patrol. Vickie will investigate. Fourth of July Parade: Chapter would like to have a float again this year with a full size airplane. Tractor and trailer are again available. Need airplane. Jack Tomen would allow his Kit Fox to be used but contingent upon someone volunteering to build a bracket to hold the folded wings securely in place. See Jack for details. Other airplane welcomed. Safety Seminar, EAA sponsored but expense delegated to our chapter. Suggested month is September at our monthly meeting. Vickie also has suggestion for a possible speaker for the October general meeting. Subject: Airspace. Bill Bezdek would like to have a seminar for riveting skills. Airport: windsock at each end of our runway? George Moore suggested that our worn windsock be replaced by a large wind vane, which is more visible. Any change must be approved by the Capital City Airport Authority. Aero scholarship Program: The question of whether or not to pursue this program was advanced with approval from BOD membership. Bill Purosky indicated that there are five possible candidates that are being considered for a similar award for Spartan Wings and that one of more of these could be assigned to the EAA sponsored program. It was noted that EAA national organization is offering a \$100 discount for each high school student along with six credit hours toward college course. However, our housekeeping expenses have priority over this program. Other: Housekeeping: Hangar door showing signs of rust along each side with need for volunteer to remove rust and paint. Also, our fire extinguisher time has expired and needs refilling. Filter fan over stove needs cleaning and our meeting room floor needs cleaning, refinishing. Bids to be obtained. AWOS transmission is very poor with much static and unclear. Mike Daigle contacted by Vickie. No 2-way Unicom from

ground to be allowed from our staff for Sunday, June 14 Dawn Patrol. Meeting adjourned at 8:29 p.m. (2429 Z).

## **EAA Chapter 55 General Membership Meeting, June 13, 2009**

There were 40 members present. Guests: Mr. Brian Egan. Following the National Anthem, President Bill Bezdek called the meeting to order at 1335 Z (9:35 a.m. EDT). Secretary's Report: One correction: "Hartwell Drilling Company" changed to "Hart Well Drilling Company" in May minutes. It was moved, seconded and carried to approve the amended secretary's report. Treasurer's report: Sharron Hacker reporting. Report approved as written. Old Business: Roof repairs pending reception of bids. New Business: Young Eagles: Today, June 13, 2009 starting at 9:00 a.m. to 3:00 p.m. EDT (1300 Z until 1900 Z. Dawn Patrol: A plea for additional help was made by President Bezdek as more time slots need to be filled on sign-up sheet. Fourth of July Parade: We are still looking for an airplane to mount on Gary Nesbitt's trailer (Gary's phone...517-230-5585) which has been "spruced up" for the parade. Doors of storage hangar need painting...volunteer(s)? Floor: our meeting room floor needs to be stripped and scrubbed. Greg Hover will do it, but needs additional volunteer help to scrub around perimeter edges that can't be reached by the power scrubber. Tom Botsford announced the Chamber of Commerce offer of members of Chapter 55 to join them for the Spartan Speedway event to be held on June 21. Cost will be \$10. One may purchase advance tickets at the Chamber of Commerce office or see Tom Botsford. A group gathering at 4:30 p.m. (2030 Z). Meeting adjourned at 1350 Z (9:50 a.m. EDT).

## **TIDBITS ~ December 2008**

**By Vickie Vandenberg**

### WELCOME NEW MEMBERS:

Our chapter is pleased to welcome new members Brian Eakin and Kyle Curtiss, along with the return of Kyle's father, Kirk Curtiss.

DAWN PATROL: What a beautiful day!! Stats: 78 planes; 295 meals; \$195 donations to the Newberry Aviation Scholarship Fund. The cooks cranked out the eggs & cakes and the field help was run ragged!! Thanks & kudos to all who helped out!!

EVENT PICS: Visit <http://gallery.me.com/ptartalone> to see photos taken by Phil Tartalone at our recent events.

MAD PLANNING: Future meetings will be 8/5/09 (w/BOD); & 8/12/09 along with set-up Thur & Fri that week.

KIT BUILDERS EXTRODINAIRE: Have you seen the latest peddle plane? Thanks to the expertise of our "701 Club" members Chuck Hacker & Pat Salow the plane was completed in time to be the feature on our July 4<sup>th</sup> Parade float. Chuck (along with Dave Groh, Ken Vandenberg, Jack Toman & Joe Pirch) had worked on our first peddle plane project, which was a raffle prize in 2005. Chuck laid out the kits & made the necessary parts for both of them. He assembled the fuselage

firewall back and Pat completed the assembly and did the paint work. Thanks & kudos to Chuck & Pat!

PARADE FLOAT: We had a very nice entry in the July 4<sup>th</sup> parade even if we didn't have a "real" plane!! Thanks go to our kit plane builders; Deanna McAlister arranging use of a hanger; Bruce VanFarowe for securing signs; Gary & Sam Nesbitt for use of truck, trailer and time to be in parade; design by Karen Meirndorf; materials provided by Ted Laken, Vickie & Ken Vandenbelt, and Karen; assembly by Gary Long & Ken. Special thanks to Karen & Vickie for walking the parade route passing out flyers.

AIRVENTURE FORUM: Elliot Sequin (son of member Drew Sequin), will be conducting a forum at AirVenture on Thursday; July 30<sup>th</sup>. Elliot is currently employed at Scaled Composites in CA. Last year, he raced at the Reno Air Races. Forum is Fly High, Fly Slow and Turn Left? - From air race fan to air race pilot -An engineer's perspective on becoming a formula one race pilot. Thursday 7/30/09 @ 1pm-2:15 pm in 004 Forums Pavilion.

DART FOAM CUP RECYCLING: Dart Container donated the cups for our DP & MAD events provided we would promote their foam cup recycling. We did & I took a big bag of cups to Dart's recycling bin after the DP. I have left one box in our meeting room so that we can continue to recycle.

TEW RAMP: Construction is set to start July 13<sup>th</sup>. Phase 1 will take approximately eight days & Phase 2 approximately six days. There will be one day that the fuel farm is not available.

TEW HANGER OWNERS/TENANTS: CRAA is compiling a contact list of TEW owners & tenants so that they can notify residents (preferably via email) of any important news, issues or improvements at TEW (ie ramp construction, meetings, special events). Forms are available at the airport terminal.

2009 YE OF THE YEAR: Be on the lookout for potential candidates for our YE of the year award. We're looking for an enthusiastic youngster to sponsor with a student membership. Doug needs to 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.

ROBERT H. (BOB) STARR: Bob passed away on June 13, 2009 at his daughter's home in Arizona. He was an instructor at TEW in the 1950-1960's and known to many connected with the airport at that time. I have included a write up about *The World's Smallest Piloted Airplane*, which was designed, built & flown by Robert H. Starr.

*The World's Smallest Piloted Airplane - The BUMBLE BEE II*  
Designed, Built and Flown by Robert H. Starr

The **Bumble Bee** and **Bumble Bee II** were designed and built specifically to acquire the title of **The World's Smallest Piloted Airplane**. Mr. Robert H. Starr, of Phoenix, AZ has been

involved with both world's previous title holding smallest airplanes. He was the only pilot of **JR** in 1949 who was able to fly it without cracking it up, unlike his predecessors. He was the co-builder and pilot for **Sky Baby** in 1954. He gained considerable experience and knowledge on these first projects and knew that a smaller, superior plane could be built. Mr. Starr had difficulty getting credit for his contributions on the first projects. Consequently, he decided to build a smaller machine and establish a new world record on his own. Thirty years later, **The Bumble Bee** and **Bumble Bee II**, were the result.

Why did he name them Bumble Bee? Rumor has it that a real bumblebee does not have enough wing area to fly. At first glance, most engineers and professional pilots made the same statement about **The Bumble Bee's**. The bumblebee and The Bumble Bee's have never heard this rumor, so they fly anyway. Mr. Starr flew Bumble Bee II several times and captured the world record in April 1988 at age 64. On the last flight of the **Bumble Bee II**, the engine quit on the downwind leg of the flight. The impact totally destroyed the **Bumble Bee II**. Mr. Starr sustained extremely serious injuries. He has since recovered. **The Bumble Bee I** is on permanent display at the Pima Air Museum in Tucson, AZ.

Mr. Starr has logged over 15,000 air hours in everything from Piper Cubs to the F-86 Sabre Jet. He was a fighter pilot in WWII and flew P-40's & 51's with the 14th Air Force Flying Tigers in China. He has participated in most of the largest air shows in the United States. He has also been test pilot for many experimental aircraft.

Additional info, pics & video at:  
<http://members.cox.net/robinstart/index.shtml>

## Young Eagles

By Doug Koons

Hi Everyone, Our chapter flew 70 kids at our 6/13 National Young Eagle Day. We had 9 pilots and lots of volunteer members who helped with this rally. Thank you all for all the great help.

Our next Young Eagle Rally is 7/11 from 10 to 2. Please come for breakfast and help with this event. I did not get the sign up sheets out in time to allow Members to sign up for the July rally. I have a Scout troop of 25 kids coming, along with the public. We can always use more help so please plan on working and remember we always have fun.

I would like to congratulate Erne Lutz. He is now at 290 Young Eagles flown. He will pass 300 YE on the July 11 rally. Just to keep everyone up to date on things, I passed 200 YE flown at our June rally. Our total Chapter 55 to date count is 2,228 YE.

Hope to see you all on Saturday.

Thank you, Doug



**David James and**



**Al Spalding with their happy Young Eagles.**

## **Notes from Cape Jubjy**

**By Terry L. Lutz, Chapter 55 Flight Advisor**

If you mention the name Eric Brown, most aviation enthusiasts will not be aware of the significant accomplishments of the most prominent test pilot in the history of British aviation. We recently hosted the 41<sup>st</sup> European Symposium of the Society of Experimental Test Pilots here in Toulouse, and Eric Brown was here to provide a firsthand account of flight-testing the first jet-powered aircraft, both British and German. His report was delivered as if he had just returned from a recently captured German airfield at the end of WWII. A remarkable report, considered that Eric Brown is 90 years old.

The first time I heard Eric speak was in Los Angeles about 10 years ago. He spoke mainly about qualifying various aircraft aboard aircraft carriers, both during and after WWII. His first assignment was with 802 Squadron, flying an F4F Wildcat off the carrier HMS Audacity. Eric managed to shoot down 2 enemy bombers during his short time on the Audacity, which was torpedoed and sunk by a German U-boat on 21 December 1941. Eric was one of only two survivors from 802 Squadron.

Eric was assigned to flight test new aircraft for carrier suitability, and had two significant “firsts” in carrier aviation. He landed the first tricycle gear airplane, a Bell Air cobra Mk1 (April 1945), and made the first jet landing in a DeHavilland Sea Vampire (December 1945). Eric has a record 2407 carrier landings, and has test flown more airplanes than anyone else at 487. The count is not model specific, so for all the Spitfire models he flew, the record only shows “Spitfire”. It is a record that will very likely remain unbroken.

Frank Whittle designed the jet engine in Britain while he was a student at the Royal Air Force College in Cranwell. His thesis at the end of the course outlined the design of a jet engine with a centrifugal compressor. Whittle was encouraged to continue his work, and received a patent on the design in 1930. But he could not afford to pay the renewal fee of 5 British pounds, and in January 1935 the design was released to the public. The German government promptly purchased several copies of the patent.

At the same time as Whittle was working on the centrifugal flow engine, a German engineer named Hans von Ohain was developing a similar concept. His design was developed into the HS-3b engine, which used machined blades for the compressor and turbine, and combustors in a gap between the two. It was essentially an axial flow engine, and was installed in the Heinkel 178. On 27 August 1939, the first jet-powered airplane flew with test pilot Erich Warsich at the controls. It was a nose-intake design, and the air went through an S-duct within the fuselage before entering the engine.

In Britain, Frank Whittle continued development of the jet engine, working on a design designated the W.U. This engine could be run continuously, convincing the Ministry of Defense to order continued development, and to order Gloster Aircraft to develop a simple and lightweight airplane for flight testing the engine. That airplane, the Gloster 28/39, had no hydraulics, and no trim tabs, and was unpressurized. First flight was on 15 May 1941, with Gloster’s chief test pilot Flight Lieutenant Gerry Saylor at the controls. With a Whittle W.1 engine producing 850 lbs thrust, within days it reached speeds of 370 mph at 25,000’, exceeding the performance of most piston engine fighters flying at the time.

Eric Brown soon joined the test program on the Gloster 28/39, and reported that the airplane had good visibility and a noticeable lack of vibration. There were lots of engine failures, but very few airplane failures. With the W.1 engine, the airplane had poor acceleration, which made formation flying quite difficult. They evaluated the airplane during gun firing and noticed for the first time that gun gas ingestion could be a problem. They did bird strike testing by firing dead birds into the engine, and learned a lot about kerosene fuel.

Engine relights were performed without too many problems, with the exception of some fuel metering failures. While there were lots of airfields around Farnborough at that time, but kerosene was only available at two airfields in England. Following one engine failure and a safe landing on an airfield nearby, the aerodrome officer met Eric at the airplane and said, “I say old boy, you’ve lost your propeller...”

Loyalty among German soldiers was very high, and there was only one recorded defection with an airplane during WWII in Europe, when a Ju-88 flew from Denmark to England. The British knew about it in advance, and made sure the airplane had an escort and was not shot down. But the only real clue about German jet testing was from reconnaissance photographs, showing long scorch marks on the grass airfields commonly used by the Luftwaffe.

At the end of the war, Eric Brown commanded Enemy Aircraft Flight, which flew as many German aircraft as they could to learn about their technology. Eric personally flew more than 53 German aircraft, including the jet-powered Me-262, and the rocket-powered Me-163.

The German engineers and military officers would tell them nothing about the airplanes, and there were no pilot notes or service records on maintenance status. But the ground crew was particularly cooperative, and they learned that the first operational jet engines had a service life of just 25 hours. An Arado 234B, a photo-reconnaissance with two axial flow jet engines was the first captured jet Eric attempted to fly. He advanced power for takeoff and after rolling just a short distance, the right engine exploded, taking the right wing along with it.

Eric said that the Me-262 was the most formidable aircraft of WWII. The Spitfire Mk 14 could achieve a top speed of 446 mph, but the Me-262 could fly 556 mph at the same altitude, and dictate the terms of combat. But it was sensitive to throttle movement, and the operational technique was to takeoff, set power at climb thrust and leave it there for the duration of the flight. The Me-262 was mainly an anti-bomber aircraft, had no dive brakes, and had little firing time compared to other fighters. When interviewed after the war, Adolph Galland reported that engine life in combat with the Me-262 was just 15.5 hours.

The Heinkel 162, designed as a lightweight fighter, was developed too late to participate in the war, but it was close. From date of design specification on 25 September 1944 to first flight on 8 December was less than 3 months. The German government was gearing up for large-scale production in a secret underground facility near Lake Constance. By May 1945, the projected production rate of the airplane would have been an incredible 500 aircraft per month.

Here is a picture of Eric Brown at a lunchtime barbeque held near the airport here in Toulouse. At 90 years old, a good caption for this photo might be: "I say old boy, you haven't lost your propeller!"



On Saturday evening the 41<sup>st</sup> European Symposium ended with a banquet in the lobby of the IMAX Theater at the Cite de la Space near Toulouse. We watched a marvelous production, narrated by Tom Hanks, about the 40<sup>th</sup> anniversary of the first landing on the moon. If you have the chance to see this program at a nearby IMAX, I would highly recommend it.

One of the attendees at this year's symposium was General Stepan Mikoyan. A few months ago, I received an email from General Mikoyan, requesting that we send him an official invitation so he could apply for a French visa. I drafted the letter for signature by the EVP of Flight Test, Fernando Alonso, to facilitate his attendance. Attached is a photo taken underneath a full-scale replica of the Mir Space Station. Note the red ribbon and star on the jacket of General Mikoyan. As a former soviet fighter pilot and test pilot, he is a Hero of the Soviet Union, which is the equivalent of our Medal of Honor.



To wrap up a busy and rather fascinating two weeks here in Toulouse, we were honored to meet Captain Chesley Sullenberger, his wife Lorraine, and their two daughters. We met them for dinner in Toulouse, hosted by Tom Enders, the Airbus CEO. The next morning, he arrived at Flight Operations, and we briefed him for a flight in the A380. Captain Sullenberger is a true American hero. We found him to be warm and outgoing, yet reserved about what he had accomplished. He is very easy to speak to, and together with his wife, they carry the responsibility of unplanned fame with grace and intelligence.

I can easily say that of all the pilots I have observed on their first flight in the A380, he tops the list, commanding the airplane from the moment he strapped in. His flying was smooth and accurate, all the while absorbing a new avionics suite and listening to our commentary. He made three great landings and gracefully accepted requests for photographs on the ramp after the flight. Even though the A380 will be the largest airplane at AirVenture Oshkosh, Captain Sullenberger will be the most important visitor. I hope you all have the chance to see him and hear him speak.



Oshkosh! Yikes! It's only three weeks away. I hope you are all planning to attend, because from I can determine, it will be the most significant and memorable AirVenture for many years to come. I am excited to see all of you there, but there are a lot of things to do between now and then, so always remember to lend a hand to your fellow pilot when they need it.

**From the Flight Surgeon**  
**Diagnosis of ADHD Disqualifying**  
**By Gregory Pinnell, MD**  
**Senior AME/ Senior Flight Surgeon USAFR**

I am increasingly seeing young student pilots coming in for their first flight physical with a diagnosis of ADHD or Attention Deficit Hyperactivity Disorder. They are usually on medications. They are often surprised to find out that both the diagnosis and the medication is disqualifying. Also not infrequently, they are put on medications not for ADHD but simply to help them study. The only way these patients can obtain their 1st, 2nd or 3rd class medical is to not only stop the medication(s) but to also disprove the diagnosis. This can be a lengthy and costly road to follow. The best solution is to avoid the frivolous use of these medications and to make sure that if a young adult is diagnosed with ADHD that the diagnosis is accurate. Questions? Call or email at [www.OK2FLY.com](http://www.OK2FLY.com) and I will have happy to provide you with additional information.

**CLASSIFIED**  
**FOR SALE**

DTV antenna from Moore Energy Conversion Systems connecting w/either a converter for analog TV or new digital TV. MECS will deliver for wholesale price of \$20.00. Contact George Moore 517-536-1034

Telex ProCom 200 noise canceling headphones & mic. New; must attach plugs. Negotiable. Bartlett Smith 517-676-2146

Burning barrels; \$5.00 Dave Groh 517-676-4416

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

New surplus hardware (hose clamps, Dzus, spark plugs, bolts, & more) Dave Groh 517-676-4416

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

Military-style Dog Tags made to your order. See Vickie at next meeting for order form & prices.

AIRVENTURE: fly over with Dave James 517-410-4959; \$110 each.

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

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

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