

# CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

DECEMBER 2006



## Meetings are the 2nd Saturday of each Month

EAA Chapter 55 Hangar - Mason Jewett Airport – 643 Aviation Drive, Mason, MI 48854  
Pres: Bill Purosky 214-2729 Vice Pres: Tom Botsford 663-1318 Treas: Sharron Hacker 623-6476  
Secr: Del Johnson 676-2756 Editor: Warren Miller 393-9385 (all Area Code 517) [www.EAA55.org](http://www.EAA55.org)

### Climb and Maintain Flight Level 55

Christmas is just around the corner and our Chapter Party is this Saturday, the 9th. I am looking forward to having a great meal and a great time with some great people.

For those members who missed last month's meeting, the Chapter elected Bill Bezdek, Debbie Groh, Chuck Hacker, Dave James and Vicki Vandenberg as our **New Directors** for the next two years.

We also wish to thank the **outgoing Directors** for their service to the organization. They are: Doug Koons, Gary Long, Deanna McAlister, and Jack Toman. So thanks again to those who have served and welcome to those who are willing to serve our Chapter.

Another thing that the Christmas season brings to our Chapter is that our yearly dues need to be paid from this time until February 14, 2007 in order to stay in good standing with our Chapter. These are currently being collected by our Treasurer, Sharron Hacker and will be collected by Doug Koons in her absence. You may pay in cash or check and a receipt will be given to you.

For the airplane owners in the Chapter, we have one space open in our hangar for use by a member. An airplane may be housed in the hangar for \$70 per month which is a very reasonable rate compared to other hangars on the field. If you are interested, contact me at your earliest convenience.

Since the next edition of this Newsletter is to come out in January of next year, I take this opportunity to wish all of the members of Chapter 55 a Happy Holiday and a great New Year.

Bill Purosky, President

### Breakfast Teams

I've been getting some questions about the duties and times for the breakfast teams and thought that this would help.

If you are listed on the team for the Saturday Members meeting, you need to contact the other members of the team to schedule the work. One member needs to be in the meeting room at 6:30 am on Saturday to get the coffee going. We are currently making about 40 cups of each, caffeinated and decaffeinated. Once they are on, they take about 45 minutes to be drinkable.

The rest of the crew should plan to arrive at 7 am. If there are enough members who are coming, you can designate two to do the cleanup. The grill should be off at 9 am and clean up should start so as to be finished when the members meeting starts.

I will have directions printed so the team can follow them to get the job done. None of the work is difficult or beyond the capabilities of any member. If you are on the team and have questions, email me at [bpuro@aol.com](mailto:bpuro@aol.com) or call me at 517 214 2729. Good cooking!

Bill

### BREAKFAST W/CHAPTER 55

<u>December Team</u>	<u>January Team</u>
Kirk Curtiss	Kyle Bradford
Carl Dalrymple	Lloyd Brown
Don Frank	Ken Drewyor
Max Hall	Gordon Hempstone
Pat Salow	Donald Keith
Ralph Taggart	Steve Kent
Jon Wiesinger	George Moore
	Jim Sawyer

## **EAA Chapter 55**

### **Board of Directors Meeting, November 8, 2006**

Bill Purosky called the board meeting to order at 7:30pm. Attendees: Bill Purosky, Tom Botsford, Jack Toman, Doug Koons, Dave & Debbie Groh, Sharron Hacker, Gary Long, Bob Smith, Dick Bacon and Del Johnson. →The minutes were approved as published in the newsletter with two corrections. 'Proxy volts' was changed to 'Proxy votes' and 'T-47' was changed to C-47. A request was made to provide more detail on the corrections to the Sept. 2006 Board of Director's minutes. This involved clarification of the motion involving the scholarship funds. The statement reads: 'The first grant was for a \$1,500 for the Pilot program and the second was for \$1,000 for the Management program'. The October Board of Director's meeting minutes were approved with corrections. →Sharon reported \$16,836.72 of cash assets at the end of October with a net income of -\$1,262.63. The treasurer's report was approved. →There are five candidates for Board of Director positions. If there are more than five nominees then there will have to be a paper ballot and the Board will have to select three Chapter members to oversee the election. →Gary Long's name will have to be removed from the bank's list of authorized signatures. →Debbie will head up the interim Renovation Work Committee. →Leo Holmes is in Sparrow Hospital with a head injury. →Del Johnson requested that we develop a budget at the start of the calendar year. Bill and Sharron will work at drafting one. →The remaining portion of the meeting was devoted to planning for MAD 2007. The Board is considering bringing in the B-25 and possibly one Aerobatic group. The ability to bring in these planes is dependent on outside contributions. The next MAD planning meeting is scheduled for January 17<sup>th</sup>. →The meeting adjourned at 9:05.

## **EAA Chapter 55**

### **Business Meeting, November 11, 2006**

Meeting called to order at 9:30 by the president, Bill Purosky. →Fifty-two members were present. →Secretary's report was accepted as written and the Treasurer's Report was accepted as presented. →The annual Chapter membership dues are being accepted (\$25 for a single membership and \$40 for a Family membership). Dues must be paid by February 14, 2007 to remain in good standing. →Doug Koons reported on the roof repairs. Sixteen members helped put the new roof on and after recent rains, there are no leaks detected. Connie Stewart brought pulled pork BBQ for sandwiches and a thank you was extended to her. →Breakfast crew was Dick Riisberg, Rich Dallas, Mark Stanton, Frank Balluff and Steve Houghton. →Elections were held. Since we only had 5 members running for 5 positions on the board of directors, a show of hands vote was taken instead of a secret ballot. By unanimous decision, Bill Bezdek, Debbie Groh, Chuck Hacker, David James and Vicki Vandenberg were elected to the two-year term of directors. Doug Koons, a current Board Member, suggested we thank those outgoing members of the Board for their past service. The officers and all members present offered heartfelt thanks. →We are still looking for a member to take the responsibility for the Monthly program at our meeting. See Bill Purosky if anyone is interested. →The two recent recipients of the Newberry Scholarship fund were present and gave brief talk about their aspirations in the aviation industry.

Matt Davis and Jason Fry both thanked the Chapter for its generous scholarship. →Sharron Hacker gave an update on the Christmas Party and mentioned that the date for your money to be in to attend the event is November 20<sup>th</sup>. It will be held on December 9 at Vevay Township Hall. →AOPA stand on user fees was talked about and references to Terry Lutz's article in our newsletter were made. Read the article in the Nov. newsletter. Write your congressman and let them know how you feel about fixing a current system that is not broken. See Bill Purosky for additional info about doing this. General Aviation will certainly take a monetary hit if these are allowed to go through. →When George Moore showed up to help clean and wax the Mason Fire Department equipment he was recognized by the Fire Department as a representative of Chapter 55. A picture and letter from the Fire Department is on the bulletin board in the Chapter meeting room. George was thanked by all Chapter members present. →Bill reported that a \$10,000 donation was made to the Chapter to support the Mason Aviation Days event coming in August 2007. Bob Smith is the event Coordinator and reported that we will need as many members as we can get to be actively helping put this event on. →Tom Botsford, our VP of the Chapter, has been elected as a member of the Board of Directors for Mason Chamber of Commerce. Congrats to him! It is nice to have a member of our chapter representing us on the local scene. →Steve Kent, a long time member of the Chapter, has completed his study and practical test and is now a full-fledged Sport Pilot. →Congratulations were given by all. →Bill Bezdek talked about the proposed trip in late February or early March to the Dayton Air Museum in Ohio. It was suggested and agreed upon that travel by bus was the best way to go. We could do it in one day by leaving early and arriving as the museum opens and stay until closing. This would allow us to keep the costs lower so more members may attend the event. Bill will check on spousal activities available for those spouses who are not aviation inclined. →Bad weather kept the folks from Three Rivers Airport from coming to the meeting to present a program about Sport Aviation. Will try for December's meeting. Bob Smith showed a CD about becoming a pilot. →Dave James talked about a book, "How to Build an Airplane." See Dave if you are interested. →Dick Riisberg mentioned that Dan Schiffer may be interested in talking to the Chapter about the Ford Trimotor that is being refurbished in Ionia. Help is needed to restore this historic bird. →Al St. George suggested that the Chapter should have a go to guy (or gal) for information about Sport Pilot. He volunteered to be that person and was accepted as such. →The meeting was adjourned at 10:15 AM.

## **TIDBITS, MAY 2006**

**By Vickie Vandenberg**

Chapter 55 Christmas Party:

The Party is this Saturday. See you there!

## **Young Eagles**

**By Doug Koons**

Nothing to report for this month.

## Notes from Cape Jubj

By Terry L. Lutz, Chapter 55

Flight Advisor

A couple of weeks ago, I flew formation with a Corvette! You read it right, a Corvette. No, it wasn't carrying it in my airplane. The Corvette was the French response to the Learjet, and was built in France back in the '70s. This particular Corvette was operated by a film crew, in a role very similar to the one Clay Lacy has been very successful with in the US. The subject of filming? A wake turbulence test that Airbus had set up between an A340 with smoke generators, and two other airplanes that could measure the strength of the wake vortex that trailed behind the airplane.

I was in the A340, and we would fly at FL120 maintaining 150 knots with full flaps, on a pre-briefed track toward two other airplanes heading in the opposite direction. One was a Falcon 20 at FL140, and the other a Fairchild Metro flying at FL100. Both had LIDAR (Light Detection and Ranging) systems which could measure the strength of our wake vortex. At 10 miles, we would turn our smoke on, and the other airplanes would fly over and under the smoke trail and take their measurements. The purpose of the test was to prove the concept, so that we could carry out similar tests with the A380 next year.



So what is wake turbulence, anyway? We've all felt it. Sometimes it's a surprise, a total surprise. "Somebody was there..." is the comment heard in the cockpit. You knew it wasn't the atmosphere, but couldn't see the other airplane. At other times, you know instantly what it is, because you can see the airplane you're following. For one light airplane following another light airplane, it's just a footnote in the logbook. But wake turbulence is worthy of a lot more discussion.

Glider pilots are well aware of the wake, as it must be avoided while being towed aloft. We are taught from the beginning a technique called "boxing the wake". Whether you prefer the low tow position (below the wake), or the high tow position (above the wake), it is a mandatory and necessary exercise during training, and a good instructor will insist that you practice.

Boxing the wake usually begins above the wake of the tow airplane. It's a lot like flying formation, except that the controls are sometimes uncoordinated to make the box. While there may be some variations in the maneuver, basically what you do with the glider is fly sort of a tethered formation around the tow airplane's

wake without getting into it. The last part of the exercise is to fly from the low tow position, up and through the wake to the high tow position. The wake at 150' or so behind is fairly powerful, so you want to fly smoothly and through it and up to the high tow position.

You can experience wake turbulence following a steep turn if you do it perfectly level. About a year ago, I was out doing slow flight in the Luscombe Silvaire Bullet. What I was actually doing was trying to see how steeply I could turn in level flight at 40 knots. This was great fun, and I went around and around right on the edge of the stall. Then something unusual happened. The airplane began to roll to the inside of the turn. I put in opposite aileron all the way to the stop, and couldn't stop the roll. I began to lose altitude, and quickly regained aileron control.

What happened was that in smooth air, I was flying directly into the vortex shed from one of the wingtips. It was forcing the airplane to roll, until I flew out of it. The vortex from the wingtip is a part of wake turbulence. The rest of the wake is simply stirred up air as the propeller and airplane pass through it.

While wake turbulence is more of a nuisance than a threat when flying behind another light airplane, other match-ups can result in serious consequences. When flying air-to-air combat behind another fighter (is there any other place to be during air-to-air?), you have to be careful not to fly through the other guy's wake. He might be pulling 8 or 9 gs, and his wake is going to be quite powerful. Airplanes have been bent, and pilots injured during those wake encounters. Not to mention that it ruins your shot opportunity! Another case is when a smaller airplane is flying behind a larger airplane. The wake turbulence, including the vortex itself, can easily result in momentary loss of control. This is bad news if you are close to the ground.

Wake has always been a concern in airline operations. When a big airplane is heavy and slow, it produces a powerful wake, which must be avoided. Back when the B747 was introduced, there was a lot of concern about how close other aircraft could follow it. Extensive studies were performed, and the industry adopted separation standards for takeoff, cruise, and approach. The standards were based on weight, and wide-bodied aircraft like the B747, and those that followed, were designated as "heavy" at the end of their call sign.

With the introduction of the A380, a lot of concern was expressed about the wake it would produce. The analysis methods used 30 years ago were based on gross weight, speed, and wing area. Logically, it would seem that the A380 would produce a stronger wake than the B747. Using modern technology and instrumented airplanes, we can find out how strong it really is, and make a direct comparison between the two airplanes. In July 2006, Airbus did just that. They flew the A380 wing tip to wing tip with a B747 at FL370. Contrails were used to locate the wake, and a Falcon 20 flew above to measure the wake vortex strength with LIDAR. An A318 (a 118-seat airplane) flew behind them and intentionally entered the wake, alternatively, of both airplanes, beginning at

4nm behind and drifting back to 20 nm. The tested the strength of the encounter, the strength of the A318, and the strength of the pilots' underwear.

Results indicate that the wake characteristics of the A380 are similar to the B747, in strength, location, and size. As you might expect the wake is a bit stronger, and the vortices a bit farther apart than the B747. Wake encounters by the A318 show similar effects in terms of bank angle upset, roll rate, and g-loads. Airbus would like to continue these tests at lower altitude. Since there are no contrails at that altitude, a smoke system is necessary to visualize the wake, which we are testing now on the A340. It is the largest test program ever undertaken to measure the wake characteristics of commercial aircraft.

It will be Christmas soon, so instead of testing the wake behind some other airplane, fly safely and just stay out of it. That will insure that you have a pleasant holiday season at home. The weather is pretty cold now, and snow will make an appearance from time to time. So remember your cold weather procedures, and as always, never forget to help a fellow pilot when they need it.

### **CLASSIFIEDS:**

**FOR SALE** – Chapter 55 Hats, \$15.00 each, see Sharron Hacker

**FOR SALE** – Zodiac inflatable boat 10'2" limited edition. Wood floor, 1100 lb. Capacity, up to 10 hp outboard motor. Excellent condition. \$800.00 Contact Tom Botsford 517-256-4381

**FOR SALE** – Franchi 12 gauge semi-auto shotgun in new condition. Contact Tom Botsford 517-256-4381

**FOR SALE** – removed avionics (Olds Forge Flyers 172 and Archer), two Bendix/King K170B radios (one with VOR, other with VOR-G/S). Also included is a power converter unit. Units removed due to upgrade. Excellent equipment for an experimental aircraft, units operational when removed. Sold as/is \$200.00. Contact Fred Honhart 517-675-7694 or [honhart@msu.edu](mailto:honhart@msu.edu)

**FOR SALE** – 1989 Dodge hi-top camper van. Has logged many happy-camper hours with many more left. Take it camping, Oshkosh, SunNFun – a great second vehicle. Good maintenance record. Only \$4900.00. Contact Ted Lakin 517-256-2322

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

**WILLING TO LOAN** – Jigs & Fixtures for a Zenith 701. Contact Chuck Hacker 517-623-6476

WE COULD HAVE INSERTED YOUR AD HERE! If you have a FOR SALE or TRADE or WANT TO BUY or NEED TO BORROW or FREE TO GOOD HOME, etc. – we have space in our newsletter. Contact Warren or Vickie for the next edition!

**POCKET CALENDAR**

**12/7/06 Mason Area Chamber of Commerce Holiday Party Mixer “Taste of Mason”**

**12/9/06 Chapter 55 Christmas Party; Vevay Town Hall**

**2/2 & 2/3/07 Great Lakes International Aviation Conference; Novi, MI**

**4/17-4/23/07 Sun-N-Fun; Lakeland, FL**

**7/23-7/29/07 AirVenture; OshKosh, WI**

**8/25-8/26/07 Mid-Eastern Regional Fly-In; Marion, OH**