Meetings are the 2nd Saturday of each Month at the Hangar, Mason Jewett Field, Breakfast at 0800, Meeting at 0900.

Pres: Bill Hanna 627-4360 Vice Pres: Paul Barbour 627-3381 Treas: Gregg Cornell 351-1338 Sec: Drew Seguin 332-2601 Editor: Charley Downey 349-3903 Graphics Editor: Sue Downey

Page 55

THE GRAND OLD PARTY I'm not referring to Republicans, but our Chapter Christmas Party of last month. Our Chapter has a few weaknesses and many strengths. One of the latter is the capability to throw a good party. Over 50 Chapter members, spouses and guests gathered at the hanger for an evening of good food and fun. Thanks to Bob and Kris Smith and Lloyd and Joyce Brown for doing the planning, set-up,

decorating and worrying – it came off great. Also, thanks to Bill and Marilyn Bezdek for the table favors.

MEMBER OF THE YEAR(S)
Max Hall was nominated by the
Board as the Member Of The Year
for 2000. Given the very successful
year we had with Young Eagles,
Max was an easy selection.
Actually, Max's contributions to

the Chapter span many years. His name first shows up in Chapter documents in the early 70's and he was an active, contributing member from the first. Max was the Chapter's first official Newsletter Editor and he served in that role for eighteen years. He has also been our Young Eagles coordinator since the start of the program. This recognition is long overdue and hardly does justice

to all the years of service Max has extended to the Chapter. Although, Max officially announced his retirement as the Young Eagle Coordinator for the Chapter, I expect we'll continue to see him just as often and just a helpful –

Max is just that kind of guy.

ANOTHER GOOD REASON There are many benefits we realize from our membership in the EAA, both direct and indirect. One of the indirect benefits is the Chapter Insurance program that provides low-cost liability insurance to cover our Chapter activities. Considering the risk exposure we have with our many public activities (especially flying activities), we probably could not afford to buy insurance coverage

independently and probably could not function as a Chapter without it. One of the requirements of our insurance coverage is that <u>all</u> members of the Chapter must also be members of the EAA. That is also a requirement of our Chapter By-Laws. Everyone should make a special effort to assure their membership in the EAA is current and renew promptly when it expires. As aviation enthusiasts, it's probably one of the best places

you can invest forty bucks anyway.

Board of Directors' Meeting

Wednesday, **January 10** 7:30 pm at Hangar

Chapter 55 Meeting

Saturday, **January 13** 8-9:00 am Breakfast 9:00 am Chapter Meeting

WHO MADE THIS PLAN? Where would the EAA be without airports? Obviously, airports are just as important as airplanes, but we don't spend much time thinking about them. At this month's meeting we'll get you thinking about airports a lot. Jim Downer will be

our speaker and will give us an overview of how our airport system is planned and funded, how Federal monies are allocated and disbursed, who makes the plans for our airports, what are the standards that



airports are designed to and what does the overall airport system plan for Michigan look like. Those will be Jim's discussion topics. I will follow-up with the current plans for Mason. There won't be a test, but I think everyone will have a much better understanding of the airport system we depend on when Jim has finished his presentation.

WHO'S RUNNING THE SHOW? At the December meeting, a new set of directors was elected to provide leadership for the next two years. The total leadership team for the Chapter is now comprised of the following individuals:

Officers	Elected Directors	Designated <u>Directors</u>
Bill Hanna	Bill Purosky	Charley Downey Newsletter Editor
Paul Barbour	Joe Pirch	
Gregg Cornell	Ernie Lutz	Greg Hover Past President

Drew Seguin Leah Voelker

I'm looking forward to working with this group – I think they have a lot of energy and vision for the Chapter.

One of our first tasks will be to assess the overall direction of the Chapter and set goals for the coming year. This will drive the budget and activities that we engage in through the course of the year. If you feel there are new initiatives the Chapter should engage in, or we are doing something wrong, please talk with any of the above people or come to the Board meetings and share your ideas. It's your Chapter, we've been elected to lead it, but only in the direction that meets the needs of the membership. Elections don't impart wisdom, only responsibility.

I'd like to thank the three past directors, Bob Noelp, Joe Whitesides and Tom Botsford, for their work and contributions over the last two years. There were many significant Chapter accomplishments during their watch. We will continue to tap them for help in running the Chapter (if they don't volunteer first).

HERE WE GO AGAIN Once again, we are going to rely on teams of Chapter members to provide our monthly Chapter programs. This process worked very well last year, yielding interesting speakers and activities. I've done my usual arbitrary job and established a roster of nine teams to cover the anticipated number of meetings that will require a

program. Once we've refined the Chapter calendar for the year, I'll post the entire list. For February, the first Team will be comprised of:

Jeffery Lape	Lynn Brown	Gary Long
Ted Lakin	David Paul	Bob Noelp
	Steve Ramey	

Notice that there is no designated leader. Someone will have to have the gumption to contact the others in the team and use their collective wits to come up with a program for February. That's another benefit of this plan, it generates the opportunity for Chapter members to get acquainted with other members and maybe make some new friends. The program can be anything the team comes up with that they feel would be interesting to the membership.

Generating these programs shouldn't be a big problem. There are many people within the Chapter ranks that have an interesting story to tell and many people in the surrounding area that can be tapped as well. I've posted a list on the bulletin board of ideas for programs that I've seen in other Chapter newsletters – just thought starters.

BOARD AGENDA – January 10th

- Review of Chapter Purpose
- Chapter goals
- Preliminary calendar of Chapter activities
- Preliminary budget
- Establish key committees

Bill Hanna, President &

EAA Board of Directors Meeting

Board of Directors Meeting – Dec. 6, 2000

In Attendance: B. Hanna, D. Seguin, G. Hover, T. Botsford, B. Nolp, M. Arntz (guest). Minutes from previous meeting were approved. → Treasurer's report was submitted in writing in Greg's absence and approved → Bill asked for a summary of selection criteria for award of the Newberry Scholarship. → Bill summarized the planning meeting for the 2001 Great Lakes Fly-in. 3 chapters were in attendance. June is proposed month for the event. → Mason will be hosting a Balloon Festival in August of 2001. This is an opportunity for Chapter 55 participation in support of aviation. Possibilities raised include fly-by's a Young Eagles day, etc. More discussions will follow → The chapter Christmas party will be held on 12/9. 44 people have committed. Walk-ins are accepted. → No news on

sale of the Mini-Max \rightarrow No news on the hangar roof. Tom Botsford and Bill Hanna agreed to correct the door seal between the meeting room and the hangar. \rightarrow With Max Hall's retirement as Young Eagles coordinator, the chapter needs to find a replacement. Bill will bring it up at the membership meeting. \rightarrow Member of the Year was selected, to be announced at the 12/9 membership meeting. \rightarrow The Headquarters status report was reviewed prior to filing. Insurance for the chapter is up for renewal at \$120.00. The board agreed to renew. As part of the status report it is indicated that all chapter members must be national members. This is consistent with the by-laws of the chapter as well. Drew Seguin will follow up with membership against the roster to obtain EAA numbers

EAA Chapter 55 Business Meeting

General Membership Meeting – Dec. 9, 2000

44 people in attendance, including several guests. > Minutes from previous meeting were approved. > Treasurer's report was approved. Greg Cornell summarized the chapter's finances for 2000 and our ending financial position. See financial statement for details. > Plans for that evening's chapter Christmas party were reviewed. >> Bill Hanna went over the chapter and headquarters requirements for national membership in EAA along with chapter membership. > Bill summarized the program teams and their success for 2000 and announced he will be setting up teams for next year. > Max hall was recognized as retiring Young Eagles coordinator and for the fine job he has done. The call was made to identify a new coordinator for Chapter 55. > Bill Hanna reviewed our success against the goals of the chapter established at the onset of 2000. Most goals were met or exceeded. Goals for 2001 will be set in the January meeting. > Elections were held for the Chapter 55 Board of Directors. New Board members are: Ernie Lutz, Joe Pirch, Bill Purosky, Leah Voelker. → Terry Lutz announced that Scott Crossfield, the astronaut, will be in town for the Michigan Aviation Conference January 26-28, 2001. He will try to set up an informal meeting with Chapter members around that time. > Max Hall was awarded Member of the Year for 2000. Congratulations Max and thanks for all you've done. > Greg Harris and Gary Long discussed their plans to provide aviation services at Mason Field. > January's program will be a presentation by Jim Downer on the Michigan Airport System Plan.

Drew Seguin, Secretary &

Air Heads

The pilot of a Cherokee 180 (LBF) was told by the tower to hold short of the runway while a DC-8 landed. The DC-8 landed, rolled out, turned around, and taxied back past the Cherokee.

Some quick-witted comedian in the DC-8 crew got on the radio and said, "What a cute little plane. Did you make it yourself?"

Our hero, the Cherokee pilot, not about to let the insult go by, came back with a real zinger: "I made it out of DC-8 parts. Another landing like that and I'll have enough parts for another one.

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During the heat of the space race in the 1960s, the U.S. National Aeronautics and Space Administration decided it needed a ball point pen to write with in the zero gravity confines of its space capsules. After considerable research and development, the Astronaut Pen was developed at a cost of about US \$1 million. The pen worked and also enjoyed some modest success as a novelty item back here on earth.

The Soviet Union, faced with the same problem, used a pencil.

Notes from Cape Juby

By Terry L. Lutz, Chapter 55 Flight Advisor

In late January, a true Rocket Man will be in our midst, Scott Crossfield. He will speak at a luncheon as part of the Great Lakes International Aviation Conference at the Kellog Center on Saturday, January 27th. His presentation, titled "Onward and Upward" is about the



development of rocketpowered airplanes, from the X-1 to the X-15 (there are a few jets tossed in there, too.) Scott captivates and motivates – not only was he there, he was at the exact center of

development of the X-15, from the heat resistant Inconel X skin material, to building the first full pressure suit, and finally to the painstakingly careful first flight. He was the first to fly Mach 2 (in the Douglas Skyrocket),

and flew to Mach 2.7 at 100,000 feet during the X-15 test program.

I thoroughly enjoyed reading Crossfield's biography. Although he was not a graduate of one of the military test pilots schools, his academic background in aeronautical engineering and natural piloting ability gave him all the tools he needed to evaluate cutting edge designs for the National Advisory Committee for Aeronautics (NACA), before it officially became known as NASA. The one thing that Scott knew, more than any one person, was that research airplanes had to reach extreme speeds and altitudes before the rapidly developing Century series fighters, so that data on stability and aerodynamic heating was known and could be designed into those airplanes. He felt strongly that a piloted airplane was the best way to travel into space.

The X-15 was initially equipped with two sticks, the traditional one in the center, and a side stick controller. Both controllers operated the same flight controls, and Scott elected to use the side stick for the X-15's first flight. In fact, he made the first flight in the X-15 (an unpowered glide test) using the side stick. He calls the center stick an "axe handle." That was in June 1959. Today, a lot of airplanes use side sticks, from the F-16 to the Long Eze. I can see it now, just like we have the "OX-5 Club," someday there will be an "Axe Handle Club" for all of us ancient ones who grew up with center sticks.

On the subject of sticks in the X-15, the story gets more interesting. I was talking to my friend in California, Bob Hoey, about the X-15 (he was an engineer on the program), and he had this to say about the reaction control system: "The Ballistic Control System (hydrogen peroxide reaction control jets) were sized for 0 q (no measurable air molecules). We did an altitude build-up test program so we had a chance to test them starting about 130,000 feet and Mach 3, which I believe was a q of about 10 psi."

"There were two side sticks in the airplane, both with arm restraints for the 4g boost phase. The right stick worked the aerodynamic controls and the left stick fired the reaction control rockets. The BCS was a cable and pushrod manual bang-bang system. It was, therefore, an acceleration command system in all axes, and it took some skill and training to use it effectively and efficiently. Over the top, you merely attempted to zero the alpha and beta needles from the ball nose (another great story, that of the ball nose), and keep the wings level." About half way through the program, a set of gyros were wired in to provide rate feedback, so then it was a rate command system. Ship 3 had a fly-by-wire

system and the reaction and aerodynamic controls were merged and controlled with the right stick. The left stick was always there as a back up."

The other thing that I learned from Scott Crossfield's book is how patient the pilot, and this case, the entire flight test team, must be to successfully fly an airplane of this complexity. It is a lesson we all should learn if we are to build and fly homebuilt airplanes. While not nearly as complex as a rocket powered airplane capable of Mach 6 and 350,000 feet, our homebuilts have detailed systems that must be understood and thoroughly checked out before we make that first flight, or expand the envelope. We must have the patience to

say "no", take things apart, make adjustments, and try again. It is the one sure path to success.

In case you have been in hibernation since the last meeting, it has snowed a bit around



here, and ground zero was probably the Mason Airport. Greg Cornell gets the award for luckiest member of the chapter, having moved his airplane from the workshop hangar to Jim Palmer's place just a few days before the big snow. For several days, you couldn't even get to your hangar. No roads and no taxiways had been cleared. Since then, numerous, innovative ways have been found to clear the stuff, including the world's largest front end loader, and the Mark 1 snow shovel.

One of the local guys has a beautiful red Luscombe 8A. He also has a set of skis for it, and on January 2nd, the first good flying day we've had in awhile, he was out flying. It was an amazing sight. Flying off hard packed snow, he shushed on and off the runway with the grace of a soaring bird. You could see every flaming red detail of the airplane and skis, as it headed upwind into a bright, but declining sun.

How long has electricity been around? Ben Franklin got all charged up about it sometime in the 1700s, but it wasn't until recently that electricity was in common use. This was made possible by the invention of copper wire in the late 1920s, created when two airline captains got into a fight over a penny. Finally, with all the litigious battles we've been through concerning the recent Presidential election, consider this: Gravity is not just a good idea, it's the law. And it's not subject to appeal. So be careful out there, and remember to give your fellow aviator a helping hand whenever you can.