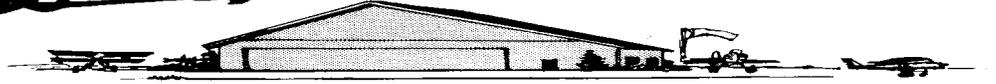


CHAPTER 55 EXPERIMENTAL AIRCRAFT ASSOCIATION

JUNE 2004

Wingtips



Meetings are the 2nd Saturday of each Month

Chapter 55 Hangar - Mason Jewett Field

Pres: Mike Arntz 694-4601 Vice Pres: Tom Botsford 663-1318 Treas: Gregg Cornell 351-1338

Sec: Drew Seguin 332-2601 Editor: Warren Miller 393-9385

Climb and Maintain Flight Level 55

PRESIDENT'S CHALLENGE

I, Mike Arntz, hereby challenge all Chapter 55 members to recruit one new member each by the December of the year 2004. The new member can be anyone and should be a national member or willing to join the national (Hint: your spouses or significant other are good prospects).

If you missed the trip to see the Ford Tri Motors, you missed a very interesting trip. When we arrived, there were two Tri Motors in various stages of completion -- one of which belongs to Kermit Weeks, owner of Fantasy of Flight in Florida and the other as I was told belongs to Eric Lindbergh who has a long history in aviation.

It was very interesting to look over these aircraft and the way they were constructed and the many similarities to the aircraft of today. After touring the shop we had a chance to poke around in the bone yard out back. There were a couple of T-28 remains complete with robin's nest and an agitated momma bird, a Beach 18, a Lear Jet less jets and many other parts just a fun place to look around.

After the tour, we were all invited to Tom Schroeder's parent's house for refreshments and great conversation, to which I would like to give a big Thank You for the hospitality.

Mike Arntz, President

JUNE SCHEDULE
Board of Directors' Meeting
Wednesday, June 9, 2004
Chapter 55 Meeting
Saturday, June 12, 2004
8 - 9 Breakfast / 9:30 Chapter Meeting



Chapter President Mike Arntz (center) presents Builders Award plaques for their achievements in completing their aircraft, to Gregg Cornell for his Glasair and Charles Hacker for his CH701



May's breakfast cooks, Dave James, Visitor, Vickie and Ken Vandenberg and Lou Farhood.

June Team

George Benson
Larry Coryell
Richard Farrell
Gregory Harris
Dell Johnson
Terry Lutz
George Moore
Dan Schiffer
Jim Spry
Joe Whitesides

July Team

William Bezdek
Jim Cushings
Raymond Fink
Robert Harter
Eugene Jones
Ron Mudge
Thomas Schroeder
Rocky Stone
Dick Wilke

EAA Board of Directors Meeting

May 5, 2004

Thanks to Renee Arntz → The meeting was called to order at 7:02 pm. → Attendees were President Mike Arntz, Vice President Tom Botsford, Secretary Drew Seguin, Renee Arntz, Dave Groh, Debbie Groh, Doug Koons, Bill Purosky, and Greg Cornell → The Treasurer's report was approved. → The minutes from the previous meeting were approved. → We talked about the two June events and need someone to go for the food permit. → Doug Koons. → Discussed the pilot of the year and voted against it. Voted to have Stan Chub given one-year membership. → Bill and Mike to hook up the grills → Talked about work party for the trim on hangar and painting the floor and walls where the freezers are. → Debbie to have \$300.00 for decorations for Christmas and the meal would be \$12.00 per person, voted and approved. → The meeting was adjourned at 8:35 PM.

EAA Chapter 55 Business Meeting

May 8, 2004

The meeting was called to order at 9:35 am by Mike Arntz. → There were 52 members and guests present. → The dates for the Dawn Patrol Breakfast will be June 13th and the Steak Fry Fly-in will be on Sunday August 15th. → Minutes from the previous meeting were approved. → Greg Cornell gave the treasurer's report. It was approved. → Renee Arntz gave dates and times for flying Young Eagles. → Bill Purosky gave a report on The Great Lakes Fly-in for June and Del Johnson will be taking his place while he is out of the country. → All members present signed Stan Chubb's card and it was voted that Stan would have a membership for the year. → Ivan Rowell and Howard Gostnell will be honored with lifetime memberships. → The Christmas party will be chaired once again by Debbie Groh. (Dave Groh lost \$20.00) Terry Lutz will have a program on TCA's after the meeting. It was very informative and interesting. → We are going to try and get the articles in sooner to Warren Miller for the newsletter. → Tom Schroeder updated us on the Balloon Festival 2005 and reminded anyone who wanted to go to the Ford Trimotors that they would leave after the meeting. Many who went doubled up in their cars. → Bill has the grills up and rolling. → The new freezer and gutters will be in by next meeting. → Debbie and Dave Groh put the last pieces of the hangar door up on Friday. → The meeting was adjourned at 10:00 am.

Notes from Cape Juby

By Terry L. Lutz, Chapter 55 Flight Advisor

Under a beautiful blue sky, on a day with light winds and perfect temperature, our nation recognized The Greatest Generation by dedicating the WWII Memorial on the Mall in Washington, DC.

To be there, to be among the many who fought so valiantly, among those who wept for friends who did not return, and among those who would say their last farewell to comrades at arms, was an overwhelming experience.

We should all be proud that our nation and our elected leadership organized a fitting and beautiful ceremony for the opening of the memorial. Placed on the Mall between the

Washington and Lincoln Memorials, the WWII Memorial is a quiet and beautiful place that reminds you of the sacrifice of many thousands of ordinary people to secure the vision of liberty so closely held by George Washington and Abraham Lincoln.



Of the many WWII veterans attending the ceremony, some wore their original uniforms. No one could say that they didn't fit perfectly, because most of them did. There was a reunion tent with bulletin boards for the various Army, Navy, Marine, and Army Air Corps units. Veterans could post notes there to locate friends, or where family members could post a note and find someone who knew their loved one. Photographs were scattered on the bulletin board in hopes that someone would remember them. Several people carried photos of their family heroes with the hope that someone would recognize the person in the photo and bring life to a long lost relative. One family made up T-shirts with a picture and the words "Our Hero" on the front, and a unit photo on the back.

There was a motor pool set up with vehicles of every type and description. A Sherman Tank, a half-track, jeeps, ambulances, trucks, a motorcycle, and the old Plymouth staff car. They were all there, and for a few minutes you were nearly "back there", waiting for the command to "move out!" A stage was set up and for about two hours the veterans and their families were sent back 60 years to their time and their music and their snappy clothes. With bands and orchestras from all three services, we climbed on board the Chattanooga Choo Choo, got In The Mood, and listened to the Boogie Woogie Bugle Boy From Company B. Interspersed with the music, the History Channel provided snapshots of the war from newsreels that captured the beginning, the key battles in each theater, and the invasion of Normandy on D-Day.

There were several outstanding speeches, but by far the best was the one given by Tom Brokaw. Author of the book, The Greatest Generation, Tom told us not about the details of war, but about the quality of the people that fought the war, then returned and with quiet resolve, built this country into what it is today. It was a marvelous, compelling speech that completely described the senior men and women gathering for one last time.

Mr. Brokaw's speech was followed by remarks from President Bush. At the end of the speech, the President asked all the WWII veterans to stand and be recognized. Thousands rose, many from wheelchairs, to answer the applause of a grateful nation.

As the flag was raised over the WWII Memorial for the first time, and the National Anthem was played, a flight of four F-16s made a parade pass overhead to remind us all that vigilance follows sacrifice. It was a tremendous ending for a very moving ceremony.

There were some notable passings recently, and I'll begin with Robert Morgan, pilot of the B-17 "Memphis Belle". For those familiar with the story of the Memphis Belle he needs no introduction, but Robert Morgan was active at air shows around North America. Just last year, he was on one of my DC-9 flights to Saskatoon, Saskatchewan for an air show featuring the B-17 painted up like the Memphis Belle. Apparently, he was at an appearance this year, and tripped over some ground equipment on the ramp, and suffered a broken neck. He passed away following complications from surgery a few days later. Sadly, he did not get to see the new WWII memorial, or live to see the completed restoration of the real Memphis Belle that is currently in progress.

William J. "Pete" Knight's name might not ring a bell for too many people, but Pete was one of the rocket pioneers that flew the X-15. He passed away about 3 weeks ago from an aggressive form of leukemia. Pete was accepted into the Air Force without a degree and finished pilot training in 1953. He flew fighters for a few years, then went to the Air Force Institute of Technology and received his degree in Aeronautical Engineering in 1958. From there, he went to the Air Force Test Pilot School, and after graduation served as project pilot on some great airplanes like the F-100, F-101, F-104, and went on to test the T-38 and the F-5.

In 1960, he was selected to fly the X-20 Dyna Soar, but when the program was cancelled a few years later, he was assigned to the X-15. When I was stationed at Edwards, Pete was the Flight Test Center Vice Commander. He told us all about the record flights in the X-15. To go really fast, they put an ablative coating on the X-15, and he said that it was pink, about 1/8 inch thick, and felt like an eraser. To go really fast, you had to have more than just internal fuel, so they put a hydrogen tank on one side and an oxygen tank on the other. Hydrogen and Oxygen do not weigh the same, so when the tanks are full, there is a significant asymmetric handling problem. At launch, the airplane would roll into the heavy tank, requiring full aileron deflection, then on acceleration when the 1,000,000 horsepower XR-1 engine was lit (yes, that's the correct number of zeros), it would yaw into the heavy tank, and require nearly full rudder. It didn't last long though, and the tanks were jettisoned when empty.

Pete Knight flew the X-15 to a record (it still stands today) of 4534 mph in the pink X-15. It got so hot that the airplane sustained heat damage and never flew again. He also flew the X-15 to 277,000 feet to earn his astronaut wings. But perhaps the most interesting flight was when he was climbing at Mach 4.17 and the engine quit due to an electrical malfunction. With no instruments and "seat of the pants" flying, he dead-sticked it onto Mud Lake, Nevada, and in doing so earned the Distinguished Flying Cross.

So what do you do after flying the X-15? You head for Southeast Asia and fly 253 combat missions in your old friend

the F-100. And after retiring from the Air Force, you become Mayor of Palmdale, CA and later become a member of the California State Assembly, the position he held at the time of his passing.

We were always amazed at what Pete Knight would do with the T-38. He'd disappear on Friday and fly non-stop from Edwards some ridiculous distance to a place like Oklahoma City. The rest of us wouldn't dare shave the fuel that close. So we asked him one day what the secrets were. He said that "If you come out of AB too slowly, the nozzle won't close back down and you'll lose significant climb thrust. The technique is to pull the engine out of AB quickly and back to about 95%, then slowly move it forward again until the nozzle just begins to open. That's where you want to climb." There were a few more secrets he didn't tell us. I guess you really know about nozzles & stuff like that when you are a rocket pilot. Pete Knight was a good man, and a good friend who treated us all as equals.

There's a lot of good flying weather out there, so fly safely, and I will add fly with good judgment. And as always, don't forget to lend a hand to your fellow pilot when they need it.



The newly installed hangar door is the latest in electric powered bi-fold doors, which replaces the old slab, crank up one. Doug Koons was the Project Manager and he labored many days and hours along with many Chapter members to finally get the great door finished. Stan Chubb, a Chapter friend was made honorary member for his loan of various heavy-duty tools used to construct the door. THANK YOU MEMBERS. The original door was built and installed back in 1980 when the hangar was being completed by Ivan Rowell, Howard Gostnell, Charley Downey and Warren Miller.

OSH KOSH BY GOSH & MORE

By Vickie Vandenberg

Memorial Weekend marked the beginning of summer for us traditionalists. And this summer - the calendar chalked full of fun things to do!!

EAA AirVenture-Oshkosh is right around the corner (7/27-8/2). Whether you fly or drive; stay in a hotel, the dorms, rent a house or camp - it's fun to run into fellow members amongst the crowds.

For those camping, several members plan to pick sites in the area of Elm and 14-15th Avenue (close to the showers & the all-important bus stop for easy travel to the gates). For those planning to attend the daily air shows, a great place to meet & watch is on the flight line in the Vintage Aircraft area and in front of the Basler Fuel house (a little to the right if you are coming out from the Theatre in the Woods). Are you going to be there?? Maybe next month we could publish a list of members who plan to be at AirVenture.

Also on the calendar are Chapter 55 Dawn Patrol Pancake Breakfast (6/13) and Steak Fry Fly-In (8/14). We have scheduled two Young Eagle Rally's (6/12 & 7/10).

The Great Lakes Fly-In will be in Howell (6/19). Set up for this event will be (6/18), contact Bill Purosky, 655-1432 to assist. The Yankee Air Force is sponsoring the Grosse Ile Air Extravaganza in Grosse Ile (6/19 & 6/20) and Thunder Over Michigan at Willow Run (8/7 & 8/8). The Capitol Area Balloon Rally will be held in Mason (8/20 thru 8/22).

CAUGHT IN THE "55" WEB

By Vickie Vandenbelt

Hope you have had an opportunity to check out the Chapter 55 web site at www.eaa55.org

Top news on the home page is the "President's Challenge". Also highlighted is our 2004 Flying Contest and our Fly-A-Member Program. You will also find important links to EAA Hot Lines and issues along with other top news items – especially the latest in Chapter news !!

The Information Section and the Calendar Section each have access to the 2004 Program/Breakfast Team lists. I hope to soon include a list of suggested doctors for medical exams in the Information Section along with other "reference" material. (If you have any suggestions – please pass them my way.)

Profiles & Projects sections are always changing. If you haven't completed or updated your Profile Information recently, forms are available in the meeting room or at the web site.

The hardest information to keep up to date is the Member List. If you see changes that need to be made – PLEASE inform Warren Miller, the Newsletter Editor, who maintains this list.

I've posted copies of various pages on the bulletin boards hope you will take a few minutes to check them out if you are unable to visit the web site. Happy surfing !!

SUN 'N FUN - April 13 - 19, 2004 LAKELAND LINDER AIRPORT, FLORIDA

By Dick Wilke

I spent three days at Sun 'N Fun this year, staying with Joan's cousin in Winter Haven, only 20 minutes from the fly-in. We were favored with cooler weather than usual, so it was a pleasant time for the show. Since I am building a RANS S-6S Super Coyote II, I wanted to attend some Workshops, visit the folks at RANS and look at avionics for my project, which is now all framed up.

On Friday I attended workshops on Safety Wiring, Electrical Installations, and Fabric Covering. I was already familiar with safety wiring, having done it on my Cessna 150M, but I did learn one trick. The session on Electrical Installations was very worthwhile, as I learned about the proper type of wire, strippers, terminals, and lacing methods. I made some notes if anyone is interested.

The Fabric Covering workshop was based on Poly-Fiber's products, and involved several groups of three people actually covering a horizontal stabilizer. My fellow workers were a nurse from Pennsylvania who is helping a friend recover an Aeronca Champ, and a former regional jet pilot from Australia who is building a Pietenpol Air Camper! I have some brief notes on that as well, including how to select and calibrate an iron for shrinking the polyester fabric.

I made a beeline for RANS, Inc. after the workshops, and visited with President Randy Schlitter, the design genius, Paula Schlitter, who runs the inside operations, Ed Schwab, their Tech person, who's answered a lot of my questions during the building, and Delvin Bader, their Paint expert. I got a lot more information from these nice folks, and took photos of construction details of the three aircraft they had on display.

Murphy Aircraft, of Canada, was displaying the aluminum fuselage of their Rebel aircraft which had been adapted to the R2800 radial engine being imported from Australia. They are also starting to offer a Light Sport Aircraft version of the Rebel, and I asked Daryl Murphy, the President, how they were able to get the gross weight within the proposed 1232 lb. limit. He said they were reducing the aluminum covering from .020 to .016 inches thick. The Rebel looks like a very substantial aircraft.

At the Jabiru tent there was a lot of interest in their Light Sport aircraft and their engines. However, their prices have escalated since the 2002 show, probably due to the drop in the value of the dollar, since they are imported from Australia.

While talking with a former Navy pilot who is with the FAA Weather activity, I chanced to visit briefly with Nick Heintz, son of Chris Heintz, and production manager of Zenith's plant in Mexico, MO. There was a lot of interest in their Light Sport 601XL with a Corvair engine.

At the FAA building I was given a listing of Aviation Data on the Web, and Advisory Circular on Small Airplane Certification Compliance Program, and a thick book of Amateur Built Aircraft Reference Material. If you are interested, I would be glad to share copies of the Web information.

I had a field day looking at Avionics at the many vendors' booths. The new Garmin 296 was a big hit, with features that are the equal of many glass cockpit displays in large aircraft, and the definition with color is amazing. I hope to buy one for my airplane.

I also looked at Com radios, and settled on an Icom IC-200, which is all solid state, very compact, has an excellent reputation, and was offered at a show price, plus a factory

rebate. I also liked the Garmin GTX-320A Transponder, which is also all solid state, and considered more reliable than older designs employing tubes. Had a look at several ELT's and Intercoms as well. With all these goodies on display, it would be easy to get carried away, but shows such as this are a great place to look at features and compare products.

Young Eagles Program

By Renee Arntz

Well it is that time of year again -- National Young Eagles Day this year is June 12th. In memory of one of our fellow members, this day will be dedicated as "Glenn Trommaeter Day". I am counting on you to help celebrate Glenn Trommaeter's life by honoring him on this special day.

This is my fourth summer season working with the Young Eagles program and the third season as the Young Eagles' coordinator. We have, year after year since 2001 met and exceeded our goals by flying over 936 Young Eagles in two years. Last year we had a record number of 231 kids flown in one day by 20 pilots and numerous volunteers. We would have had over 300 if we would have had more planes and pilots. It was a beautiful sight-seeing all those children's faces when they came off that airplane. Those smiles and all our members who help make this a success, keeps me going.

Two weeks ago, I sent out the public service announcements to all the community newspapers, State Journal, radio and television stations. It is possible that we will have over 70 disadvantage children from a local town. I would love to see us break another record of over 231 in one day.



Lou Farhood with his RV8, Ted Gauthier and Carl Franz with their RV6's.

POSTED ON THE BULLETIN BOARD

Michael Lumbert offers professional flight test services in experimental aircraft with experience ranging from small single seat piston engine aircraft through high performance jets.

For those of you who don't have email, please see copies of the EAA Chapter E-GRAMS from Headquarters on the Bulletin Board. There may be something of interest for you in these grams for upcoming events and activities.

RICHARD D. NEWBERRY MEMORIAL SCHOLARSHIP

Chapter 55 received Thank You letters from Jacob D. Tonova for the Maintenance Scholarship and Patrick Regan for the Flight Scholarship. Please take a minute to read these letters posted on the Chapter Bulletin Board.

SPECIAL ANNOUNCEMENT NOTICES

With the new Sport Pilot license soon to be available, Bill Puroskey is looking to form a new sport pilot club and purchase an aircraft for those interested. He indicates ten persons would be needed to start the venture with a fee of \$975.00 each plus fuel costs, etc. Contact Bill for more details.

Ted Lakin wants to get Chapter members without aircraft of their own, into the air. He has invited members to sign up to go for rides when he rents his plane. He has taken several members to various airports and restaurants to visit and have a bit to eat. There is no charge for the ride, but Ted will accept lunch. Call him at (517) 256-2322.

Long time senior Chapter members, Ivan Rowell and Howard Gostnell were given Life Time Member status at the May meeting. They will not have to pay dues ever again.

Any person who has personal property stored in the Chapter hangar, should remove it within 10 days. All unnecessary items will be taken to the dump to make room for the plane owners who rent the space.

FOR SALE



George Haley (whose job will take him out of the country for a few years) wants to sell his new Challenger that has only 14 hours on it for \$15,000. Phone 517 694-2716

N434GC—It Flies!!!

By Gregg Cornell

April 24, 2004, marked the highpoint of a ten-year homebuilt aircraft project. My Glasair IIS FT lifted off for the first time at about 8:00 a.m. that morning. Tim Martinson acted as my ground liaison and official photographer. Prior to that day the airplane had been taxied and ground tested for about 1-½ hours.

That first liftoff was a thrill that will always be one of the highlights of my flying career. Now, for the rest of the story!



The airplane was inspected by Ted Gauthier on March 27 and he issued the Special Airworthiness certificate that day. Ted was extremely helpful and thorough in getting me through the paperwork and inspection process. Ted is a FAA DAR based at Pontiac and has completed a beautiful RV (red and white with a checkerboard accent) that we frequently see at Mason. It was great to work with someone who has experience as a homebuilder.

The day following the inspection, I went on vacation, so by the time I got back in town and we had decent weather to fly—it was almost a month before the first flight. During that time, Keith Walker was gracious in giving me several hours of left seat time in his Glasair IIS. That time included several patterns and landings, which built my proficiency and confidence for the first flight. The Glasair has a much higher wing loading than the typical general aviation airplane, so I was grateful for the time in Keith's aircraft. Terry Lutz, our Chapter Flight Advisor, also worked with me to refine the first flight plans and to help get me mentally prepared for that first flight. Our Chapter is very fortunate to have a Flight Advisor with such great experience and willingness to help.

Ground testing involved engine runs at all power settings and getting used to ground handling without nose wheel steering. Steering with differential braking wasn't difficult to learn and it seemed natural after a very short time. I found that a big advantage of the castering nose wheel is the ability to turn the aircraft in a very short turn radius. I did some "fast taxi" on the runway but did not attempt liftoffs before the first flight. I figured there was more potential risk with a brief liftoff, touchdown and getting stopped in time than just going for it on the first flight. Terry Lutz agreed with me but stressed that I had to be prepared to abort on that first takeoff if the airplane didn't feel right. That first takeoff roll was definitely the point of most

apprehension, but the concerns quickly turned to joy as the liftoff was very smooth and there was no roll tendency at all. However, during climb out, I noticed that the cylinder head temperatures were climbing faster and higher than I am used to seeing in other airplanes so I pulled the power back and decided to stay in the pattern. Tim was on the radio and I let him know I was going to come around the pattern to check controllability with flaps before landing. The airplane flew beautifully in the landing configuration, so after one low approach, the second pattern was flown to a full stop landing. Following a smooth touchdown and rollout, I had time to think about how smooth the controls were and how well the electric elevator trim worked.



The critical questions had been answered in that brief ten minute flight—the airframe was straight, the controls were properly rigged and the trim worked great. After returning to the hanger, we broke out a bottle of champagne to toast the culmination of 6,000 hours building time over a ten-year period—champagne had never tasted so good!!



Following that first flight, I tightened up the engine baffling and learned that I should expect somewhat higher temperatures on a new engine. The second flight was completed on May 3rd and lasted one hour, so I really had a chance to explore the controls and handling of the aircraft.

The radio, transponder, GPS, and other equipment also worked well so it was a very successful flight.



As of June 6th, I have flown almost 18 hours, not quite half way through the 40 hours test flight period. During those 40 hours, I must stay within 25 nm of Mason and fly with a passenger. I am really getting to know that 25-mile radius area quite well! The airplane has an 180hp fuel injected Lycoming engine and is cruising at 150-160 knots without the wheel pants, so I believe the advertised 200 mph (175 knots) advertised cruise will be attainable. I have kept the wheel pants off during the initial testing so I can keep a close eye on the tires, brake lines etc.



In addition to Terry Lutz, Tim Martinson, and Keith Walker who contributed so much to the success of the first flight, I want to thank Jim Palmer for all his help and encouragement over the entire ten-year building process. Jim's painting skills added a very professional touch to the airplane that I could not have accomplished myself. In fact, I don't believe the project would have ever been completed if I had not been an EAA member. The help, friendship and encouragement of many EAA Chapter 55 members kept me going when I would have been ready, willing, and able to quit. Only after you have built the airplane do you realize that the greatest skill needed is PERSERVERANCE.



In the end, it is worth every hour of work, every minute of frustration, and every second of patience. In my case, the end product is a great aircraft that handles very much like the T-38 military jet I once flew in the Air Force (although admittedly it is much slower and smaller) and it will provide hours of enjoyment for the rest of my life—it **doesn't get any better than that!**

(additional photos provided by Warren Miller)



Note that big grin. Congratulations, Gregg for a job well done!!!