CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

MARCH 2011

Wingtips

Meetings are the 2nd Saturday of each Month
EAA Chapter 55 Hangar - Mason Jewett Airport – 643 Aviation Drive, Mason, MI 48854
Pres: Ken Vandenbelt 589-5051 Vice Pres: Bill Purosky 214-2729 Treas: Al Spalding 676-3370
Secr: Vickie Vandenbelt 589-5051 Editor: Warren Miller 214-2656 (all Area Code 517) www.EAA55.org

Climb and Maintain Flight Level 55

April showers bring May flowers. OK, so when will it get warm??

It was very sad to see the damage at Sun-N-Fun. Thankfully no one was seriously injured and weather improved. But, to see the work of many home builders reduced to a wad of material and damages to other aircraft is just heart breaking.

I hope you enjoyed Brian VanWagnen's program on air space as much as I did. I know I learned and re-learned more than a few things. Brian did a great job, with some humor injected throughout. Let's try to get him back again sometime next year?

This month Dr. Greg Pinnell will be our guest speaker. He is going to talk about the common problems in medical certification. Dr. Pinnell does a great job and is a wonderful resource for medical information.

Board of Directors Meeting
April 6, 2011, 7:00 pm.
Chapter Membership Meeting
April 9, 2011
Breakfast 8-9 Meeting 9:30 am.

Don't forget, we will be hosting an MDOT seminar at our May meeting.

On Saturday, we hope to have signup sheets available for those who can help with our First Responders Seminar on May 21st; our Young Eagle Rallies; and the Dawn Patrol on June 12th. Our next Events Planning Meeting is scheduled for Wednesday, April 27th and suggestions or helping hands are always welcome.

See you all Saturday,
Ken Vandenbelt, President

Breakfast Teams

April	May
Louis Bacon	Bill Bezdek
Don Burt	Lewis (Bob) Clark
Don Frank	Margie Clark
Deanna McAllister	Chuck Hacker
Don McAllister	Sharron Hacker
George Moore	Gordon Hempstone
Gary Nesbitt	Jay Komnenic
George Spencer	Chris Long
	Al St. George

EAA Chapter 55
Board of Directors Meeting, March 9, 2011

✈Meeting was called to order at 7:05pm. ✈Directors present: Ken Vandenbelt, Al Spalding, Vickie Vandenbelt, Joe Madziar, Doug Koons, Jim Spry, Dave James. Absent: Bill Purosky, Warren Miller, Ed Search. ✈Secretary's Report dated 2/9/11; Doug Koons moved to approve; supported by Jim Spry; all approved. ✈Treasurers Report dated 2/28/11; income from dues; breakfast donations; & rents; expenditures for rent & utilities; Doug Koons moved to approve; supported by Joe Madziar; all approved. Al advised that the errors in our Quick Books program have been corrected by the consultant as well headings and 8 upgrades; also, he has completed IRS tax report for 2010. ✈Doug Koons advised EAA55 has $1,140 in YE credits for use by Dec 31st; and, everything is set for the Stockbridge School YE program. ✈Membership; discussed non-renewed members. ✈April potluck? no decision. ✈Expenditure; might think about getting a DVD player for our movie nights; but we do have laptop that can be used. ✈First Responders; discussed invitations.

✈Event Planning; discussed CAP & Boy Scout assistance; porta-potties. ✈Discussed Consumers utility charges, particularly the increase in the gas cost. Weighed charges relative to the lease agreement, along with chapter support of builders. Consensus was hanger rent is still a good deal even if utility costs allocated as set in lease. Doug Koons moved to charge builders hanger tenants 100% of the Consumers gas charge and 50% of the Consumers electric charge per the lease agreement effective 6/1/11; supported by Dave James; all approved. Al will work up a letter to provide to tenants. ✈Doug Koons moved to adjourn; supported by Joe Madziar; meeting adjourned at 8:24pm.

EAA Chapter 55
Gen'l Membership Meeting, March 12, 2011

✈Meeting was called to order at 9:30am; approx. 36 members & 14 guests present. ✈Following the National Anthem, President Vandenbelt thanked our Joe Madziar & Doug Koons for stepping up to cook & clean due to the lack of a breakfast team. ✈Guests were introduced. ✈Secretary's Report dated 2/12/11; motion to approve, second, all approved. ✈Treasurers Report dated 2/28/11; motion to approve, second, all approved. ✈YE; Doug Koons discussed Stockbridge class. ✈Announcements: ✈Petition for N/S runway. ✈Event Flyers now available. ✈Karen Meirndorf is doing Relay for Life. ✈Motion was made & meeting adjourned at 9:45am. ✈Brian VanWagnen presented our program on Air Space

TIDBITS ~
By Vickie Vandenbelt

YOUNG EAGLES DATA SHOWS BIG IMPACT FOR PROGRAM: In the just-mailed March issue of *Sport Aviation*, EAA chairman Tom Poberezny highlights some of the data that shows how significant the Young Eagles program has been since Tom and inaugural Chairman Cliff Robertson flew the first Young Eagles at the EAA fly-in at Oshkosh in 1992. Of the more than 1.6 million Young Eagles flown since those first flights, some 1.1 million of them in the U.S. are now between the ages of 15 and 34. Within that age group, some of the findings are enlightening and a cause for optimism. For instance, a Young Eagle is 5.4 times more likely to earn a pilot certificate than an American age 15 to 34 who has not taken a Young Eagles flight. In addition, 7.3 percent of all active pilots in the U.S. ages 15-34 were previously Young Eagles. This percentage will only grow as more of these Young Eagles reach the typical age range (late 30s to early 50s) where participation in aviation accelerates.

EVENTS PLANNING MEETING: Wednesday; April 27th at 7:00pm.

RECYCLE: We recycle styrofoam cups - the box is next to the coffee pot stand.

YOUNG EAGLES
By Doug Koons

On March 17th Deanna McAlister, Bill Purosky, Dave James and I met with the 5th grade reading class at the Stockbridge elementary school. We each gave a short presentation on different areas of aviation and answered alot of questions. All the kids, teachers and the four of us had a great time. The teachers are now trying to set up a field trip to Mason so the kids can go on their Young Eagle rides. I want to thank Deanna, Bill and Dave for helping me with this great outing.

Gary Long has been trying to set up Young Eagle flights for the kids at High Fields. The director called me a few days ago and after answering the rest of his questions about our program, he has agreed to let the kids that do well in their program, reserve rides. I hope to get their rides started in the next month. Thank you Gary for all your work on this project.

I have rescheduled the group of students from the Leslie class for their Young Eagle rides in May. They are the group who came out to the airport last fall and did not get their rides due to the over cast weather. Their teacher and I have scheduled the afternoon of May 11, 12, or 13th (depending on the weather) from 3:30 to 5:30pm. If anyone can help with this group of kids please let me know.

Thank you, Doug

NOTES FROM CAPE JUBY
By Terry L. Lutz, Chapter 55 Flight Advisor

To accomplish my A320 and A330 annual training and checking events, I spend a few weeks each March in Miami. This year, I was also able to travel to Dallas to do a post-maintenance check flight on a corporate owned A319, fly to Michigan for a weekend, and do an evaluation flight on a very interesting LSA. As it turned out, my weekend in Michigan was the same weekend as the March meeting of Chapter 55. It was nice to see everyone again, and enjoy another gourmet breakfast!

Since the weather that morning was fairly good for early March, I started pre-heating the engine on Sweet Nancy Lynn before breakfast. I was hoping to do a little flying, then change the oil, and in effect take the first step on the 2011 condition inspection. After breakfast, I went back to the hangar, and as one might expect, the nice clear morning was turning grey. After takeoff, I found a nice hole and climbed on top into the bright sunshine to burn some horizontal and vertical paths in the sky. I stayed on top of the hole, which drifted SE toward Stockbridge, then descended again and returned to Mason under a completely overcast sky.

After removing the cowl and getting the warm oil headed into the waste oil bucket, I went back to the Chapter meeting room to take part in a very interesting program by Brian VanWagnen on how to interpret the airspace markings on aeronautical charts. It was quite challenging and presented in a manner that pulled us into the details so that we could get a new grasp on things we knew in the past, and that are different today with changes in the airspace.

To make things even better, there were a number of Michigan aeronautical charts available, so everyone could participate right where they sat. I have to say that this type of program (thank you Mr. Bill Purosky!!) is ideal for our chapter and for every aviator. It is exactly the kind of program we need to improve our abilities as pilots and to grow the chapter. Then, to make the day one step brighter, a young guy came into the room and announced that he had just soloed for the first time! An awesome day, all things considered.

You have no doubt heard the exasperating news from the Sun 'N Fun gathering in Florida last Thursday. A huge super cell expended all its energy, furry, and possibly a tornado right over the airport, resulting in the loss of many airplanes. Thankfully, there were no human losses, although there were some injuries, and a few people remain hospitalized. After spending years building an airplane, only to see it lost to nature in a few short minutes, the next question is a difficult one: where to go from here? Repair, rebuild, or replace will be the answers, and the homebuilt community is already reaching out to help.

What has been lost is tiny compared to a life, or compared to the devastation suffered in Japan during the recent earthquake. So it doesn't hurt too much to see that in a few short days some good humor has sprung up after the storm:

- It's rebuildable…..we found the data plate.
- I can help. How much duct tape should I bring?
- Zenith Aircraft lost all their airplanes:
- "We were ground Zenith for the tornado".
- The three Pietenpols stacked together became
- a "Pieten-pile".
- The official board game of Sun 'n Fun: "Twister".
- Weather report for Friday: Sunny with partly twisted
- sheet metal.
- The Fly Market will be flooded for the next few days.

The very next day, a guy who had just finished and painted the tail feathers for his RV received a call from his wife. He had hung the beautifully painted horizontal and vertical tail on wall in their living room. "Sorry to tell you the bad news, but the horizontal tail fell off the wall and is badly damaged". While the poor guy's heart was still reacting to that mighty overdose of adrenalin, she added "April Fool!"

One year ago at Sun 'N Fun, Piper delivered the first PiperSport LSA to three pilots from the Miami area: Charlie Carlon (retired Delta Captain), Brian Garhammer (formerly with American Trans Air), and Mike Morduant (pilot and Veterinarian). Charlie and Brian are both training instructors in Miami at the Airbus Training Center, and the airplane is kept at the Tamiami Airport where Brian operates a full-service training school.

I had a morning free, so Charlie offered me the opportunity of a flight to evaluate the airplane. It was sunny with the usual south Florida cumulus clouds and wind from the east at 10-15 knots. Charlie had already spotted the airplane from his shade-port parking spot to the flight line. We did the walk-around on the all-metal airplane, and opened the canopy, which is hinged at the front. With the airplane parked facing downwind, and a helicopter running nearby, the canopy was acting like a sail, so I had to hold the airplane from moving forward until the helicopter lifted off.

Looking around the cockpit, I noticed that there was plenty of room for storage behind the seats, with access essentially wide open. That alone is a big plus over other airplanes. Cockpit entry is easy by first stepping on the seat, then by letting yourself down into the nicely reclined seats with your hands on the console and canopy rail. Other than the stick, there nothing in the way that could be accidently bumped. There is no seat adjustment other than cushions, but the rudder pedals with toe brakes are easily adjustable. Tall pilots take note.

You need to be ready to start the engine once the canopy is closed and locked, so you can get some airflow into the cockpit. In bright sunlight, there is also a sunshade that slides forward to shade the upper portion of the canopy. Start up for the Rotax 912 engine was normal, and the engine was already warm from repositioning to the ramp. The cockpit was equipped with Dynon D-100 EFIS display, a Dynon EMS D120 engine monitoring system, and for navigation they are using a Garmin Aera 560. Combined with an autopilot, this was nicely equipped airplane for sport cross-country, or for training. It was by no means "over-equipped" for its mission.

Taxi is via differential steering, so you need to be moving a little for the steering to take effect. Once moving, steering was very positive, and I found I could easily do a 180 turn next to another airplane in the run-up area (downwind to upwind as well).

Max takeoff weight for the PiperSport is 1320 lbs, the maximum for an LSA. The airplane can carry 30 gallons of fuel, and with Charlie and me and with slightly less than full fuel; we were close to maximum takeoff weight. The best fuel for the airplane is Premium unleaded auto fuel, which is purchased at a station just off the airport. Ethanol content must carefully checked, and on average it's about 6%. If 100LL is used in the Rotax, the oil change interval goes down from 100 hours to 50 hours. The airplane is equipped with a ballistic recovery system, and the deployment handle is within easy reach of both pilots, halfway between the instrument panel and the console.

As briefed, once you get to takeoff speed, it takes very little force or stick travel to rotate and fly. Some pilots might find this objectionable, but by the second or third takeoff, it will become predictable, mainly because there's no instability present, just light forces and small deflections. The recommended climb speed after takeoff is 65 knots, yielding a rate of climb of between 800 and 1000 fpm. For visibility, a slightly higher speed is better at a slower rate of climb. No right rudder pressure was required in the climb, but there was some left rudder required during cruise. We headed out over the Everglades and found a nice clear area among the clouds for our air work. Pitch trim is very positive, and the trim position indicator is found on the Dynon D-100. We took a look at out of trim stick forces by trimming half way nose up from the neutral trim position. Releasing the stick gives a very quick pitch up, which is consistent with light forces and small stick travel. It is something to remember in a mistrimmed, or trim runaway situation.

Once level at 3500 feet, with power set at 5000 rpm and 23.5 inches MP, we were cruising at close to 110 knots IAS on 4.9 gph. Control forces are light and smooth, with small stick deflections to make the airplane move as you would like it to move. I did the standard dynamic evaluation in the pitch and roll axes with following results. Starting in trim 105 kts (electric trim is on the top of the stick) and raising the nose to intentionally lose 10 kts, the airplane fully recovered to level flight in three phughoid oscillations. The short period mode required only small inputs, and was found to be deadbeat. The spiral mode was interesting. If you trimmed carefully and released the stick in 20 degrees of bank, the airplane would begin banking more, then stop at 25 degrees. There was no tendency to diverge, which is a good feature for instrument flying (which this airplane would normally not be doing) and for training, which is part of the mission. Roll characteristics are very nice, and the roll stops quickly, but not abruptly when the stick is released. The dutch roll exhibited 4-5 oscillations, which is normal this type of airplane.

The fun part of evaluating airplanes is always slow flight and stalls, because each design is a little different, and you can learn so much. Slow flight at 50 kts was very good with little rudder required in each direction. We could have easily done the same thing at 45 kts. With idle power and in clean configuration, the first indication of the stall is light buffet and a slight pitch down at 38 kts. There is still a lot of stick travel at the stall, and if you bring the stick fully back, there is only a mild increase in buffet. But most importantly, there was no tendency to yaw or drop a wing at the stall, and full aileron control, without much adverse yaw, is retained.

We continued with stalls at cruise power, then with full power. With both entries, the stall occurred at 35kts (clean), and there was consistently no tendency to yaw or roll, which I found remarkable, considering that the rudder is above the horizontal stabilizer and the elevator is full span without a cutout for the rudder. Visually, you would think that the rudder would suffer from some blanking at the stall, with a loss of directional stability. But it was absolutely not the case. Considering the low speeds involved, the PiperSport reacts very predictably at the stall, and is more like a heavier airplane than an LSA. From a design standpoint, a broad bubble canopy usually means a few aerodynamic problems, but that is not the case with this design.

During the descent back to the pattern at Tamiami, Charlie pointed out that the throttle has a full time friction system, and that when moving the throttle, he normally raises it slightly, then places it down into a series of small notches that hold it in position. The armrest helps a bit to stabilize your arm and give you very precise throttle control. The stick is a bit high, and I noticed that when Charlie was flying, he tended to fly with a few fingers at the bottom of the stick grip. We took a quick look at the Dynon systems on each side of the panel, and found them rather intuitive to use in most respects. One thing I like is that you can customize your checklist on the Dynon, depending on how the airplane is equipped, and the mission of the airplane.

The PiperSport has a nice control feel in the pattern, and is very predictable. Flaps are lowered using a rocker switch where the panel meets the console. The flap position indicator is mounted right next to the switch. There is a small pitch down effect when flaps are lowered, giving nice visibility over the nose on final. The final approach is flown at 60-65 kts with touchdown at 55 kts. The final, flare and landing are easily accomplished, and I never had to increase control travel to make the airplane move the way I wanted it to at low speed. The main gear provided a positive feel for the ground at touchdown and during rollout. During post flight inspection, the main gear is a composite leaf design that should hold up very well in the training environment. With training in mind, Piper made a few changes to the nose gear to strengthen it.

Overall, I was thoroughly impressed by the design and flight characteristics of the PiperSport. Visibility (plus no canopy bow), relined seating, runway performance (both takeoff and landing), margin between cruise speed and stall (better than 70 kts), and excellent control at the stall, are in a category by themselves. All things considered, one might say that the PiperSport is the F-16 of the LSA community.

But times change, and a lot has occurred since Piper delivered this first airplane, N767PS to Charlie, Brian, and Mike. Not because of the storm at this year's Sun 'N Fun, but because of a storm of another sort. The original design for this LSA came from the Czech Aircraft Works in the Czech Republic, with the name SportCruiser. Piper proposed changes to the design, then entered into an agreement to market the airplane worldwide as the PiperSport. The agreement was terminated earlier this year, after delivery of about 55 airplanes. There are another 10-20 airframes that could be assembled as PiperSport aircraft. Piper will maintain their customer support network for the aircraft.

Taking liberty with something Lee Iacocca once said, “If you can find a PiperSport, buy it, because you are not likely to find a better LSA”. And if you find one of your fellow aviators at the airport who is obviously in need of assistance, kindly lend a hand. It’s the only way to make our community work, even after the devastating effects of the weather.

FROM THE FLIGHT SURGEON

By Gregory Pinnell, MD
Senior AME/ Senior Flight Surgeon USAFR

Fatigue continues to be problem in the aviation industry as evidenced by the recent spate of ATC controller sleeping incidents. Unfortunately it is still a significant factor in General Aviation accidents as well. Sometimes hard to define, fatigue leads to poor vigilance, difficulty in concentration and poor decision making.

Combating fatigue involves many factors including getting adequate rest before flying, reducing stress and avoidance of some medications.

The FAA has a good brochure on fatigue available through their website www.faa.gov. Bottom line is if you think you are too tired to fly, you probably are. Fly Safe!

CLASSIFIED

AIRVENTURE: Fly to Oshkosh; $120.00 Contact Dave James 517-4101-4959 or davejamesj@sbcglobal.net

HANGER SPACE: EAA55; Deanna 517-851-7047 or Lloyd 517-589-8619

FOR SALE:
2009 Kitfox; Model 4-1200; Rotax engine; many extras. Jack Toman 517-882-8331.

KIS TR-1, Subaru Legacy engine; GPS nav/com; many extras; cruise 170 mph. George Moore 517-536-1034.

Rans 2007 S6S Coyote II; Rotax 912; many extras; $49,000. Ernie Lutz 517-676-4601

Hunting Camp; 1/8 share; 157 acres; Houghton Lk State Forest/Roscommon. Dick Bacon 517-230-7808

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

Telex ProCom 200 noise canceling headphones. Bart Smith 517-676-2146

Generac Generator; $350.00 Greg Hover 517-676-5126

Yesteryear Aviation; new surplus hardware; 517-676-4416

Avon Products; Deanna McAlister 517-596-2506 and Emu Oil Products; Vickie Vandenbelt 517-589-5051

POCKET CALENDAR:

Apr 9 = Program: Dr. Gregory Pinnell

May 14 = Program: MDOT Seminar
May 21 = EAA55 "First Responders" Seminar

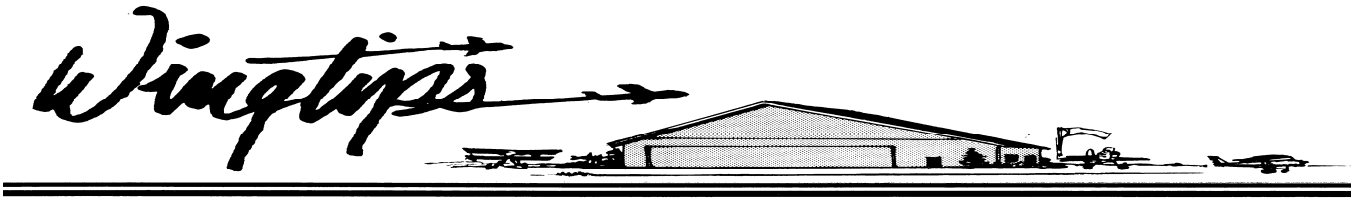
Jun 11 =Young Eagle Rally
Jun 12 =EAA55 Dawn Patrol 7am-Noon

Jul 9 =Young Eagle Rally
Jul 23-24 = Thunder Over Mich/Blue Angels
Jul 25-31 AirVenture

Aug 13 =Young Eagle Rally
Aug 20 =Mason Aviation Day 7:30-4:00

Sep 10 = Program: MDOT Seminar

Dec 11 = Xmas Party; Eldorado; 4:00pm; Sunday



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