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

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ALWAYS MORE TO LEARN Once again, Terry Lutz took us on a flight to new levels with his presentation at last month's meeting. The principles of airspeed calibration and measuring flight performance involve a dimension of flying that us puddle-jumpers never approach. Terry was concerned that he may have been too technical with his talk; I did notice a few glazed eyes and a nod or two (they probably missed the Edwards AFB stories too). However, several members were also remarking about actually doing some of the test procedures he outlined and finally

understanding some of the terms a little better. Not every one will turn on to every program so the next time a different set will get some nap time. Thanks Terry, for making us think a little and maybe learn a bit too. There will be a test at the end of the year: anyone that cannot convert Centigrade to Fahrenheit in their head will automatically be a candidate for Chapter President.

A DIFFERENT KID THING One of the spin-off benefits of flying Young Eagles is the accumulation of "points" by our participating pilots that can be

used to offset part of the cost of sending a young person to the EAA Foundation Air Academy. The general discussion at last month's meeting favored sending a person to the Academy this summer -- if we can find a candidate in time and appropriate arrangements can be made. I would assume we would do this with some level of offset to the Newberry Scholarship funding we make to LCC this fall. I have had one name submitted thus far. If you know of a young person (ages

12-18), please contact me at once There are no guarantees of sponsorship at this point, but it would be good if we can put the credits established by our Young Eagle pilots to good use.

NOT JUST HOT AIR Greg Hover and Ernie Lutz have been maintaining contact with the Mason Chamber of Commerce regarding the Balloon Festival planned this summer for the weekend of August 17-19. We have committed to set up a "booth" at the festival. The objective will be to promote the Chapter and advertise our fly-In breakfast that

Eagle rally scheduled for that Sunday (Aug 19) and hopefully we can recruit a good complement of kids at the Festival. This is a promotional opportunity for the Chapter and will also help maintain a positive connection with the Chamber of Commerce. One of our Chapter goals is "Airport Support and Promotion" – this should count toward that objective.

objective.

TIME IS GETTING SHORT I'm certain everyone has the weekend of June 23-24 marked on their calendars (?). That will be the second Great

Lakes Fly-In at the Livingston County Airport. Chapter 55 is one of the sponsoring Chapters. Bill Purosky and Joe Pirch have both been integral players in the planning this year and I hope you all view it as one of "our" events. This year will have more forums and workshops. The focus is for builders and pilots with EAA members (some from Chapter 55), vendors and the FAA making the presentations. By all indications, this will grow into a very significant aviation event for Michigan. A flyer with details of the programs and



Board of Directors' Meeting

Wednesday, **May 9** 7:30 pm at Hangar

Chapter 55 Meeting

Saturday, **May 12** 8-9:30 am Breakfast 9:30 am Chapter Meeting

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activities will be sent within a few days. If you plan to attend and would be willing to volunteer a couple hours of time, please call or e-mail me. Each Chapter is expected to contribute its share of labor to make the event a success – our volunteers and attendance will be important (you will also have a good time!).

KIDS 'R US No, we are not going into the toy business. However, immediately following this Saturday's Chapter meeting, our first Young Eagle rally of the season will be launched. Mike and Mark have been working and worrying to get it planned. The rally has had some major exposure in the Lansing Schools so we may experience a very good turnout. Hopefully, you have already signed up to help – pilot, ground crew, general gofer, etc. These always prove to be almost as much fun for the

kids as they are for us, so be sure you are clear to spend the day at the Hanger – something good is about to happen.



ROOM WITH A VIEW One half of the Chapter Shop is open and ready for an aircraft project. Anyone with an aircraft under construction or one that is a candidate for restoration should be considering using our facility. It is secure, well-lighted, heated and there are windows where airplanes can be observed in action. Anyone interested should contact Gregg Cornell or me for details.

BOARD AGENDA - 5/9/01

- > Young Eagle update
- MAD update
- Balloon Fest planning
- > Roof repair plan
- ➤ GLFI update
- Program Teams

Bill Hanna, President &

EAA Board of Directors Meeting

Board of Directors Meeting - April 11, 2001

In Attendance: M. Arntz, G. Cornell, B. Hanna, G. Hover, E. Lutz, J. Pirch, D. Seguin, Leah Volker. → Minutes from previous meeting were approved. → Treasurer's report was approved. → Mike Arntz reviewed Young Eagles plans. We need pilots and helpers for all events. → Mason Aviation Day is set for Sunday, 9/16/01. It will be a basic fly-in breakfast. Joe Pirch, program chairman, is working to get food sponsor donations. → Mason Balloon Festival. The Board agreed to rent a booth (\$70.00) to promote Chapter 55, Mason Aviation Day, and Young Eagles day. The board also noted that Chapter 55 is not in position to endorse or sponsor any flying activities at the Mason Balloon Festival. Chapter 55 is not a sponsor of this event. → Bill Hannah will

meet with Paul Barbour to develop a plan for repairing the hangar roof this summer. → Motion was made and carried to sell two display cabinets for \$75.00 each → We have a sales agreement for the Mini-Max. It is now officially available for sale, as is, for \$7,500.00. → There were no applications for the maintenance portion of the Newberry Scholarship. There were two applications from the flight school. The committee will select the winner and report back. → The Cessna 120/140 club is interested in holding a meeting at the hangar on 8/19. This is in conflict with the Young Eagles rally scheduled for that day. Will propose the following weekend.

EAA Chapter 55 Business Meeting

General Membership Meeting - April 14, 2001

49 members in attendance, including 3 guests → Minutes from the March 10, 2001 membership meeting were approved as published > Greg Cornell provided the Treasurer's report, which was approved. > Young Eagles Co-Chairman, Mike Arntz reviewed plans for the first Young Eagles Day. We need sign-ups for volunteers. Mike also indicated we need signatures on forms to qualify for credits towards sending a student to the EAA Air Academy See Mike. The Mason Balloon Festival will be held on 8/17 to 8/19 We will be manning a chapter booth as indicated in Board minutes above. > Joe Pirch is coordinating some Chapter activities for Oshkosh. Please see sign-up sheets. + Leah Volker announced the Winged Spartans is up and running with 22 members and their first plane soon to arrive. Contact Leah for membership opportunities and information. • As indicated above, the Mini-Max is available for sale as, requiring minor finish work for \$7,500.00. Terry Lutz gave a presentation on flight testing in the first 25 hours.

Drew Seguin, Secretary &

For Sale

Kit Fox N-6371M is up for sale by its owners: Bill Purosky, Dick Coleman and Del Johnson. The plane is in the Chapter 55 hanger. It has never been flown but has an FAA Special Airworthiness Certification. It has been recommended by Jim Palmer and others to replace the aluminum engine mount with a chrome molly steel mount and to re-route and firesleeve the fuel lines in the engine compartment. Not a lot of work to get it flying for the prospective buyer.

Check out the instrument panel. The Kit fox is has Com/Nav radio with an integrated GS, transponder, two engine information monitors that monitor all four cylinders, Clock, Digital Voice Recorder, Artificial Horizen, Alt. ASI, VSI, turn & bank indicator, Whelen wingtip strobes and ELT. The

engine is a 95 hp Hirth with a belt reduction and a 3 bladed prop.

Asking price is \$14,000. Contact Del Johnson 676-2756, Dick Coleman 349-8048, or Bill Purosky 655-1432.

Notes from Cape Juby

By Terry L. Lutz, Chapter 55 Flight Advisor

A couple of weeks ago, I was in Atlanta, and drove down to visit Chuck Berthe in Williamson, GA. He lives in a fly-in community and has built both an RV-3 and RV-4. He recently sold what is probably the world's most expensive Aeronca 7AC Champ, for \$34,000. But, that's another story. While kicking tires in his hangar, we got into a discussion about airspeed calibration. I noticed that ahead of the static ports on Chuck's airplanes were small triangular pieces of sheet metal. They were his homebuilt fix to adjusting the airspeed indications to read as close as possible to the actual calibrated airspeed.

Now, stay awake on me here! Actually, I should apologize for putting everyone to sleep with my discussion of flight testing your homebuilt in the first 25 hours. It used to be that "Degrees Centigrade" were the most feared words in the aviation vocabulary. The new most feared words are "Terry's Talking Today"!!

The method I briefed for airspeed calibration was to use the GPS and fly three headings, 90 degrees to one another. After a bunch of tough math, you calculate TAS, then the calibrated airspeed. Chuck says that's way too hard. He suggests flying a gradual turn, watching the GPS groundspeed. Note the headings when the groundspeed is at a peak, and at a minimum. Then fly directly into the wind, and directly away from the wind at different speeds. The average speed between two runs at the same speed is your true airspeed. Much simpler math! (You still have to convert to standard day conditions to get calibrated airspeed.)

Once he had static error nailed down, Chuck experimented with aluminum wedges ahead of the static ports, until he found a shape that gave nearly zero error between indicated and calibrated airspeed. Put the wedge ahead of the port, and the static pressure will go down. Put it behind, and the pressure goes up. Think about it! If you put enough metal ahead the static port, your airspeed would read high enough that you could keep up with a P-51!

I finally found some smooth air to do a calibration flight on the Luscombe Silvaire Bullet. Reducing the data was another story. I downloaded a program from the National Test Pilot School (www.ntps.com), which uses a Microsoft Excel spreadsheet to do all the calculations. There are blocks to input the 3 GPS groundspeeds, but only one block for heading. I had to call the author to learn that the single heading is the first heading flown, and the other two are flown counterclockwise from the first. Stick it in that way,

and the math works out great, plus it will plot a graph for you. Cool stuff!!

After taking airspeed data, I flew back to Mason. It was a great Saturday morning, and it also happened that Gregg Cornell brought his airplane back to the airport after the Chapter's own paint zen-master, Jim Palmer, made it look like a work of art. You have to see it to believe it. Maybe we can get Jim to tell the whole story sometime.

The last time I flew, I was taxiing out and heard a rather loud squeal on the radio, with no apparent voice behind it. Didn't think much about it at the time, but climbing out, I noticed a Cessna 172 entering the pattern on the downwind. There were a few more squeals on the radio, and the airplane landed. As you probably guessed, something was wrong with the guy's radio. But something was also wrong with the way I thought about it. When I heard the squeal, I should have thought to look for another airplane. As the weather gets better, and we start flying more, we should start thinking about our game plan to avoid having a collision inflight.

Here are a few things to consider:

- 1. Make sure that your own equipment is working properly. Have a buddy listen up on his radio, and tell you what your own radio sounds like.
- 2. If you have a transponder, use it. Even if you can't benefit directly from the information it provides to ATC, at least they can point you out to other airplanes, and you will show up on TCAS in airline cockpits.
- 3. Fly good traffic patterns. Enter and depart properly. Listen up for other airplanes in the pattern. Count and keep track of all the others. Focus when you need to, scan the rest of the time.
- 4. Make yourself visible. If you have a landing light, use it anytime you are in the pattern. Turn it on for takeoff, and turn it off when you depart the pattern. This technique has worked for years with the airlines and the military, and it can work for us.
- 5. Listen up on the radio, and make your own radio calls short and precise. Listen to what people are saying, try to look where they might be, and if you don't see them, set up a scan.
- 6. Clear all the time. Do a clearing turn on the ground before takeoff. Do one in the air before practicing airwork. If you have a high wing airplane, raise the wing and look before turning. Low wing folks: clear in the direction you're turning.

It should be a great flying season, and don't forget we'll be flying Young Eagles at the next meeting. And as always, don't forget to lend a hand to your fellow aviators if they need it.

The Beginnings of the Soaring Experience

By Bartlett Smith

On July 19, 1969, my wife and I started a mini-vacation trip to Mystic Seaport, Connecticut to indulge my interest in the old square-rigger ships. The first day we drove to Brantford, Ontario, Canada and stayed over night in a new Holiday Inn. The accommodations and food were excellent. Because of this good experience, we decided to try to stay at Holiday Inns the rest of this trip, if possible.

After a tedious drive across New York State on Sunday, we found our nights lodging at a Holiday Inn in Groton, Connecticut, the home of the nuclear submarines. As it happened, it was the date of the first Moon landing by Neil Armstrong and Edwin Aldrin. We stayed up most of the night watching that historic walk.

Early the next morning, we made the short drive to fog shrouded Mystic Seaport for six hours of interesting sight seeing and lunch. By mid-afternoon, we were back on the road again. Our intentions were to take Highway 1 to New York City as my wife had never seen that city. At New Haven, we encountered heavy traffic due to an accident, so we diverted to the scenic Garden State Freeway to pass north of the city. Crossing the Hudson River on the Tappen Zee Toll Bridge, we continued on west to Binghamton, New York. Once again we sought out a Holiday Inn, which was near the campus of New York State University. The invitation to "come as you are" to their restaurant we took quite literally. Going to dinner in our traveling clothes, we found ourselves in one of the finest restaurants encountered in all our travels.

It should be noted here that the previous year my daughter had me watch a Disney movie titled "In the Company of Eagles." This movie was about a young boy learning to fly gliders, and disclosed the fact to my fourteen year old daughter that she could legally solo gliders at that age. It also created my interest to learn more about that silent form of flight.

The next morning, we continued to the north-west with an ultimate destination of Cleveland, Ohio. After about fifty miles of travel, we came to the city of Elmira, New York. My new interest in gliders had revealed that this was the location where Schweizer gliders were manufactured. Soon we saw signs for Harris Hill Glider Field and Museum. Of course we had to investigate.

It was a simple task to follow the signs to the top of Harris Hill. During our short tour of the Soaring Museum, we found out that glider rides were available there. At my wife's urging, I took a ride in a Schweizer 2-33 glider, a two-place training model. During the preflight, the instructor-pilot found out I was a current active pilot flying twin-engine planes commercially. As a result, I did most of the flying on our half hour flight except for the tow and the landing. It was a new and different experience. Right then and there I was hooked on this silent flight.

Back in the usual routine of work after the short vacation, I began to search out information on this new found type of flying. Strangely, I found a copy of *Soaring* magazine at a news store. I say strangely because I never saw the magazine for sale on a newsstand again. I was told it was only available by membership in the Soaring Society of America. From that magazine, I learned that there were several glider operations in Michigan. It also revealed that the Schweizer Aircraft Factory on the Chemung County Airport at Elmira, New York had a glider pilot school at that location from May through October. They offered special courses for power pilots to obtain the glider ratings on their pilot certificates.

The more information I gained about gliding and soaring, the more determined I became to get the proper rating and to participate in this fascinating flying sport. During the spring of 1970, I contacted the Schweizer Factory and Glider School to arrange to enroll in their power pilot glider rating course in the fall.

Because I took very few days of vacation, my employers allowed me a limited personal use of the company aircraft that I piloted for them on business. Early on Thursday morning September 17, 1970 my wife and I arrived at the company hangar at Capital City Airport to begin our trip to Elmira, New York and the Schweizer Soaring School. My good friend, George Wood, had signed up for the rating course also. We were to pick up he and his wife, Jane, at the Tri-City Airport north of Saginaw, Michigan then continue on to Elmira.

By the time I moved the plane out of the hangar, moved our car into the hangar, and closed the doors, it had started to rain. I stored our baggage, started the engines, and made my initial call to Ground Control only to be advised that the airport had just gone IFR (Instrument Flight Rules) with ceiling down to two-hundred feet. I requested clearance to the end of runway 6 to check my VOR receivers then filed an Instrument Clearance to Tri-city Airport on the radio. This was the beginning of an interesting four days.

Although my wife had flown with me many times before, this was her first time in the Skymaster and the first time she had been in the co-pilot seat on an instrument takeoff and flight. When I realized we were going to have to operate IFR, I had hastily gathered the required instrument charts and plates for the short flight from my flight bag and dumped them in her lap. In a matter of seconds after lift-off, we were totally engulfed in the clouds and their sea of white. It must have been a little terrifying to her but revealed her faith in me.

It was a short flight at three-thousand foot altitude with a hand-off to Tri-City Approach Control. Because there was a TVOR on the Tri-City Airport, I was cleared for a DME arc approach and broke out at three-hundred feet in light rain. Our friends were waiting for us at the terminal.

The next phase of the flight could be handled with proper preparation. A visit to the Flight Service office in the terminal allowed me to file the instrument flight plan through Cleveland Center via Buffalo direct to Chemung County Airport. Soon we were off the ground again, climbing on instruments through the clouds. This time my friend was in the right front seat and our wives were in the second seats behind us.

It seems that many of my longer flights always had interesting circumstances that make them remain vividly in my mind. This flight and return fit that pattern.

While cruising at eight-thousand feet IFR over London, Ontario, the Cleveland Center called me to ask if I had a certain radio frequency available. When I answered in the affirmative, they asked me if I would call a Cessna 310 that was enroute from Lansing to Traverse City and ask him to call them on another frequency. It seems that they had asked him to respond on the first frequency only to find out they, the Center, did not have the capability to use it. The Center assured me it was their fault, not the fault of the Cessna pilot. When I called the Cessna, I immediately recognized the pilot as Dean Crane, a Michigan Department of Aeronautics pilot and friend. Inasmuch as he did not recognize me, I did not identify myself. (Later I confronted him, jokingly, as the inept pilot who got frequencies wrong. He was anything but that!)

After crossing Buffalo, the clouds beneath us started to break up. Before I reached Chemung County Airport, I was able to cancel IFR clearance and land there in sunshine shortly after noon. Parking the plane at the terminal, we rented a car and proceeded to the Schweizer Factory across the field.

Checking in at the school, they confirmed that we had reservations at the Holiday Inn about four miles away in Elmira. After each paying the transition course fee of \$165.00, which entitled each of us to three hours of ground school, books, and eighteen flights. The eighteen flights were all aero-tows, six to 3000 feet, six to 2000 feet and six to 1000 feet. The actual flying time was determined by conditions and pilot skill, as was the dual instruction time. One 3000 foot tow was reserved for the final flight check with the FAA inspector for the award or disapproval of the glider rating. Ground school was only conducted in the mornings and was mandatory before solo. We would have our ground school the next morning. Then we met our flight instructors. George's instructor was the son of one of the Schweizer brothers, mine was Irving Jones, the chief pilot for the Schweizer Company.

We were to start flying right away in the two place 2-33 trainers on aero-tows by Piper Super-Cubs. I had two very interesting flights with my instructor when he surprised me by waiving the ground school requirement and soloed me in

the trainer as my last flight for the day. He also cleared me to fly the single place 1-26 on my next flight.

By the next morning, the rain we left in Michigan was with us in New York. After we finished our ground school, it was evident that there would be no flying that day because of the weather. My instructor took us on a tour of the Schweizer factory where their gliders were manufactured. They also produced the Grumann Ag-Cat as well as sub-assemblies for Piper aircraft and Bell helicopters. We also were introduced to Paul Schweizer, one of the owners and founders of the company. When he learned we were from Michigan, he produced a small bottle of water with a card attached from his desk. He explained that in the early 1930's he was flying in a gliding contest off the sand dunes at Frankfurt, Michigan. The bottle of water was an award he won there for missing the beach and landing in Lake Michigan.

The non-flying afternoon was spent with our wives visiting the nearby Corning Glass Works, the Glenn Curtis Aircraft Museum and the Gold Seal Winery as well as sight seeing in the area.

Saturday was a beautiful day. My first flight of the day was in the 1-26 while my friend made his first solo in the trainer, and then on to the 1-26. It was a busy day of flying and learning. The greater portion of the school enrollment were students just learning to fly rather than transition pilots like ourselves, so the weekends were very busy. Although there were times when we had to wait for a plane or a tow, many flights were accomplished that day. Of the three types of soaring, I had experienced both ridge soaring along Harris Hill and thermal soaring farther from the field in the afternoon.

One interesting experience, that was to have a long range effect on me later, occurred while I was working a thermal in a 1-26. A Schreder HP-14 joined the thermal below me and quickly passed me in altitude. The efficiency and beauty of that home-built sailplane made a deep impression on me. No doubt that encounter was an influencing factor in my later decision to build the next Schreder-designed sailplane, the RS-15.

Sunday morning revealed another beautiful day for flying. We each had only three flights left to complete our courses, two 2000 foot tows and one 3000 feet tow for the flight check. We checked out of the motel early and after loading our baggage in to our plane, turned in the rental car and taxied across the field to park the Skymaster in the school area.

Soon we had each made short disappointing flights in 1-26's for our first 2000 foot tows. My second 2000 foot tow had not revealed much lift either, and I believed this last solo flight was destined to a short one too. While headed back to the airport, I passed under a hawk. Quickly I turned to follow it and he found a thermal. In a matter of minutes, I had climbed from a thousand feet to over four thousand feet

altitude. This turned out to be my longest flight and earned me a FAI "C" badge. (For staying above your tow release altitude at least 30 minutes and total flight duration of over an hour,)

As soon as I completed that flight, I found out George had already had his check ride and had the rating. Now it was my turn to take my check ride with Bernie Carris, the FAA inspector. While I was on that flight, my wife enrolled me in the Soaring Society of America (SSA) in the office. The paper work was completed after my successful check ride and we each had the Glider rating listed on our individual pilot licenses and each had been awarded FAI "A" and "B" badges as well.

In the bright sunshine of early Sunday afternoon, we took off from Chemung County Airport for our trip home. About half way between Buffalo and Michigan over Canada, we lost the sun to heavy clouds. Once again I had to file an instrument clearance to continue the flight on to Tri-City Airport where our friends could pick up their car and head home. An instrument approach there allowed us to break out under a four hundred foot ceiling.

We said goodbye to our friends after a great four days together. Now it was necessary to file another airport-to-airport instrument clearance from Tri-City Airport to Capital City Airport. This would lead to an incident I still recall vividly.

Tri-City Departure Control cleared me direct to the St. Johns intersection at 3000 feet and to contact Capital City Approach Control at that point and report my position. There I was cleared to report the Lansing outer marker at three thousand feet and to turn outbound for the procedure turn for the instrument approach to runway 27. Just after I repeated my clearance on the radio, there was a call in a Texas drawl from the pilot of a Grumann Gulfstream turbotwin enroute on Airway Victor 2 from Detroit to Lansing. Approach control cleared him to report the outer marker at three-thousand-five-hundred feet, then turn west. properly repeated the clearance. This meant I was proceeding south at 220 miles per hour and he was proceeding northwest at 350 miles per hour with the same spot, the outer marker, as our destination. Both of us were flying in solid cloud cover.

At the first audible sound of the outer marker, I started my turn east-bound as I reported my position, "Skymaster 084, outer marker at three thousand turning outbound for procedure turn."

Just as I released my microphone button came the call, "Gulfstream xxx outer-marker at <u>three thousand</u> turning west." The Lansing Approach Control literally exploded into "Gulfstream start an immediate climb to four thousand!" Of course we could not see or hear each other, but the two planes must have passed within feet of each other!

Approach control cleared me to continue my instrument approach then put the Gulfstream in a holding pattern at four thousand feet. We broke out in the clear below a four hundred foot ceiling and landed on runway 27. After retrieving our car and hangaring the plane, we could hear the Gulfstream still in a holding pattern in the clouds above the airport.

On the drive from the airport to our home in Mason I then told my wife what a dangerous incident had just taken place. Of course she had been completely unaware of what a precarious position we had been in for a few seconds. That was many years ago, but I still shudder when I recall the incident.

I never did find out if they cited the Gulfstream pilot for an obvious violation. Later I learned that the tower personnel at Capital City Airport were really upset by the affair and complimented me for not making more of an issue of the close call.