

Experimental Aircraft Association Chapter 55 May 2003

Hameed Noon

**Meetings are the 2nd Saturday of each Month at the Hangar,
Mason Jewett Field, Breakfast at 0800, Meeting at 0930.**

**Pres: Mike Arntz 694-4601 Vice Pres: Gary Long 676-3867 Treas: Gregg Cornell 351-1338
Sec: Drew Sequin 332-2601 Editor: Warren Miller 393-9385**

Climb and Maintain Flight Level 55

Spring has finally here. So it's time to get out the old "Rust Off" for flying skills especially those of us who have not flown over the winter, after last months meeting I had a chance to fly the 235 Dave James brought to the meeting. It is a good cross country machine with a 140 cruise so you can get places in a short time, I even got to land it and the landing wasn't pretty. Connie had to fill in three holes in the runway. (just kidding)

Much has been going on this past month. At last month's meeting we voted and accepted the new bylaws. We also voted to have the C-47 along with the B-17 to be here from August 15-17th. Renee and I made and printed up invitations to give to Debbie and Dave Groh so that they could send them to the warbird pilots. Dave and Debbie have sent out over 150 so far. We also have a flyer for the promoting the event.

Speaking of the event we had the first planning meeting for the Mason, Centennial of Flight Celebration it was very well attended, we had some good ideas and some not so good, but that is why it's called planning. The meetings are open to all who want to see this event be a success and possibly become one of the better events in the state. Meetings are held on the third (3rd) Saturday of the month at 9:00am. Remember it takes teamwork to pull this off and Chapter 55 is one of the finest teams I have witnessed. So no matter if you want to do a little or a lot get involved it's FUN. And a one-man show is just that.

There will be a Young Eagles rally on June 14, 2nd Saturday. It will be from 9-5:00PM. There will be a sign up sheet on a poster board starting on May 10th meeting. We need as many pilots and ground volunteers for this event. Renee has contacted Dean Sims to see if we can get more home schooled children. In October, we flew 70 Young Eagles. May's Team Contact is Gary Long.

Mike

Teams

MAY-(contact Gary Long, 676-3867)

John Mireley	Bob Smith
Jim Palmer	Del Johnson
Joel Hekler	Baseil Craig Teall
Lynn Brown	Terry Lutz

JUNE (contact Renee Arntz, 694-4601)

James Andrews	Pete Chestnut
Richard Bacon	Jim Spry
Barb Bacon	Jim Doerr
Steve Ramey	Dick Wilke
Russ Hilding	

EAA Board of Directors Meeting

Thanks to Renee Arntz for providing these minutes.

➔ The meeting was called to order at 7:07 on April 9, 2003. Present at the meeting were: Michael and Renee Arntz, Gary Long, Bill Purosky, Doug Koons, Ernie Lutz, Dave and Debbie Groh, and Joe Watkins. ➔ Mike A. read the Treasury report, which was accepted. ➔ Renee did the secretary's minutes due to Drew Sequin's absence. ➔ Open business issues: We are going to vote on Saturday, April 12, on the revised by laws. ➔ Dave and Debbie Groh updated the board on the B-17. Bob Selig indicated CRAA has budgeted the \$6000.00 we asked for to cover the B-17. They will disburse funds to receipts we provide. Dave stated that we could also have a C-47 at an additional cost of \$700.00. This will be brought up and voted at the Members

meeting on April 9th. → Joe Pirch and Joe Watson will get together for the fly-bys and check on wording for the balloon festival for them. We will also be having on the 3rd Saturday of the month at 9:00am. subcommittee meetings until the event. We will need total of 10 rooms of which we will be paying for 7. We are going to need flyer's right away for the warbirds, which Renee will do. Joe Watkins is also looking for helicopter pilots to fly at the Mason Balloon festival. Ernie Lutz would like to see some of the B-17 pilots get a ride from the home base of the Yankee Lady to Mason. Need to check on a shuttle from the balloon festival to Mason airport. School buses, Dean Transportation and the Ercoupe vans to be checked on. Still working on getting Gov. Granholm to present the state flag for the Michigan to Kitty Hawk flight. → Terry Lutz to be talking on website for World War 2 veterans. → Still need a TV. Bill Bezdek has a 21". → The meeting was adjourn around 8:30

EAA Chapter 55 Business Meeting

The meeting was called to order at 9:35 am. → There were 49 members and guests in attendance. → A motion was made and carried to play the national anthem and raise the flag before each Chapter 55 meeting. → Minutes from the previous meeting were approved. → The Treasurer's report was approved as presented by Mike Arntz. → Young Eagles. Renee Arntz got corrections and an apology from headquarters for errors on the recognition list. → Mark Jacob updated on the Chapter Web Page. There are still a few login issues. If you are having trouble contact Mark. → Bill Landucci announced the successful first flight of his Pulsar project. Congratulations Bill. → The revised Chapter By-Laws were distributed by email in advance of the meeting. Mike reviewed changes and additions. A motion was made and carried to accept the new By-Laws. → Mike Arntz updated the meeting on plans for the Centennial Celebration of Flight on August 15-17 at Mason. CRAA has agreed to provide major funding to bring the Yankee Air Force B-17 to the event. The Mason Chamber of Commerce is donating \$500. Motion was made and carried to add the C-47 to the event. Motion was made and carried to spend \$250 on plaques and certificates to commemorate participants in the event. There will be planning meetings the third Saturday of each month from April until the event. → Debbie Groh updated the group on the CRAA board meeting. They are doing an economic impact study on Mason. The master plan will be updated in the next 60-90 days with the addition of the North/South runway. → The Great Lakes Fly-In will be a one-day event on June 21. Volunteers are needed. See Bill Purosky. → The builder's hangar has been rented to Jim Palmer for 6 months. → The meeting was adjourned at 11:15.

Notes from Cape Juby

By Terry L. Lutz, Chapter 55 Flight Advisor

"And then there were none." William R. Crooks passed quietly away February 23rd, 2003. He is noted in history as the oldest pilot that served during World War I. That's right, *World War I*. But it was the rest of his life that we should all remember, and therein lay some messages we can all take to heart.

Bill Crooks was all of 4 years old when he was boosted atop the water tank on a steam driven tractor as it pulled a threshing machine through the wheat fields of Missouri. He decided right

then that he would someday build machines like that. Then, his father read the St. Louis newspaper to the children before bedtime on December 17th, 1903, describing two brothers from Ohio who had invented a heavier than air machine capable of sustained flight. (That the St. Louis newspaper knew about the first flight is remarkable by itself.)

After the sinking of the Lusitania and the beginning of the draft, Bill Crooks saw that the Signal Corps was looking for men to train as pilots. He learned to fly in a Curtis Jenny at Kelly Field in San Antonio. When he received his wings, he transferred to Ellington Field near Houston to train as a bomber pilot. He was preparing to join the spring offensive of 1919, but the war ended and the armistice was signed.

Enrolling in engineering school at the University of Missouri, Bill completed his studies and accepted a position with the Fairbanks Morse Company in Wisconsin designing diesel engines. He married his hometown sweetheart that same year. Bill later joined the Cooper Bessemer Company, working as head engineer in Grove City, PA and later as head of the design group in Mt. Vernon, OH.

Now "fast forward" to 1961 (only 42 short years ago). Bill was 68 and facing mandatory retirement. Instead of retiring, he accepted a job with the National Academy of Science (founded originally by Abraham Lincoln). He and Pauline moved to Washington where Bill worked on the development of an anti-ballistic missile defense system. Some of the guidance logic he developed is used in today's weaponry. Think of it, Bill's thoughts ranged from World War I pilot to anti-ballistic missile guidance systems. I wonder if at age 109 he had an email address.

He eventually retired and moved back to Mt. Vernon, OH. In 1978, a huge blizzard swept through the upper Midwest. I was living in Dayton, OH, not far from Mr. Vernon, and remember it very well. The wind was so strong from the west that it blew into every crack in the hangar door protecting the Luscombe Silvaire Bullet. When I could finally get the snow removed, just to open the door, I found the airplane completely encased, and the hangar full of snow from floor to ceiling.

Power was off, so homes were freezing and pipes were bursting all over Ohio. Some friends of Bill Crooks that once worked for Cooper Bessemer decided to look in on him. They found him well and his house was nice and warm. He explained that it took 24 volts to open the gas valve on his furnace, so he hooked up two car batteries to do the job. Then, he hooked his bicycle to the furnace blower pulley, and when he needed some heat, he opened the gas valve, lit the furnace, and pedaled up some heat. Bill Crooks by that time was 85 years old.

William R. Crooks was nearly 110 years old when he died, and among many things we can learn about his life, he left us one important piece of wisdom: "There is no such thing as a problem. What you have is simply an opportunity for a new solution." What more profound words to put to good use today, whether it be for building airplanes, or for working toward approval of a crosswind runway. "And then, there were none."

As mentioned a few months ago in these notes, Burt Rutan is on the verge of going into space. The details were reported in the April 21st issue of Aviation Week and Space Technology. The ungainly looking airplane pictured earlier is the mother ship for a rocket-powered spacecraft. The two airplanes are named White Knight and Space Ship One. Burt is doing this entirely his own, without government involvement, other than getting N-numbers for the airplanes. He is financially backed by an un-named investor, and hopes to capture the \$10 million X-Prize. This competition requires that three people be taken to 100 km and that the spacecraft repeat the flight within two weeks. (For more details, visit www.xprize.org)

The launch concept is to takeoff from Mojave, CA and climb to 50,000 feet, where the spacecraft will be launched. It has a single rocket engine, which is a throttleable hybrid between solid fuel and a nitrous oxide oxidizer. The rocket burn will be about 65 seconds, and the peak altitude about 328,000 feet (100 km). Burt has designed the vehicle and the flight profile so that loads on the vehicle never get higher than 260 kts equivalent airspeed.

The entry profile is unique because before coming back into the atmosphere, the fuselage and wing of the spacecraft bend so that the wing is faired in the descent, but the fuselage is at a 60-degree angle to the airflow. The wing will not have to endure the pressure and temperature of entry to the atmosphere, and terminal velocity in this configuration is only 60 kts equivalent airspeed. So although deceleration is high, loads remain fairly low.

It is a simple design. The spacecraft and the mothership share almost identical cockpits, so the mothership can be used for crew training. In case you are wondering, Burt is using a Garmin 295 for navigation. Why not? It works!! The spacecraft will utilize a large tank of compressed air to maintain cabin pressure, defog the windows, and provide pressure to the reaction control system. The crew will not wear pressure suits because Burt feels that the structure provides the same redundancy as the suits themselves. So the stage is set: Some time this year, one of Burt's pilots will fly into space and be home for dinner. We hope. It's never easy, even though Burt makes it look that way.

The battered airline industry has few bright spots these days, but as an airline pilot, I had the honor of bringing two young soldiers home from Iraq. I took one to Green Bay, and one to Saginaw. When we knew that we had them on board, both in uniform, we got the details and took the time enroute to let the whole cabin know who we had on board, and to thank them for their courage and their conduct. It's been a long time since we've been this proud of our men and women in uniform. At those two destinations, one soldier walked proudly forward, to the applause of those on board, and `deplaned before all others to the waiting arms of their loved ones.

Fly safe out there, take the time to thank a soldier, and as always, lend a hand to your fellow pilot when they need it.



THERMOCOUPLES (From the Dope Sheet)

As the cold weather set in this fall, I was wondering why my engine was running rich, yet my EGT temps seemed high. Each time I tried to cool off the engine by richening up the jets, it ran richer and poorer. When I queried my Skystar Lite Website group on this issue, the answer I received solved the problem. I was richening up the mixture too much because I thought the high gauge was telling me I was too lean.

Most of our gauges in the wintertime fool us because they are thermocouples. They are calculated to read correctly at an ambient temp of 75 degrees. Change the ambient temperature and they are not totally accurate. A thermocouple gage creates voltage (and therefore a reading) based on the difference in temperature between the hot and cold end...the greater the difference in temperature, the greater the voltage. So a higher voltage can be created by either raising the temperature of the hot end (hotter exhaust gasses) or by lowering the temperature of the cold end (cold winter day).

So...the gauge reads the voltage and displays it as a number. The gauge is built so that at an ambient temp of 75 degrees F, it is showing the actual EGT temperature. At any other ambient temp, the gauge has an error equal to the difference between the current ambient temp and 75 degrees F. For example, at 30 degrees, the gauge reads 45 degrees hotter than the actual temp at the probe.

This can be displayed as a chart. Before flying, just check the ambient temp and make a mental note of the correction to apply to the number you are seeing on the gauge.

EGT reading Correction Chart

Ambient Temp	Actual Temp	Gauge Reads	+ or -
30	1175	1220	45
35	1175	1215	40
40	1175	1140	35
45	1175	1145	30
50	1175	1150	25
55	1175	1155	20
60	1175	1160	15
65	1175	1165	10
70	1175	1170	5
75	1175	1175	0
80	1175	1170	-5
85	1175	1165	-10
90	1175	1160	-15
95	1175	1155	-20
100	1175	1150	-25

MASON EAA CHAPTER 55's PRESENTATION OF "CENTENNIAL CELEBRATION OF FLIGHT"

A planning meeting will be held every 3rd Sat. of the month @ 9:00 to discuss and arrange for parking, security, food, etc. until the event date of Aug. 15th thru the 17th. Your input will be appreciated.

FOR SALE

1968 PA32 Piper Cherokee
King radio package with ADF-Auto Pilot. Cargo Door.
Excellent condition. 1300 hrs TT airframe and engine.

1972 Harley FLH full dresser. 13,000 miles. Loads of chrome. Blue with white fairings. Excellent condition.

22 ton tilt bed Wisconsin trailer with air brakes.

Contact Fred Hollister in Harrison, 989 539-2423



Russ Hilding and Bart Smith enjoy a beautiful day after last month's meeting. In the background is Russ's Champ.



Bill Landucci and his completed Pulsar project. Bill's first flight was a success -- he's very happy.



Members attend the April business meeting

