

CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

JUNE 2008



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

Climb and Maintain Flight Level 55

The welding seminar is history. Ten of us converged on Chuck Hacker's shop Saturday to learn the intricacies of gas and the ease of MIG welding.



Everyone had hands-on time with the torch, making several attempts at forming and moving a weld bead, careful feeding of filler rod, repairing holes burned in the thin metal, and actually constructing a 45 degree joint in half-inch .035"chrome-moly aircraft tubing. After that, the simplicity and virtually foolproof operation of a MIG welder was a welcome relief. Chuck then demonstrated the delicate precision of the TIG welder. One is not to even touch its tungsten electrode with bare hands when assembling the torch!



We had plenty of food, as the Chapter had purchased Subway sandwiches, chips, cookies and lemonade for the 24 people who had originally signed up. Many thanks, to Chuck for his

hospitality, his instruction, and his vast experience with metal forming. We all learned much more than just welding techniques.

The next workshop will be this fall on fabric covering of a wing, including sewing, stretching, finishing, and rib stitching. It will be taught by Bob Smith, who used to be in charge of the wing department at the Lansing Waco plant. Next spring we'll have a seminar on riveting, including flush riveting done in reverse, pounding them down from the under side.

But next we concentrate on Young Eagles, and the Dawn Patrol fly-in breakfast. Saturday we'll have our regular meeting in the hangar, with the meeting room being already set up for Young Eagles. Then, while some of us are flying the kids the rest of us will be cleaning the hangar and setting up the tables and chairs for Sunday morning when our neighbors in the community and our fellow aviators show up (we hope). Make sure you are on the work schedule.

**Board of Directors Meeting
June 11, 2008 7:30 pm
Chapter Membership
Meeting
June 14, 2008
Breakfast 8-9 Meeting 9:30**

Last Saturday was the rain date for the Young Eagles flights we had scheduled two weeks before. We had to postpone because of gusty winds. But it seems events overtook the kids also, with only five showing up. We told the kids who did fly to go back and needle their classmates mercilessly about missing such a wonderful experience. We hope they will show up during the next three open Young Eagles rallies. Many thanks are extended to the large group of pilots and volunteers who turned out in expectation of a busy day.

Marilynn and I went to the Red Bull air races last Sunday. You may have seen the coverage on TV on Monday. Saturday's practice and qualifying was cancelled because of high winds, so the qualifying heats were run on Sunday. They promised to refund ticket monies sold for the cancelled Saturday qualifying rounds. The event was blacked out locally, but televised elsewhere around the world. It was recorded and will be

broadcast on Fox network 27 July and 5 October. An estimated 750,000 people in Detroit and Windsor watched live. The highlight for me was the aerobatic Red Bull helicopter. The thing actually does rolls and loops -- many of them, but quite slowly.

Publicity for MAD is high on our list. Mason is having a Fourth of July parade as they did last year, and we're planning to march and hand out MAD advertising flyers again. This year we're considering towing an aircraft in the parade, something with wings that will fit between the street light poles, or something with folding wings. Either way, we'll have a fun time and sleep well that night. Come join us. Be sure to also take flyers to the local businesses you personally patronize.

Also, the fourth annual live Thursday Night Concerts are underway at 6 PM on the Mason Courthouse lawn. When you go, pick up some MAD flyers at our clubhouse to hand out. Thursday, 12 June will be the Mason Community Orchestra. The remaining concerts will be 25 June, 10 July, 24 July, 14 August, 28 August, and 18 September.

Bill Bezdek
President

Breakfast Teams

<u>June</u>	<u>July</u>
Lynn Brown	Don Burt
David Cook	Don Chubb
Denise Cook	Mary Gowans
Gregg Cornell	Ed Krouse
Dennis Hall	Warren Miller
Greg Hover	Tom Scheehan
Mike Marhanka	Ralph Taggart
Tim Martinson	Richard Wilke
Jack Toman	

EAA Chapter 55

Board of Directors Meeting, May 7, 2008

President Bill Bezdek called the meeting to order at 2441 UTC (7:41 p.m. EDT).

Secretary's report: Bill Bezdek suggested that the term included in the sentence, "Welding **demonstration** to be given by Chuck Hacker, to be changed and the sentence to read, Chuck Hacker will **teach** various welding techniques. Also, Chuck Hacker is a Board of Director member, instead of member in attendance. Also, Sharon Hacker is not on advertising committee. Advertising members: Vicky Vandenbelt and Bill Bezdek. Secretary's report approved as corrected.

Treasurer's report: Approved as written.

Young Eagles: Saturday, May 10, 2008 is the date for the Everett Middle School children Young Eagles flights. Plans already prepared and ready for implementation.

May 17, 2008: This is the big one to fly the 6th graders from Mason Middle School, time from 8:30 a.m. to about 4:30 p.m., so there is a need for two additional 4-place aircraft to serve about 150 children. May 31, 2008 is alternate date in case of inclement weather.

Dawn Patrol/Fly-In/Drive-In, June 15, 2008: \$1500.00 be allocated to cover the costs of this event with expected 400 people to attend. Motion seconded by Chuck Hacker, carried.

Bill Purosky indicated that he has enough hot dogs that may be provided to pilots of military aircraft. Bill Bezdek moved that we provide free dinners for Warbird pilots and crew members Al Spalding seconded, carried.

MAD, August 17, 2008: Budget to be determined.

Oshkosh camping: Bill Purosky has space available. See B. Purosky if you plan to attend Oshkosh this year.

Tables and chairs: Vicky Vandenbelt to provide info re: another choice as our first choice of color not available. Doug Koons suggested we make a decision and purchase ASAP, hopefully before Dawn Patrol and MAD.

Roof repairs and hangar door: Doug Koons reported that he needs about 12 people to volunteer for this summer's planned event. Door frames, along with hinges ready to be installed. Roof repair to include replacement of drip edge, which was previously installed backwards! Bill Bezdek moved that \$200.00 be allocated for these repairs/paint including new drip edge, hangar door installation and paint for picnic tables, etc. And the hangar door is to be painted with asphalt paint. Motion seconded by David James, carried.

Christmas Party: Al Spalding reported that cost of last years dinner exceeded cost by \$0.78. 41 people attended in '07. Bill Bezdek moved to allocate a cost of up to \$27.00 per person for catering for 2008. Seconded by David James, carried. Merindorf's to cater event again in '08.

Meeting was adjourned at 0015 UTC (9:15 p.m. EDT).

BOD members in attendance: President Bill Bezdek; Sharon Hacker, treasurer; George Moore, secretary; David James, Chuck Hacker, Al Spalding.

Member in attendance: Doug Koons.

EAA Chapter 55

General Membership Meeting, May 10, 2008

President Bill Bezdek called the meeting to order at 1335 UTC (9:35 a.m. EDT).

Secretary's report: Corrections as indicated by the BOD minutes were made and secretary's report approved as corrected. Moved, 2nd and carried.

Treasurer's report by Sharon Hacker: Report approved as presented. moved, 2nd and carried.

Young Eagles: Everett School children, about 15 youngsters, arrived for their flights scheduled at 10:15.

May 17 is date for the BIG ONE, to fly the 6th graders from Mason Middle School. Doug Koons reporting that we still need more volunteers to handle ground crew and flight safety line positions, also car parking monitoring. We will also need volunteers for the June, July, and August YE events as well. Sign up sheet will be available for these events as well.

Welding class to be taught by Chuck Hacker at his home shop, 2751 Parman Rd, Dansville on Saturday, June 7. There will be free food for those volunteering help during MAD.

Jim Andrews, who is working with Oshkosh crews to do electrical work on new buildings to be completed before the 2008 Fly-In/Air show reports need for additional help from those wishing to arrive early at Oshkosh one week or several days before the event to volunteer some very needed help.

Camping Oshkosh: See minutes from BOD minutes.

New Business: Vicky Vandenberg offers thanks to Dick Wilke for making a mounting board to display materials that Vicky has in her possession for advertising/display purposes, etc.

Old Business: Latest report from our attorney: no insurance coverage for Chapter 55 hangar for aircraft stored therein, so each aircraft owner is responsible to carry insurance for his/her aircraft stored there.

Our thanks to Jim Spry who has a friend who has requested suggestion to help promote the auction to raise money for "Center for Independent Living." Jim suggested that perhaps one of our pilots could fly two people for a ½ hour flight as PR for this event. David James has volunteered to fly the two people to be rewarded in this way. Thanks David and Jim for some good PR.

Al St. George presented some information re: EAA recommendations for first flight procedures. Info available.

Bob Smith picked up some family service radio transceivers for our use. Good for communication during fly-in/MAD, YE events.

Bruce Bennett invites anyone interested in helping with Ford Tri motor restoration in Alma to join the crew.

Meeting adjourned at 1407 UTC (10:07 EDT)

Our special speaker for today is Dr. William McUmber, subject: Pilot Weather Service.

TIDBITS 2007

By Vickie Vandenberg

DICK & BARB BACON - 60th WEDDING ANNIVERSARY:
EAA members are cordially invited to join Dick & Barb as they celebrate at an Open House to be held on Thursday June 26th from 1:00 to 4:30pm at the Holt Presbyterian Church (Holt Road & Aurelius Road; 2021 N. Aurelius Road; Holt). Wedding vows will take place at 3:00pm. Refreshments will be served. Your presence and good wishes are the only gift desired.

WELCOME NEW MEMBERS:

Our two newest members are Dave Courey and Gregory Harris. Welcome aboard!!

YOUNG EAGLES and MASON AVIATION DAY FLYERS:

We have a supply of flyers at the hangar. Please feel free to take them to post at any airport. And, if you could post at your workplace, your church, group meetings and/or any community bulletin boards you know of – we need to spread the word!!

STILL LOOKING FOR INFORMATION:

I am working on completing the Chapter files with copies of old newsletters and/or copies of minutes for all meetings. I have some records that go back as far as late 1974 ... if you have any information or newsletters or meeting minutes from 1974 or prior – could I borrow them to make copies?? Contact Vickie Vandenberg

I am also looking to complete a file identifying our "Past Presidents". If you served (or recall who served) during the years of our Chapter, please fill me in!!

RELAY FOR LIFE JUNE 13 & 14:

Karen Merindorf heads up a team for Meijers-Mason. She will be selling luminaries for the event. She also invites all members to come on out to the Michigan Trap Shooters range during the Relay event.

Always remember to sign the airport register!

Young Eagles

By Doug Koons

Hi Everyone, We only had four 6-grade kids show up from the Mason middle school on Saturday 5/31. All of them had a great time and a great airplane ride. I want to thank everyone who came to help. We had enough help to handle 150 kids or more if they had come.

Our next Young Eagle Rally is 6/14 from 9 to 3. Please come for breakfast and help with this event. We can always use more help even if you did not sign up and remember we always have fun.

I would like to congratulate two of our YE pilots who have made it to new mile stones. Bill Purosky has now given over 100 Young Eagle rides. Erne Lutz has now given over 250 Young Eagles rides.

Hope to see you all on Saturday. Thank you, Doug

Pat Saylow provided his plane to demonstrate a preflight inspection for these Young Eagles.



Young Eagles later took a flight with Steve Houghton.



Notes from Cape Juby

By Terry L. Lutz, Chapter 55 Flight Advisor

During gym class at West Junior High School, particularly when the weather was bad, teacher Dale Metz would sometimes show us films about WWII. Narrated by Walter Cronkite, there are two things I remember about them. One was “Kowing Kommercial”, a strange message that appeared at the beginning, and the other was footage of a fighter pulling up and doing a victory roll. The airplane was a P-51, and maybe that’s why I have, for all these years, been rather fascinated with the Mustang.



With the throttle cracked about an inch, prop forward, and mixture at cutoff, I held the starter engaged for 4 propeller blades, and then moved the mag switch to Both On. As the Packard V-1650-7 Merlin crackled to life, I reached down and moved the mixture lever to lean, advanced the throttle just a bit and the Merlin settled down to a steady idle. The long awaited journey of discovery was about to begin.

The airplane I would fly was Crazy Horse 2, which was built-up specially for Lee Lauderback and Stallion 51 Corporation. They now have two dual-controlled Mustangs, which they use for training, demonstrations, and Heritage Flight displays with USAF aircraft. Lee, and the organization he began some 20 years ago, have become the “keepers of history”. They set the standards for training and operation of the Mustang, and in doing so maintain the history, and work to keep Mustang operations as safe as possible. It takes a lot of people working together to make it work, for parts, advice, and mutual support.

When I scheduled the flight, I filled out a sheet with my background information and sent it along with an insurance waiver. My mind was pretty much fixed on flying from the rear seat, but right from the start Lee said that with my test pilot background, his insurance would allow me to fly from the front. It was a very pleasant surprise, giving me the pilot perspective as it might have been to the fighter pilot. What I was hoping to do is learn as much as I could about why the airplane was so effective in combat during WWII.

Lee’s preflight briefing and cockpit demeanor were absolutely superb. The briefing covered the entire flight, with details injected as necessary. For example, to understand how the locking mechanism of the tail wheel functioned, he had an example on the table to look at. In the airplane, he asked me the starting procedure, and then the fire on start procedure, (which was memorized), before I began the start sequence. He provided instruction when necessary, and paced it out so well, it was like we had always flown together. Because he was so relaxed, I was relaxed, and had the opportunity to do perhaps some of the best evaluation flying I have ever done.

After starting on the ramp in Kissimmee, we taxied across the field for takeoff on Runway 24. Turns on the ground with tail wheel steering require plenty of lead time if you want to accomplish the turn without tapping the brake. Normally, the stick is held aft. If you need to make a tight turn, the stick goes forward to unlock the tail wheel, and the turn is accomplished with brake and a little power. During taxi, you have to S-turn to see what’s ahead, which is very important to avoid hitting a smaller airplane ahead. Other than planning carefully for turns without brake, I found taxiing to be completely predictable for an airplane of the Mustang’s size and ground geometry.

Prior to run-up, I closed the canopy with a very well designed crank and lock system. A slotted disk on the canopy crank accepts a key when the lock is released, so you can lock the canopy in nearly any position, including full closed. Run-up and checklist procedures were straightforward and similar to any airplane with a constant speed prop. I set the rpm at 2300, which is engine rpm, and not prop rpm. The prop turns slower with a ratio of 0.491:1 due to the gear reduction drive.

For takeoff, I pushed the power up to 2300 rpm, released the brakes and set power at 40 inches manifold pressure. With the airspeed moving past 50 knots, I moved the stick forward to raise the tail, and pushed the power up toward 55 inches mp. As you might guess, there is a lot going there! One thing you read about in text books, but seldom really get to see is the effect of engine torque (not p-factor) as the nose comes down to a level attitude. It is very noticeable. Also, the amount of throttle travel required to set 55 inches was more than I expected. At 110 knots, I applied a little back pressure on the stick and the airplane flew easily off the ground. Once safely airborne, I reached down and raised the gear handle.

The major controls for the Mustang (stick, throttle, trim wheels, flap handle, and gear handle), were designed for intuitive and rapid use. The throttle is mounted on top of a rectangular box. On the aft edge of the box is the flap handle, and on the front lower edge of the box is the gear handle. You cannot mistake the two. Raising the gear requires you to lean forward, almost to go head down. The gear handle must be moved slightly down and inward to remove it from the down detent, and then be moved up and into a similar up lock detent. The flap handle can be operated completely blind, due to its unique shape and location. However, you have to count the detents when operating them in the blind. The controls and markings in Crazy Horse 2 were nearly identical to the way they were in WWII, and looked essentially new.

Setting climb power at 46 inches mp and 2700 rpm, I trimmed for a climb speed of 150 knots. The airspeed indicator Lee has installed in the airplane is drum-pointer type, and it is calibrated in knots instead of mph as it was in WWII. It turns out that 150 knots is the “universal speed” for the Mustang: best climb speed, best engine out glide speed, and gear speed. I leveled off initially at 2500’ to remain under the Class B airspace south of Orlando, and when clear began a climb to 6500’. I started checking roll response during the climb, and found that it takes little effort to get the roll going, and the roll stops fairly quickly with the stick centered, but it doesn’t stop abruptly. This keeps the stick forces light in roll, and very little compensation is required to stop it on a point.

At level off, I started with aileron rolls, left and right. With very little rudder compensation, I could complete the rolls (left and right), with very little heading change at roll out. Lee pointed out that you lead the roll with just a bit of rudder to keep the ball centered at all times. I learned throughout the flight that anything you do (turns, climbs, rolls, acceleration, deceleration) requires rudder or a change in rudder trim. Not a lot of either, but enough to have to train yourself to become skilled at it. Bud Anderson, a triple ace in WWII, noted that he always kept the airplane in trim with rudder to get the most accurate gun shots. I believe it. I measured the roll rate conservatively at 100 deg/sec, but with the airplane unloaded and at higher speed than 200 kts, the roll rate would prove to be higher.

Since it was Friday afternoon, the Air Force wasn’t using the bombing range at Avon Park (this range has been in continuous use since WWII). We called the range controller and they cleared us into the range. They could monitor other traffic for us while we maneuvered in the range airspace. We started at 6500’ and went into low speed maneuvering, beginning with stalls. With the power set at 24 inches, I raised the nose and began slowing at about 1 knot/sec. Lee is very sensitive to the airplane and could feel it begin to “talk” at about 92 kts. I could definitely feel buffet in the elevator at 82 kts, with the stall occurring consistently at 75 kts. The Mustang has plenty of natural stall warning prior to the stall. With the ball centered, there was a slight wing drop to the left at the break, but more about that later.

I put the flaps down to 20 degrees and repeated the stall entry. There’s a little less warning here, perhaps 5 kts. Buffet begins about 72 kts, and depending on what you do with the rudder, the stall occurs at about 65 kts (remember these speeds when I talk about flying the pattern). I was doing pretty well with the rudder during the stalls, so Lee said we should intentionally do some stalls with the ball ½ out to the R and L. With the ball off center, the Mustang will roll predictably and crisply away from the ball at the stall, to almost 90 degrees of bank during a normal recovery. Recovery is easily flown with forward stick and opposite rudder, then aileron. Stalls with Gear Dn and Flaps 50 provide buffet beginning at 70 kts and a stall at 66 kts. Recovery is very quick and very predictable. We did some accelerated stalls with Gear Dn and Flaps 50, beginning at 110 kts. Once again, there was good buffet warning, and an almost instant recovery with forward stick. These are excellent characteristics if you make a bad mistake in the traffic pattern.

When flaps are retracted from 50 to 30, there is very little pitch change. When the gear is retracted there is a tiny up then down, with a decel then accel (both pretty small). However, when the flaps are retracted from 30 to UP, there is a noticeable nose up motion, that you need to compensate for with trim and nose position.

Accelerated stalls in combat-type maneuvers have very little buffet before a wing drops, but there is enough there to let the pilot know when to stop pulling. We started at 150 kts clean, and entered the stall about 140. Recovery is quick with little pitch or bank change. Entries at 180 kts gave higher buffet and quicker recoveries. With speed at 160 kts, I could keep the airplane right on the edge of buffet and continue to maneuver. With flaps at 20 at the same speed (maximum speed with Flaps 20 speed is way up there at 220 kts), I could noticeably increase the turn rate and still maneuver on the edge of buffet, a really nice combination in combat.

Then we did some aerobatics, and I started with 210 kts and did a victory roll. Not for myself, but for all those who have gone before us, and made the hard sacrifices in the name of freedom. I followed with a barrel roll, and then using 260 kts, began a

series of over the top maneuvers (loop, immelman, Cuban 8, Split S). During recovery from the Cuban 8, I did the roll maneuver almost completely unloaded to zero g, and at noted the roll rate to be closer to 120 deg/sec. One thing you notice with large changes in airspeed is the changes in rudder trim required. So if you were maneuvering in combat, you would be constantly on both the pitch trim and rudder trim. The good thing about the Mustang design is that pitch trim, just aft and below the throttle is easily moved and takes about ¼ inch of movement each time you need it. Rudder trim is just above the pitch trim, and takes just a touch to keep the airplane in yaw trim. At higher speeds following a Split S, you can feel the ailerons getting stiffer, which the fighter pilot would notice in combat.

Since we were at Avon Park, we used their bombing targets and set up for some simulated air-to-ground weapons delivery passes. The first one targeted a small building from about a 30-degree dive. Beginning at about 5,000', I kept an imaginary piper on the target down to about 2500', and was really surprised how perfectly I could track the target as airspeed increased. There was absolutely no tendency to "banana" in the dive due to increasing airspeed, as I have seen on other airplanes. I really think a target could be accurately tracked to within one or two piper widths, with very little effort.

From Avon Park, we headed over to Bartow Airport, which coincidentally was used to train P-51 pilots during WWII. We flew up initial at 250 kts for the left break, beginning at 1000' agl. At the break, I set the power at 25 inches and as airspeed slowed, set the flaps at 20. On the downwind, I pulled the nose up to slow below 150 and lowered the gear. At the base turn point, I had slowed to 130 and set the Flaps at 30. "Speed 130, Flaps at 30". Rolling out of final, I set Flaps at 50 and retrimmed for 110 on final. On short final, Lee had me bring the power back to almost idle, which I was sort of reluctant to do, since I did not know how fast the airplane would slow down. But it wasn't a problem, as the airplane has plenty of speed margin, even at 100 knots and idle power (recall that with Gear and Flaps down, I noted the stall in the 66-70 knot range).

What I was really pleased about is that the Mustang holds airspeed very solidly. As long as you are trimmed and have both pitch and power set, airspeed is wired. It easily holds 130 kts with Flaps 30, and 110 knots with Flaps full. The only thing that was unusual was convincing myself to pull off power a little sooner. You have a good feel for the runway when the gear touches down, because it is a bit compliant then steady once you're on the wheels. Pitch attitude for touchdown is near!

Now the dreaded question about the Mustang: Is it really dangerous on the go-around? It can be, unless you fly it with common sense and by the numbers. You've got a big problem if you instantly push the power up to 61 inches from slow speed, then at the same time retract the flaps (you lose lift) and retract the gear (operates slowly if you try to raise flaps and gear at the same time, which causes lots of drag), and then rapidly lower the nose to compensate for pitch up with flap retraction (causes gyroscopic yaw to the left when you are already holding a lot of right rudder). But if you put on about 46 inches, retract the flaps to 30, retract the gear, then bring

flaps up again in 10 degree increments, trimming each time, it's a non-event. I did just that, and found the airplane to be very predictable, and react just as Lee described it. Altogether, I did two touch and goes and a go-around at Bartow, and a full stop at Kissimmee.

After flying the Mustang, (besides wanting to fly it again!), I found several reasons why the airplane was so effective in combat. First, it was very well designed. In the cockpit, controls and switches are intuitively placed so they can be used easily by feel and with minimum effort. The stick is long, but meets the hand nicely, and requires just the right displacement and force to quickly maneuver the airplane with minimum pilot compensation. Visibility is excellent, over the nose for sure, and notably to the side and rear. Trim controls are perfectly placed so the pilot can move the throttle and trim controls in minimum time with little movement on the trim wheels. Stalls give ample warning and a predictable break. Flaps are useful to increase turn rate at low speed. Aerobatics, as an indicator of combat performance, are easy to perform with great precision, as noted from the tail camera on the tape of our flight. During simulated air-to-ground weapons deliveries, the Mustang tracks with unusual accuracy. And finally, the airplane is very predictable in the traffic pattern, and like many WWII era airplanes, it stays wired on the numbers with the right combination of pitch, trim, and power.

While this might be just one pilot's opinion, there were scores of 19 and 20 year olds who were thrust into combat with little more than a few hours in the airplane. I studied essentially the same flight manual they did when I prepared to fly the airplane. The result for them was the same: a solid, predictable and lethal performer in the air that was easy to land when they were cold, tired, and a bit shaken with what they saw in combat. I can only speak about one fighter among many, but compared to a lot of fighters I have flown, I felt instantly at home in the Mustang.

If you can ride out the stormy weather there in Michigan, you might find some good weather ahead. Always remember to help your fellow pilot when the help is needed (particularly Jack Toman with his carburetor problems!). And with all the Young Eagle flying we do, remember to be very, very careful out there. Safety, as they say, is no accident.

SUN 'N FUN - Lakeland, Florida, April 8 - 13, 2008 **By Dick Wilke**

I attended this year's Sun 'n Fun for the first three days, going to educational Forums in the mornings, and volunteering afternoons at the EAA Tent at the main entrance. Evenings I camped out in my station wagon in the parking lot.

This was my first experience as a volunteer, and I would certainly recommend it to anyone who can stay more than a day or two. Mostly, I greeted visitors, checked to see that their EAA membership was up to date so that they qualified for daily or weekly discounts, or referred them to a nearby both where they could update their membership. Or, if they had forgotten to bring their card, obtain a slip verifying that their membership was current.

I also learned how to use the computers to sell admittance wristbands, but since I had not brought the glasses I use for computers, this proved to be a challenge. Many of the volunteers do this every year, some even using their vacation time give their time to EAA at Sun 'n Fun. An interesting bunch!

The Forums were offered daily from 9:00 AM to 1:00 PM, and were held in ten large tents near the entrance, with a large bulletin board listing the times, subjects to be presented, and names of speakers. Dean Vogel of Lockwood's Aerotechnical Institute in Sebring, gave an excellent talk on ROTAX 912 Engines, covering the design and construction features, proper lubricants, coolants and fuel to use, and some basic operating and maintenance information owners should be familiar with. I purchased a Carburetor Synchronization Kit from Lockwood Aviation Supply later at the show.

Doug Stewart's topic was "Beyond Basic GPS". He said that your GPS must have a current database to avoid FAA enforcement if your aircraft should be involved in an accident. He advocated inserting waypoints and routes to avoid restricted areas and TFR's, rather than simply punching Go To. He suggested planning descent to pattern altitude, and using the E6B capability to plan your flights.

Jim Lauerman, president of AVEMCO, said that they will insure student pilots while taking instruction in their Experimental airplanes, which some companies are unwilling to do. He explained that the World Trade Center loss totaled \$5 billion, whereas the previous year's losses were only \$1.7 billion, resulting in the escalating aircraft insurance premiums we have all experienced.

Bob Mackey of Falcon Insurance, agent for EAA Insurance, discussed the types of coverage available. He recommended full coverage for the first year of an experimental aircraft's flying, but said an owner might consider having only Ground and Liability coverage in later years if cost is a problem. They are now able to cover powered parachutes and weight shift trikes.

Jasen Clemons of Zaon portable collision avoidance systems (PCAS) spoke about their XRX and MRX systems. He discussed active and passive systems, and how they are used in air transport, military, and general aviation aircraft, and explained that a transponder is the key to collision avoidance. Having experience two close encounters with other aircraft, I was sufficiently impressed with his presentation that I decided to purchase a PCAS MRX from Pilot.Mall.com at the show.

Bill Evans, a retired airlines inspection supervisor from Canada, gave two talks on "Aircraft Inspection for Homebuilts". He emphasized that you need an Inspection Form for type, in order to do a thorough inspection, and that these can often be obtained from the kit manufacturer. He said to use your eyes, touch, and smell, and a mirror and flashlight, and to INSPECT EVERYTHING, and write down every defect. He listed a number of standards for replacing worn components,

and discouraged the use of questionable items purchased at fly marts.

I still found time to look at a lot of airplanes, especially the large number of Light Sport aircraft on display near the entrance, and also the RANS exhibit, and wander in and out of the four large hangars where all the vendors' booths are located. And I begged off a little time in the afternoons to catch a few of the air show performers. What a great show!

Wednesday evening Tom Poberezny, EAA President, gave a talk about the spirit of EAA, and told about the plans for this year's AirVenture, and the planned expansion of the facility. A video entitled "Oshkosh: The Spirit of Aviation" was shown, and copies were given to the audience. Plans for the new Founders Wing at the museum were presented by a member of the Board, and Founders Paul and Audrey Poberezny were brought up to the stage. Paul told us about the early days of EAA, and Audrey shyly said a few words. They have saved much of the early correspondence and records of EAA dating back to 1953, and even the furniture they used in their basement. Much of this will be on display in the Founders Wing. I had met Paul last year at Sun 'n Fun, and went up to tell him and Audrey how much EAA had meant to me. I said "If it hadn't been for you and EAA, I never would have built my airplane, and had so much enjoyment". They were both very gracious, and seemed to appreciate my comments.

On Thursday evening AOPA's Phil Boyer discussed the challenges facing our members, and presented several of his key staff people who told about activities in their area of responsibility. One of the main topics was funding of the FAA and user fees. Phil's talks are always very upbeat, and you have the feeling that AOPA is on top of all of the issues that face aircraft owners in today's world.

SYNCHRONIZING THE ROTAX 912 SERIES ENGINES By Dick Wilke

Recently, following the completion of the Annual Inspection on my RANS S-6S Super Coyote II, Jack Toman and I synchronized the Bing carburetors on my ROTAX 912UL engine. Because the engine has a carburetor on each pair of two cylinders, ROTAX emphasizes the importance of synchronizing the carburetors to avoid undue vibration and wear on the reduction gear. They recommend that this be done every 100 hours.

Because the instructions which came with my Synchronization Kit from Lockwood Aviation Supply were rather brief, I looked up the recently offered video on the ROTAX web site, and attempted to make notes on the important points. This proved to be difficult, so I set my micro cassette recorder in front of the computer screen, and recorded the spoken instructions, and transcribed them on my word processor, so I could use them, step by step, while performing the task.

Jack was a great help, since he had already had some experience doing this. We tied down my airplane on the north side of our hangar, and tied the tail eye to the bumper hitch on my station wagon, to prevent the airplane moving while the

engine was being run. We followed the instructions carefully, and when we had finished the engine ran smoothly, and on static run-up reached 5200 rpm, whereas before it had read 5100 rpm.

ROTAX recommends that the idle be set at 1800 - 2200 rpm, and that it should never be run below 1400 rpm, to avoid damage. We had set it at 2100 rpm, and upon flying the airplane, found this was too high, so I adjusted it downward to allow a lower rpm while taxiing and landing. I would be happy to share a copy of my transcribed instructions with Chapter members who need to synchronize their ROTAX engines.

CLASSIFIED

FOR SALE: 1995 Bounder 29 ft. Motorhome. 55,000 miles. Good shape; has a few minor issues we can discuss. Has loads of Oshkosh experience. \$18,000 or make offer. Contact Dick Bacon 517-694-0715

FOR SALE: 1971 Chevrolet ¾ ton PickUp. 74,000 miles; 396 CU big block. Was my dad's truck. Make offer. Contact Dick Bacon 517-694-0715

FREE: Unisys Printer with extra ink cartridge. Can be seen and/or picked up in the meeting room.

OSHKOSH – ROOM AVAILABLE: see Bill Purosky

WANTED: copy of Flying Magazine - February 2006 issue. Contact Fred Honhart as he needs this issue to complete a set to donate to the library.

FOR SALE: 2 Lots in Sugar Springs Residential Community approx. 10 miles north of Gladwin MI. This 4000 acre development has two lakes, paved roads, sanitary sewer system, underground electric, weekly garbage pickup, 18 hole championship golf course w/ pro-shop, indoor swimming pool, restaurant and pub, beach areas with toilets and showers, 2 tennis courts and a 3500 ft. grass airstrip. These two lots (approx .40 acres each) are improved, drive/culvert, 5" well, electrical service set, sewer line already in. Only \$15,900 for both. Contact Doug Simons 517-626-6790

FOR SALE: Mason Aviation Day T-shirts; lots size L & XL \$10.00 each.

FOR SALE: 1948 Ford Tractor, 8N with a 12 volt Werner electric hydraulic snowplow, tire chains and grill guard. Runs

very good. Asking \$2500. This price includes the original manual. Contact Warren Miller, 517-214-2656.



FREE TO GOOD HOME: Sporty's Electronic E6B Flight Computer. Like new. Retail value \$90.00; will give to anyone who would like to check it out. See Vickie Vandenbelt

FREE: Collection of EAA Sport Aviation magazines; all issues 1959 thru 2000. All organized in boxes by years & includes some indexes by Bergeron. One condition – entire collection must go. Contact Bart Smith 517-676-2146

FOR SALE – Wicks one inch thick seat cushions, blue, with front map pocket. Set of 2, like new. \$120.00. Contact Patrick Salow 517-565-3178

WILLING TO LOAN – Jigs & Fixtures for a Zenith 701. Currently on loan but contact Chuck Hacker 517-740-9222 if interested for a later date.

FOR SALE – Avon Products & Natural Beauty Soaps. For a copy of the latest brochure, contact Deanna McCreery McAlister 517-596-2506 or visit www.naturalbeautysoaps.net/deanna

WE COULD HAVE INSERTED YOUR AD HERE!
Contact Warren or Vickie for the next edition!

POCKET CALENDAR

6/14/08 Young Eagles; 9am-3pm

6/15/08 Mason Dawn Patrol; 7:00am-Noon

7/12/08 Young Eagles; 10am-2pm

7/28/08 to 8/3/08 AirVenture

8/9/08 & 8/10/08 Thunder Over Michigan

8/9/08 Young Eagles; 10am-2pm

8/17/08 Mason Aviation Day; 7am-4pm

8/23/08 & 8/24/08 EAA Mid-Eastern Regional Fly In

12/12/08 Chapter 55 Christmas Party

For additional listings see www.eaa.org and www.mdot.state.mi.us and www.flyins.com