



Experimental Aircraft Association *Chapter 55*

March 2003

**Membership Meetings: 2nd Saturday of each Month at the Hangar
Mason Jewett Field (TEW)
Breakfast at 0800 Meeting at 0930**

**Pres: Mike Arntz 694-4601
Secretary: Drew Seguin 332-2601**

Vice Pres: Gary Long 676-3867

**Treas: Gregg Cornell 351-1338
Editor: Warren Miller 393-9385**

Important meeting:

Capital City Airport Authorities will be presenting the plan for the runway with Chamber of Commerce of Mason, Ingham County Commissioners, City of Mason, and Vevay Township

Date: Thursday, March 13th

Time: 7:00PM

Where: Mason Middle School 235 Temple St., Mason, (north of the Mason fairgrounds).

We need as many users of the airport and chapter members to be there, also remember to get your letters in the mail ASAP.

Support your airport!

Climb and Maintain Flight Level 55

Hey has anyone seen spring? Did we miss something? Here it is the first of March and it is six

below zero. Those open cockpit boys are going to have a tough time staying warm. After reading some old accident reports one would wonder what goes thru the minds of the people involved. One in particular that stands out was about was a guy who had twenty hours of taxi time on a BD-5. It seems that the engine was very troublesome on the day of the accident, he taxied out to the active. The engine quit while the aircraft was on the taxi way and restarted right away while doing the run up. It quit again, restarted, and the pilot proceeded to take the active, once again the engine quit after some hard cranking the engine fired up and he fire walled it then took off. The aircraft did not come back to the airport and was found two days later at the bottom of a lake about two miles away, with the pilot still strapped in....

My Question: "How many times would you restart your engine before you take off? Hopefully only once to taxi back to the hangar.

We are working hard on the August event, getting all the ducks in a row. I had a meeting with Joe Watkins of the Mason Chamber of Commerce. It looks very promising and could turn into the event to be at. If any member has some ideas, please bring them forward. Don't be shy, we need all the help we can get.

Remember we are still working on the goal of a **Member A Month** so bring someone to the meeting. Let us break two hundred members this year.

I would like to thank **Chris Bayley and Renee Arntz** for all the help received so that we could get the newsletter out on time.

Mike

Remember when you go flying take a chapter member with you.

Board of Directors' Meeting

Wednesday, **March 5, 2003**

7:00 pm at Hangar

Chapter 55 Meeting

Saturday, **March 8, 2003**

8-9:00 am Breakfast

9:30 am Chapter Meeting

Teams for 2003

MARCH TEAM

Bob Noelp, Raymond Fink, George Haley, J. Morris Hickman, Dale Buttermore, George Spencer, and Ken Distler.

Bill Purosky is the April Team will be **Adam Fogg, Peter Greenfield, George Benson, Mary Schwaderer, Carl Dalrymple, Greg Hover, John Kingsbury, Duane Dusseau, and Gilbert McKessy**

EAA Board of Directors Meeting February 5, 2003

Attendees:

Pres. Mike Arntz, V. P. Gary Long, Treas. Gregg Cornell,
Sec. Drew Seguin, Renee Arntz, Doug Koons, Bill Purosky,

- ➔ Secretary's report was approved
- ➔ Treasurer's report was approved
- ➔ Greg Cornell and Mark Jacob have applied to EAA for participation in the 50 Flags to Kitty Hawk event to commemorate a century of flight. It would be nice to have Chapter 55 represented in this historic event.
- ➔ Greg Cornell presented a draft of the revised By-laws for review by the Board. He will update with changes discussed and email it to the Board. The goal is to have Board approval in March and then distribute it to the membership for comment.
- ➔ The Leadership conference will be held at the Chapter 55 hangar on February 15. Thirty people are signed up so far and they expect to have about fifty present. Ted Lakin and Bill Purosky will handle food. No additional volunteers are required.
- ➔ The Yankee Air Force B-17 is scheduled to be in Mason on the weekend of August 16. Total cost to the Chapter will be about \$6,000. We are working on

sponsors to offset the initial commitment. Mike Arntz and Drew Seguin will approach CRAA for sponsorship. This date will correspond with Mason Balloon Festival and will be our Fly-in as well. We are planning a steak lunch as we did last year. We would like to bill it as a Mason celebration of a century of flight.

- ➔ The Great Lakes International Aviation Conference will be in February next year.
- ➔ The Board approved purchase of two lights for over the cooking area.
- ➔ Gary Long volunteered to repair the faulty fluorescent light fixture in the meeting room.
- ➔ The meeting was adjourned at 9:05 PM.

Membership Meeting

February 5, 2003

- ➔ Terry Lutz donated a tape to view.
- ➔ Minutes from the previous meeting were approved.
- ➔ The Treasurer's report was approved.
- ➔ Renee Arntz passed out new name tags.
- ➔ Mark Jacob provided an update on the Chapter Web Page.
- ➔ Bill Purosky updated on the Leadership Conference.
- ➔ Mike Arntz gave an overview of plans to bring in the YAF B-17 in August Lots of things to do and money to raise but it should be a lot of fun.
- ➔ Warren Miller donated a box of AN fittings to whoever could use them.
- ➔ Bill Purosky relayed information on airport security from AOPA.
- ➔ Dave and Debbie Groh updated the group on the efforts to get a North/South grass safety runway. You should have received a flyer on this from Dave. Please write a letter to the officials listed.
- ➔ Bob Smith relayed his experiences in Oshkosh at the seminar on "Flying Your Homebuilt".
- ➔ Mark Jacob invited pilots to participate in the Young Eagles rally at Detroit City Airport on February 9.
- ➔ The team program was presented by Dan Beckett on Pilot Situational Awareness.

EAA Chapter 55 Business Meeting

The meeting was called to order at 9:30am.

Notes from Cape Juby

By Terry L. Lutz, Chapter 55 Flight Advisor

There is a lesson for every pilot and every homebuilder in the aftermath of the space shuttle tragedy. We must carefully study the parallels in our own approach to project work and flying. Like many high tech programs

involving cutting edge thinkers and cutting edge science, NASA operates in a “success oriented” environment. Studies, analysis, and development work are focused on success. Even system safety analysis is aimed at reducing failure probabilities to extremely low levels, without focusing on solutions to rare failure states. Challenger and Columbia have proven how fragile the system becomes when success, rather than safety, dominates a program.

Every homebuilt airplane, whether it be quick-built, kit built, or scratch built, is a unique vehicle. When the airplane is registered, the builder becomes the manufacturer. You are just like Cessna, Piper, and the rest of the big boys. But because different manufacturers build them, no two airplanes are built exactly alike. A quick look at the many different instrument panels installed in Van’s RVs, parked wingtip to wingtip at Oshkosh, will tell you that.

The many, many decisions you make as a homebuilder all contribute to the operational safety of your airplane. Where there are thousands of rivets and thousands of rib stitches, you can afford to mess up a few without compromising the structure. But where fuel lines pass close to the exhaust system, or where critical parts need to be safetied in some way, you can’t make an error. Aviation has a long heritage, and good design, construction, and maintenance standards have a long history behind them. The old maintenance guide, AC 43-13, is the history book for good maintenance practices. But it’s really the history book based on what didn’t work, often with tragic consequences. It’s a safety-oriented guide.

Those of us who own store bought airplanes literally go nuts sometimes because we can’t upgrade to a new part without that part being approved for the application. What the FAA is trying to do is keep the fleet configuration as constant as they can, with exceptions by STC and with FAA-PMA parts improvements. Without that structured environment, we’d have shopping cart wheels on the tail (talk about tailwheel shimmy!!), automotive alternators of every description under the cowl, and who knows what kind of hardware bolt holding the gear together. The FAA’s rules insure both success and safety.

Homebuilders can choose the parts they want to use, and the methods to install them. If anything, the level of care in making those decisions goes way up compared to the owner of the store bought airplane. For example, the electric fuel pump recommended for one popular homebuilt is mounted in the cockpit area, and the paperwork that comes with it clearly states “Not for use in aircraft applications”. And even if you decide to use it,

you must carefully check that the flare angle on the fittings is the same as the flare angle of the fuel lines you are using. Decisions, decisions. Will the decision be successful as well as safe?

Some of us will be pioneers, and try some things for the first time. If Burt Rutan had decided not to build the Vari Eze because his method of using foam and fiberglass for construction was previously untried, today’s world of sport aviation would be boringly different. But you can bet that Burt tested his designs very carefully, and used standard practices and hardware whenever possible. His decisions were focused on success with an acceptable level of safety. As the design matured, success and safety matured along it.

But in the case of the Long Eze, it was not without difficulty. They found that when flying in rain, the aerodynamics of the canard changed enough to affect flying qualities. A John Ronz designed airfoil for the canard solved that problem, but created another. The new canard airfoil was so good that it would keep flying with the main wing stalled, holding the nose way up in the air, despite the pilot’s best efforts to lower it.

I remember very well Mike Melville’s flight testing of that new canard. He went up to 16,000 feet and did a slow deceleration to the stall. When it did stall, the nose was way up in the air, and it stayed that way. The video out the front was all sky as Mike descended nearly vertically with the main wing stalled and the canard still flying. He tried everything he possible, and finally, using a combination rudder and aileron, he was able to rock the airplane from bank to bank with increasing bank angle to try and point the lift vector toward the ground. At about 6,000 feet, this technique worked and the nose of the airplane dropped to nearly vertical, with a lot of ground now showing in the video tape. Mike said that in his entire life, he was never so glad to see dirt. In this case, the success of the new canard did not insure safety.

As homebuilders, we’re not only going to carry our own pink bodies, we’ll be carrying our family and friends over great distances at high speeds. Not only do we want to be successful, we want to be 100% safe. The EAA programs created to assure the safety of homebuilt airplanes, the Technical Counselor and the Flight Advisor, are designed with that in mind. They provide a second set of eyes look over your airplane. They provide guidance to carefully flight test the airplane and get you safely through that developmental stage in the first 25 hours. Success is achieved in a framework of safety.

When you make those many decisions that face you as a homebuilder, pilot, and aircraft owner, remember that success and safety go hand in hand. Use standard

practices. Constantly seek new sources of information. Have others cross check your work. Test new systems carefully on the ground and in-flight. No matter how knowledgeable you are, no matter how exactly you built the airplane according to the plans, success is not guaranteed. Be both success **and** safety oriented in your thinking.

OK, it's going to be Spring soon, and those of you who haven't flown for most of the winter have some serious rust removal to do on those flying skills. Remember that the winds of Spring are more treacherous than the winds of Fall. They are stronger, have more gusts, and will generally be across the runway. Moisture in the air will contribute to carburetor ice. It can and will happen, even to you Lycoming operators (trust me on this), and it brings down a few airplanes every Spring. The grass fields will be muddy for a month or two, so wait for dry weather.

And as always, a few of us are going to need a little help, so remember to give your fellow aviator a hand when they need it.



Terry Lutz explaining at our February meeting the space shuttle.



Bob Noelp, Bob Smith and Doug Koons giving the peace sign or ?



Break time at the Leadership Conference on Feb. 15th.