

CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

MAY 2011



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 & Maintain Flight Level 55

Finally, some warmer weather - let's head to the airport!

Doug, Vickie & I attended the "Bring Your Kid to Work" Event at Pratt & Whitney. We were set up in the back conference room and not many visited us. But, then we moved out into the shop area across from the CARDS display which was better. We talked to some of the kids - but to be honest, the parents and the P&W workers were the most interested. Good for PR and we did come away with ideas for "next time".

Vickie and I had the pleasure of attending the 50th Anniversary Banquet of EAA Chapter 113 at Plymouth/Mettetal Airport. It was a wonderful evening; the guest speaker was EAA President, Rod Hightower, who is always informative. Chapter 113 put together an outstanding brochure outlining the history of their first 50 years. I brought back a copy for all to see.

Board of Directors Meeting
May 11, 2011, 7:00 pm.
Chapter Membership Meeting
May 14, 2011
Breakfast 8-9 Meeting 9:00 am

This month our program will be hosting an MDOT Seminar - "What The Pros Do &

You Should Too". We will start our chapter meeting as soon as possible after 9am in order to get the seminar going by 9:30am. Hopefully, it will be a nice day to have it out in the hangar !!

The Saturday following our meeting will be the First Responders Seminar. If you can help out, please sign up.

And, June is around the corner with our first Young Eagles Rally and Dawn Patrol Pancake Breakfast.

Hope to see you Saturday, Ken Vandenbelt

ATTENTION: For those traveling 127 South to Kipp Road - remember that the Kipp Road bridge is out for replacement. Exit at Cedar Street and come thru Mason to get to the airport.

NOTE: Work Volunteer Sign-Up Sheets will be available at the May meeting for our First Responders (5/21); our Dawn Patrol (6/12); our Mason Aviation Day (8/20) and our Young Eagle Days. Sign up and participate often! Great excuse to spend the day at the airport with your aviation friends. Plus our DP & MAD events raise funds - without which EAA55 could not award Newberry Aviation Scholarships to aviation students each year !!

Breakfast Teams

<u>May</u>	<u>June</u>
Bill Bezdek	David Cook
Lewis (Bob) Clark	Denise Cook
Margie Clark	Dave Groh
Ralph Gregus	Dennis Hall
Chuck Hacker	Greg Hover
Sharron Hacker	Mike Marhanka
Gordon Hempstone	Tim Martinson
Chris Long	Jack Toman
Al St. George	



April Breakfast Cooks: George Moore and Don & Deanna McAlister

EAA Chapter 55 Board of Directors Meeting, April 6, 2011

→Meeting was called to order at 7:07pm. →Directors present: Ken Vandenbelt, Al Spalding, Vickie Vandenbelt, Joe Madziar, Doug Koons, Spry, Dave James. Absent: Jim Spry, Warren Miller, Ed Search. →Secretary's Report dated 3/9/11; Doug Koons made a motion to approve; Joe Madziar second; all approved. →Treasurers Report dated 3/28/11; Bill Purosky made a motion to approve; Dave James second; all approved. →YE: Doug Koons reported the trip to Stockbridge was great; working on contacts with Leslie & Highfields. →First Responders; Delhi will have abt 30; invitations going to others. →Events Planning; next meeting April 27th. →MAD: Doug Koons is arranging golf carts for cost of delivery. Dave James made a motion to approve up to \$125.00 for delivery of golf carts; Vickie Vandenbelt second; all approved. Doug Koons & Margie Clark are contacting scout groups to work. →Vickie Vandenbelt made a motion to approve up to \$550.00 for the purchase of two 10x20 canopies like the one we have; Dave James second; all approved. →Vickie Vandenbelt made a motion to approve up to \$175.00 for the DP porta-potties; Joe Madziar second; all approved. →Vickie Vandenbelt made a motion to purchase airplane Crazy Bands for cost not to exceed \$150.00; Dave James second; all approved. →Doug Koons made a motion to adjourn; Bill Purosky second; meeting adjourned at 7:46pm

EAA Chapter 55 Gen'l Membership Meeting, April 9, 2011

→Meeting was called to order at 9:30am. →Following the National Anthem, President Vandenbelt thanked the breakfast team. →Guests were introduced. →Secretary's Report dated 3/12/11; motion to approve, second, all approved. →Treasurers Report dated 3/31/11; motion to approve, second, all approved. →Dave James advised that he is working with Joe Pirch to nominate Terry Lutz for National Member of the Year (EAA Major Achievement Award). Anyone with info to share please contact Dave. →EAA National has sent paperwork for any members interested in working at OshKosh to prepare for AirVenture. →First Responders Seminar is set for May 21st. →Next Events Planning meeting is set for April 27th. →Al St. George announced Shreveport hat their first Young Eagles program. →Karen Meirndorf announced she is participating in Relay for Life 3rd weekend in June & is selling luminaries for \$10 each. →Motion was made & meeting adjourned. Dr. Gregory Pinnell was our program speaker. Joe Madziar, acting secretary

TIDBITS ~ By Vickie Vandenbelt

IVAN ROWELL's HISTORICAL DOCUMENTS: I was thrilled to be contacted by Ivan's daughter, Judith. She had discovered about four boxes of Ivan's EAA documents that had been put away in a storage shed. I have been going thru the information & was thrilled to find many newsletters & minutes from the 70's and 80's. We still don't have much history for the years prior to 1970 but I am less than halfway thru the files so I still have my fingers crossed.

RELAY FOR LIFE: member Karen Meirndorf is once again heading up a team for the Mason Area Relay for Life. Please consider the purchase of a luminary or two to support this worthy cause. Info is available at the chapter or by contacting Karen.

BART SMITH: is still undergoing physical therapy at the Ingham County Medical Care Facility. He does not have a direct line or Internet access but he can be reached on his cell @ 517-285-1518. He is in a new room - if you care to drop him a line or visit: Bartlett Smith; Room #250; Ingham Co. Med. Care Facility; 3860 Dobie Road; Okemos, MI 48864

SPORT AVIATION COLLECTION: Bart is again attempting to find a home for his collection of SA dating from 1958 on. All are in boxes. If know one steps up to secure this collection, we will try to arrange to bring the set to EAA55 for "Free Info" at our Young Eagle Rallies & other events.

MERFI (Mid-Eastern Regional Fly-In): I don't know if Chapter 55 has ever participated in the fly-in for our region - but this is it. MERFI is scheduled for Sept 10 & 11 at Urbana OH. There is on-airport camping, pancake breakfasts and much more. See what's new with the B-17G restoration project & the new items in both the Champaign Aviation and Grimes Flying Lab Museum. Participate in the workshops, forums and fly market areas. A special 9/11 dedication ceremony will be held Sunday afternoon. MERFI is the second oldest regional fly-in in the United States. Contact info can be found on fly-ins.com

CARDS: The Capital Area Radio Drone Squadron has a calendar of fun filled events for the summer. Warbirds & Classics Over Michigan will be held June 4th & 5th. The Giant Scale Event is scheduled for July 16 & 17th. Then their Helicopter Fly-In will be held July 23 & 25th. The CARDS Field is located at 8328 Otto Road, Grand Ledge & Spectators are welcome.

AVIATION APRONS: Irene Shurson from Iowa City, IA contacted me to see if we would be interested in some aviation aprons for our chapter. We have plenty but I told her I would pass on a note to you all in case you might be interested in some themed aprons. Visit www.alloccasionaprons.com

ST. JAMES CATHOLIC CHURCH (MASON)

RUMMAGE SALE: is set for Saturday, May 21st. If you are spring cleaning & have any gently used items to donate, please consider St. James.

SALE, SALE, SALE: Pop .35; chips .20; cookies .20; ice cream .10 (Sorry - but granola bars, candy bars, & water remain at regular price) This is our liquidation sale!! Inventory will be turned over & prices return to normal sometime after our May meeting. Hurry in & pick up a treat each time you're at the airport.

YOUNG EAGLES

By Doug Koons

The 5th grade reading class from the Stockbridge Elementary School has decided that they will not be able to have a field trip to our chapter for their Young Eagle rides. I was sorry that this project did not work out for them. I did extend our Young Eagle pamphlets and information to all the kids and their teachers so their parents can bring them to one of our rallies this summer.

This summer, we have three Young Eagle Aviation Days planned. They are all scheduled on our meeting dates, June 11th, July 9th, and Aug. 13th. I will have signup sheets for volunteers at the May meeting. Please sign up for the dates that you can help with ground crew duties and pilots with planes, or call me to sign up to help at (517-676-5001). Also, all pilots please review the EAA requirements for you and your airplane in order to keep everyone safe while flying the Young Eagles.

Thank you, Doug

NOTES FROM CAPE JUBY

By Terry L. Lutz, Chapter 55 Flight Advisor

A few important dates in aviation history will always be remembered. For example December 17, 1903, the day the Wright brothers flew their first powered flights, and perhaps May 21, 1927, the day Lindbergh touched down at Le Bourget in Paris after the first non-stop trans-Atlantic flight.

There are many, many other dates that are important, but lost in time.

For those of us here at Airbus, February 22, 1987 is a date that changed the history of our company. It is the date that Airbus A320 msn 0001 took to the air for the first time.



More than 24 years later, here is just some of the history of a magnificent airplane that we refer to here in Toulouse as simply “Bravo Alpha”. While many prototype airplanes are cast aside for the latest and greatest things the project designers have in mind, F-WWBA has been continuously in flight test since the day it originally flew. It has been used for aerodynamic improvements, engine testing, system testing, and for test pilot training. When I arrive at work and head for my parking spot, it is always exciting to see BA at its stand next to the abreuvoir (which in French means “watering trough”), and even more exciting to see my name on the schedule to fly this historic airplane.

Developing the all Fly-By-Wire A320 was difficult from many standpoints. Even though the cockpit operating philosophy was similar to the A300 and A310 aircraft, which were in production at the time, the use of specific control laws in the flight control computers and the introduction of a side-stick controller would require careful development. In fact, some of the flight-testing of both the side-stick controller and FBW control laws were accomplished on one of the Concorde development aircraft. The final challenge was certifying these new systems, because a new set of rules specific to the A320 had to be developed.

The test pilots for the first flight of F-WWBA were Pierre Baud, VP and Head of Flight Test, and Bernard Ziegler, Technical Director at what was then called Airbus Industrie. I have met both of them since arriving at Airbus in 2006. While Pierre Baud remains a striking presence as a consultant and pilot, Bernard Ziegler is secure in knowing that his vision and strong push for technical innovation has created a generation of aircraft at Airbus.

My first real flight-testing on BA was in February 2007. The CFM-56 engines (CFM International is a joint venture between the French engine manufacturer Snecma, and General Electric) had been modified with new internal components, so with these “tech insertion” engines, we took the airplane to Iqaluit, Canada for cold weather testing. On the westbound leg, we stopped in Keflavik, Iceland for fuel. On the return leg, we were able to fly non-stop back to Toulouse. With temperatures in Iqaluit below -25C (-13F), we did engine cold soak, cold starts, engine runs, and some local flying.

F-WWBA was also used as the primary follower airplane to do wake vortex testing behind the A380. It has become a 4-year, multi-flight program where this one A320 airplane has performed nearly 1,000 wake turbulence encounters behind the A380 and comparison heavy generators flying in formation with the A380. To accomplish this testing, the airplane was modified with a fin-mounted video camera, differential GPS, and special VHF communications links. As with stall testing, we flew the airplane with many of the FBW protections removed, to simulate a “generic” transport airplane in the ICAO Medium category. The last testing was accomplished in November and December of 2010.

Since then, the airplane has been upgraded with LCD displays to replace the original CRT units. It is equipped with a prototype ADS-B display, which allows the pilot to see the call sign, heading, altitude, and speed of all the airplanes nearby that are equipped with Mode S transponders. It was the prototype for testing the Head Up Display that is now used on the A380, and retains the HUD capability today. We recently certified an electronic flight bag screen that mounts on the sliding window, and the computer docking station that powers it.



Airbus is developing a newer version of the A320 we call NEO (New Engine Option). NEO will be an improved version of the A320, with new engines from Pratt & Whitney and from CFM International. These new engines will be larger in diameter, which will affect the size and aerodynamics of the inboard slat on the leading edge of the wing between the engine nacelle and the fuselage. One of the tests we accomplished last summer was with modified slat shapes to determine any changes in lift coefficient, which required doing a lot of stalls. To do stalls in a fully protected FBW airplane, we use the instrumentation system to temporarily allow testing at high angle of attack.

Airbus trained two Chinese test pilots last year, and I flew in BA with both of them to teach stall testing, and velocity for minimum control with engine out testing. Also in the last year, I have been involved in flight-testing of handling characteristics where individual spoiler panels have been extended asymmetrically. And we have been testing winglets on the airplane. To date, the airplane has had 4 different types of winglets tested, to the point where it was becoming difficult to adapt all

the different fasteners required to the existing holes at the wingtips.

With the announcement that Airbus would design new winglets for the A320, to be called “sharklets”, we knew that it would be necessary to completely re-certify the flight characteristics of the airplane. This will include stalls, handling qualities, speed for minimum unstick on the ground, and cruise performance testing, to name just a few. As a result, we needed to perform “baseline” testing on BA. One of the more interesting and demanding tests I performed in BA was baseline testing to determine the exact velocity for minimum control with one engine inoperative. This is done with an engine actually shut down (not at idle, as we do for training), and it is done beginning at 1500 feet agl. Minimum speeds reached were on the order of 110 knots in the approach configuration, which is very slow for this type of airplane.

With baseline testing completed, F-WWBA entered a 6-month working party to prepare the airplane as a NEO test bed. The first step was opening both wings at the wingtip to strengthen the structure to accept the loads produced by the sharklets. The second step was opening and modifying the rear fuselage for strength and to accept installation of the skid plate that will be used in the velocity for minimum unstick. For this test, the tail is flown down to where the skid plate just touches the runway, so that the airplane lifts off at minimum speed in the takeoff configuration.

When BA first went into working party, I met with the Test Flight Engineer who has managed all the difficult maintenance on this airplane over the last 15 years, Jean-François Azzopardi. We put on our required hard hats, and walked around the airplane as the technicians prepared to remove the horizontal tail. Then we found a window in the office space that overlooks the hangar, and took the attached photo at almost exactly the same spot and aspect (although not the same final assembly building) where the airplane was parked during final assembly in April 1986, just over 25 years ago.

Now with nearly 5500 flight hours and 2712 test flights to its credit, F-WWBA is once again proving itself to be so much more than just the prototype of an airplane that generated a family of modern aircraft. Once thought to be economically unviable, and that only a few hundred of the type would be sold, I flew A320 msn 4724 last week, A330 msn 1274 flew last week, and so did A380 msn 86.

And what of the future? After the sharklets and full envelope testing is complete next year, we envision that F-WWBA will become the test bed airplane for many of the enhancements expected to be in place for NEO. It may include testing of both the Geared Turbofan from Pratt & Whitney and the Leap-X engine from CFM International. We expect that this historic airplane will continue in flight test until 2015, when the A320 NEO makes its first flight and F-WWBA takes a final bow and fades into history.

I am going to say once again how important it is for everyone to have safety on their minds when flying. The year 2011 has already seen enough accidents to indicate that the trend continues in the wrong direction. Make it your mission, above all, to operate as safely as you can. Somebody once said, “The

air is good, stay away from the edges of the air". And make sure you to help your fellow aviators when you are standing on the solid edge of the air.

FROM THE FLIGHT SURGEON

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



A common question I get from pilots is "if I have a certain medical diagnosis do I need to report it yearly to the FAA?" The answer is yes. But not necessarily. Certain diagnosis such as many heart related disorders will likely need yearly documentation. But others such as hypertension, asthma and hypothyroidism only need documentation every two years along with your 3rd class medical.

The question that always follows is "how long will it take to get my medical back from the FAA once I provide the information to them?" That can depend. In many cases we can call your information in and get a telephone approval. In other cases we can summarize your case by email and get an approval to issue your medical that way. In most cases we can significantly reduce the wait time.

Questions on your specific aeromedical issue? We are as near as your phone or email. Fly Safe!

CLASSIFIED

AIRVENTURE: Fly to Oshkosh; \$120.00; Dave James 517-410-4959 or davejamesj@sbcglobal.net

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

WANTED: a good used 8-10HP outboard motor; 25" or longer shaft. And, a Garmin 396 or 496. Contact Dan Schiffer 517-862-6413

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. 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 Vandenberg 517-589-5051

FREE: Collection of Sport Aviation dating from 1958 on; All are in boxes. Bart Smith 517-285-1518

BEACON AVIATION RIDES: Mike Marhanka 517-485-9190/ Jim McFarland 517-944-7796; sirjames1@sbcglobal.net



Members at April Meeting



Ken Drewyor's Homebuilt Kitfox

AVIATION HUMOR

A pilot gets home late...

He left home about 8:30 a.m. to do some work in his hanger at the airport with his friends. On the way out the door he answered his wife's "what time will you be home?" question with "probably about 1:30, I'll have lunch at the airport."

1:30 came & went, 3:00 passed, 6:15, still not home, finally at about 7:00 pm he rolls in the driveway, and presents his wife with a pizza, and begins the apologetic story.

I finished cleaning the plane about 11:30, had lunch, and I started home, when alongside the road I saw this attractive girl with a flat tire on her car. I stopped to help, got the tire changed, and looked around for a place to wash my hands. She offered money, but I refused, so she suggested that I at

least allow her to buy me a beer. She said there's a tavern just up the road, and they have a restroom, you can clean up a bit. I agreed to stop, we had a beer, then another beer, then a couple more, and I realized that this girl was not only pretty, she was very friendly, and a good companion to spend time with. Before I knew it, we were in the motel next door having sex. And that is why I am so late getting home.

His wife looked him right in the eye and said "don't lie to me;

YOU WENT FLYING, DIDN'T YOU?

POCKET CALENDAR:

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

Sep 10 & 11 = MERFI (Mid-Eastern Regional FlyIn)

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