



**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 Seguin 332-2601 Editor: Warren Miller 393-9385**

Climb and Maintain Flight Level 55

Bob Smith and I were chatting the other day and he suggested that I write about what we were talking about. The conversation was about weather and how to find the most recent weather prior to launching into the blue yonder (not necessarily true these days). Some reports can be as old as 90minutes when the national weather service receives them. You can have up to the minute reports that will never be more than 59 minutes old (and if it's that old, the weather is good, or it is bad and very stable). The METAR and SPECI once you learn the coding for them are quite easy to read. Here is a break down of the METAR and SPECI format:

METAR KLAN 021455Z 28007KT
10SM OVC013 08/06 A2959 RMK AO2SLP021
T00780056 51016. Ok, what does this mean? First, it tells what kind of observation it is. The METAR is only issued on the hour; SPECI's can be issued any time during the hour, next KLAN is station identifier for Lansing.

Next is date and time only, the day is put in the month and year will be left out hence 021455Z or 2nd day at 1455Z universal time coordinated or 10:55 local standard time not daylight savings time. LST does not change with the seasons. We are always plus 5 hrs here. Next wind speed and direction 28007KT, 280 degrees at 07 knots, direction first and speed last.

Next is the visibility: 10SM 10 statute miles or more anything less will be reported in one mile increments down to 3 miles and then 1/4 mile increments down to 2 miles and 1/8 mile increments 1/2 mile and 1/16 mile increments down to zero visibility. (At that point you want to be walking.

Next is the height of the lowest cloud layer and coverage remembers only BKN broken and OVC overcast are ceilings, SCT scattered and FEW are not but don't get caught on top when it changes unless you filed IFR. Metar and SPECI's will only give three heights maximum. There maybe more than three and a maximum height of 12000FT. OVC013 Overcast 1300FT

Next temperature/dew point given in Celsius temperature will always be first followed by a / and then dew point it is very important to keep a watch on the temp/dew points especially in the summer. High temperature and dew point that are close together are indicative of

severe weather.

Last but certainly not least is the altimeter setting A2959 altimeter 29.59 inches of mercury corrected for altitude of the reporting station in there marks section you will see SLP021 that is sea level pressure for the station in hectopascals.

The other two groups in this example are high and low temperature and precipitation amounts.

Here are some web sites that might be handy for you and some are just fun to play with <http://www.uswx.com/us/wx/>
<http://www.rap.ucar.edu/weather/radar.html>
<http://www.intellicast.com/Local/USLocalWide.asp?loc=klan&seg=LocalWeather&prodgrp=RadarImagery&product=MetroRadarLoop&prodnave=none&pid=none>

The last one is a long one you might want to cut and paste it. If not just go to intellicast.com and look around.

Board of Directors' Meeting

Wednesday, May 8, 2002
7:00 pm at Hangar

Chapter 55 Meeting

Saturday, May 11, 2002
8-9:00 am Breakfast
9:30 am Chapter Meeting

Team #4 is on deck for the program this month. They are **Richard Bacon, Adam Fog, Greg Hover, George Moore, Carl Dalrymple, Dave Groh, Ted Lakin, and George Spencer**. I haven't heard a thing on what the program is about, but I bet it will be a good one. The team is made up of some very interesting backgrounds.

Teams for 2002

MAY TEAM #4

Richard Bacon	Carl Dalrymple
Adam Fogg	Dave Groh
Greg Hover	Ted Lakin
George Moore	George Spencer

JUNE TEAM #5

Thomas Bancroft	Ken Distler
Robert Fox	Bill Landucci
Ron Mudge	Steve Ramey
Jim Spry	

JULY TEAM #6

George Benson	Jim Doerr
Don Frank	Max Hall
David James	Terry Lutz
Gary Nesbitt	Arthur Sundeen

AUGUST TEAM #7

Willam Bezdek	James Downer
Hugh Fuller	Jim Sawyer
Dennis Swan	Bill Hanna
Delbert Johnson	Tim Martinson

SEPTEMBER TEAM #8

Tom Botsford	Ken Drewyor
Ken Gerow	Gordon Hempstone
Deanna Kennedy	Morgan McCalla
Gary Nicola	Thomas Schroeder

OCTOBER TEAM #9

Glenn Trommater	Jack Toman Jr.
Mary Nestell	Ivan Rowell
Richard Wilke	Joe Whitesides
David James	

NOVEMBER TEAM #10

Robert Smith	Thomas Sheehan Jr.
Bob Noelp	Bart Smith
Jennifer Wells	Ed Zdybel
Mark Jacob	

EAA Board of Directors Meeting

Board of Directors Meeting – April 10, 2002

In attendance: Mike Arntz, Renee Arntz, Tom Botsford, Greg Cornell, Chris Baily, Ted Lakin, Gary Long, Ernie Lutz, Bill Purosky, Drew Seguin. → Treasurer's report was approved. Minutes from previous meeting were approved → Note a correction from previous minutes, Young Eagles days on 5/11 and 7/13 are half days and the 6/8 event is all day. → Mark Jacob will edit the Chapter 55 web page → Gary Long donated a PA system to the Chapter. We still need to buy speakers to go with it. → Bill Purosky provided an update on the Great Lakes Fly-In. It will have the same setup as last year except more consolidated in the forums area. We need Chapter 55 volunteers for general duties. There are at least 13 and possibly 15 chapters participating in the event. Livingston County Airport is supportive and looking for long range plans to host the event. The event is 6/29-6/30. → There is some local interest in purchasing the Mini-Max. It is not on E-bay yet but will be soon. → There are no applications in for the Newberry Scholarship. The Board agreed to wait and see what happens this year before determining how to proceed. → The Ercoupe fly-in is on track and approaching fast. It will run from 6/20 through 6/23. We still need volunteers. This is a great opportunity to have fun while raising needed funds for the Chapter. → There was a general discussion of concern over Aero-Genesis' support of the airport and notice that the Airport Authority had installed an airport manager for Mason independent of them. → The decision was made not to have a booth at the Mason Balloon Festival. → There will be an informal picnic at the airport on the Fourth of July. Gary Long is the de facto sponsor. Bring your family and a dish to pass for fun and a great view of the Mason Fireworks. → There is some interest in having a Hangar Dance some time this year. It will be put forth to the membership to see if anyone wants to act as sponsor. → There will be a safety seminar sponsored by Chapter 55 and Spartan wings from 7:00 to 8:00 PM on May 15 at the Chapter 55 hangar. → Ted Lakin motioned to buy an easy-up canopy to use at various Chapter events and to be available for member use. The motion was carried.

YOUNG EAGLES RALLY

The Young Eagles rally starts at 10:00am be there and watch the fun. I hear Bill Hanna will be burning hot dogs and other fun things.

Mike

EAA Chapter 55 Business Meeting

General Membership Meeting – April 13, 2002

There were 50 people in attendance, including members and guests. Mike Arntz passed out suggestion forms looking for membership input on what we should be doing. → Meeting minutes of March were approved → The Treasurer's Report was presented by Greg Cornell and approved. → Ken Drewyor thanked everyone for their support during his recent medical challenges. → Chris Baily updated us on the Young Eagle program. Chapter 55 has flown 772 Young Eagles to date with this year's goal to push us over the 1000 mark. Certificates of recognition for last year's efforts were awarded to Mike Arntz, Greg Cornell, Ernie Lutz, and Ted Lakin. → We need signups for the Ercoup convention. → Mike asked for a volunteer or two to organize a Hangar Dance. No response so far. → There will be a safety seminar sponsored by Chapter 55 and Spartan wings from 7:00 to 8:00 PM on May 15 at the Chapter 55 hangar. → John Myerley mentioned the discussion group on Yahoo. mireley@cem.msu.edu. → Bart Smith Showed a video but I had to leave and didn't catch what it was about. Sorry.

Drew Seguin, Secretary &

April Breakfast Crew: Ray Fink, Lynn Brown, John Mireley and Doug Koons



Notes from Cape July

By Terry L. Lutz, Chapter 55 Flight Advisor

A NASA test pilot told me an interesting story a few years back. He was one of the lucky few pilots to fly the X-29, a single engine, canard configured aircraft with a swept forward wing. NASA was asked to fly the airplane to the Dayton Air Fair for a static display. This was the same year that 2 Mig-29s toured the U.S. and performed at air shows. My friend watched as the Russian pilot performed several incredible maneuvers, many of which had not been

seen in United States. When asked what it felt like to fly an airplane with such incredible performance, the Russian replied, "I feel like King Kong!!"

When you fly today's high performance homebuilt aircraft, you can climb faster, cruise faster, fly higher, and fly farther. Even if the highest performance airplane you have ever flown is something like a Piper Lance, airplanes like the Lancair, Glasair, Questair Venture, and the RV family can make you feel like King Kong by comparison. But we all have to remember that King Kong had to *climb* tall buildings. He was not Superman, and could not leap tall buildings in a single bound.

Having impressive performance at your fingertips is an invitation to do things you would not have attempted in the airplanes you grew up with. Many of today's high performance homebuilts are capable of flying above the weather. If the airplane is properly equipped and the pilot is current and rated, "VFR Over the Top" is a reasonable consideration. Are you legal if the airplane is not IFR capable and the pilot does not have an instrument rating? Yes. Is there one engine failure between you and certain death? Yes.

If you are flying perfectly legal just above the clouds at 11,500 feet in a VFR equipped airplane and your engine fails, the most likely scenario is that control will be lost. I remember very well the audiotape played to my class in USAF pilot training. It was a pilot in a Bonanza who was lost in the weather, and ATC was trying to help him. He was having difficulty holding heading and altitude, and eventually lost control. His last words were "Help! Help!", in a voice so chillingly high pitched that it is impossible for me to forget.

Having impressive performance is an invitation to fly higher than you ever have before. This puts you on the edge of violating some FARs that you haven't considered before. At 8,000 feet, the pressure in the atmosphere is 50% of that at sea level. Most of us do just fine there. In fact, we do just fine at 10,000 feet. Above that, the lack of oxygen begins to impair thought processes and fine motor skills. FAR 91.211(a)(1) requires that if you are flying between 12,500' and 14,000', your maximum time at that altitude is 30 minutes without supplemental oxygen. But if you are not in good physical condition (suffering from a cold, for example), or if you have an exhaust leak, you can be in real trouble. These regs were written back when airplanes first had the capability to fly high and fast, and people died because of what they didn't know. *Know and survive.*

Flying VFR above 10,000 feet, whether you are on top or not, places you in a different environment with a different set of rules. Cloud clearance criteria changes to 1000' above, 1000' below, and 5 sm horizontally. The reason is

another difference: there is no speed limit up there. Airplanes are whizzing around at 250 to 350 knots. Small sport airplanes are difficult to spot until they are only a mile or two away, and the high closing velocities make the problem even worse.

Is a transponder a requirement to fly above 10,000 feet? Maybe. If the top of a TCA extends above 10,000 feet, you will need a transponder to fly through that area. You will also need a clearance!! If you do have a transponder, and fly above 10,000 feet, consider this: It's one thing to operate at low altitude, generally avoiding controlled airspace, and use your transponder to squawk 1200 and Mode C. However, at the higher altitudes, faster aircraft on ATC clearances are depending on you to be squawking the correct altitude on your mode C. This is a key component to the Traffic Collision Avoidance System (TCAS) system in most commercial aircraft. FAR 91.215 says that "ATC transponder equipment must meet the performance and environmental requirements" of the applicable TSO. This means that the transponder must be checked every 24 months (Part 91.413). Flying above 10,000 feet is not the place to push the limit of legality.

Just remember that King Kong was not Superman. Climbing higher and going faster requires a different operating philosophy. Learn to embrace it and leave yourself plenty of safety margin. Otherwise, we'll read about you in the papers and find out you were just another big ape.

I was flying the line on the weekend marking the start of Sun 'n Fun, and knew that the Fowlerville gang would be in the air at the same time I was. I departed Memphis for Detroit, and climbed toward Evansville, Indiana. Leveling at FL330 about 60 miles south of PXV, I dialed 122.75 in the #2 VHF, and sure enough, there was Ron Cooper chirping away like a canary. "Is that you, Cooper?" "Yeah, who's this?" "Terry, about 60 miles south of Evansville at FL330." "Do you mean 33,000 feet?" (Cooper is weird like that. He also gives me heartburn if I mention knots instead of mph). It was one of those few aviation experiences in a lifetime, where kindred spirits were aloft at the same time. Distant specks in a huge sky, and in contact for the few minutes we were in radio range.

Bill Purosky loaned me his Compaq iPaq with the Anywhere Map software, and I recently had the opportunity to test it in both the RV-8 and the Luscombe Silvaire Bullet. Boy, was it terrific. The Anywhere Map software is different than what you find on the Garmin GPS units. It is not totally intuitive, but if you are familiar with the Window operating system, you will quickly adapt and make good use of it. I was an hour into an RV-8 flight when I took it out of the case, velcroed the iPaq to the instrument panel and started using it. I was able to use it for the rest of the flight (although I admit to skimming the book first!).

You need to orient the iPaq for the best viewing angle, because as many of us know, LCD displays can be somewhat limited when viewed off center. The iPaq utilizes a touch screen, which is normally done with a stylus. Of course, most pilots will drop and be unable to find a stylus in the first few minutes of flight. So I experimented a bit, and found that with a gloved hand (my old, junky military flying gloves), I could do everything I needed to. You have to go slowly, and expect a few incorrect taps on the screen. Turbulence doesn't help. I also found that the back end of a ballpoint pen works just as good as the stylus.

There are plenty of options to customize the display and declutter it when necessary. It has two compass modes, and arc mode and a rose mode. I flew with both, and both worked just fine. The course deviation indicator was smooth, and I could easily center the needle. The Anywhere Map software draws a green line from you to the selected waypoint. Bearing information is provided at bottom of the screen and the CDI needle, and magnetic course is provided in at the top. If I were to make teeny, tiny changes to the display, I would box the bearing and course information to make them easier to spot. The really good news is that the Anywhere Map subscription comes with software upgrades, so as this display evolves, you can download the changes without having to buy a whole new unit. Cool! You can take a look at it at the next chapter meeting.

Young Eagle flying will start next Saturday, May 11th. I can't emphasize enough that flying safely is the single most important thing we must do. Here are some numbers to make the point. Let's figure that the GA accident rate is 5 per 100,000 flying hours. Then let's calculate the number of flying hours it will take to fly 1,000,000 Young Eagles. If you figure 2 kids per flight, and each flight lasts an average of 30 minutes, the math works out to 250,000 flying hours. So in theory, with an accident rate of 5 per 100,000, we can expect that there would be 12.5 accidents in the course of flying 1,000,000 kids. It is a bit chilling to think in these terms, so our firm resolve should be on flying each and every flight safely. Get your best glasses on, get all your lights on, and make sure that you and your airplane are operating well within limits. The latest Sport Aviation has a good article on collision avoidance in the traffic pattern. Please take a look at it before flying Young Eagles this year.

Overheard in the Mason traffic pattern last week: "Woomf, Woomf!" "Come here, boy, come here" "Woomf!!" "Badger, that's my radio!" "Woomf!" "Badger, come back here!!" Doesn't Tim Martinson have a dog named Badger?

In a few weeks, it will be Memorial Day, and I have been saving this story about the origin of the music we call "Taps". In 1862, Union Army Captain Robert Ellicombe commanded a company of soldiers near Harrison's Landing in Virginia. Across a narrow strip of land was the

Confederate Army. During the night, Captain Ellicombe heard the moans of a mortally wounded soldier. He decided to risk his life and bring the man back to camp for medical attention, not knowing if he was a Union or Confederate soldier. Crawling on his stomach through gunfire, Captain Ellicombe reached the soldier and pulled him back toward the safety of his own camp. The soldier had died when they reached camp, and Captain Ellicombe could tell from his uniform that he was from the Confederate Army. But the brave Captain went numb when a lamp was lit and he discovered that the soldier was his own son.

The boy had been studying music in the South when the war broke out, and without telling his father, had enlisted in the Confederate Army. The heartbroken father asked permission to give his son a full military burial, despite his Confederate status. The request was partially granted. The Captain had asked that an Army band play a funeral dirge at the son's funeral. The request was turned down, but out of respect for Captain Ellicombe, they allowed only one musician, a bugler. He asked the bugler to play the notes from some music they found in the dead son's uniform. Thus came the notes for "Taps". And also the words:

Day is Done
Gone the sun
From the lakes, from the hills, from the sky
All is well, safely rest
God is nigh
God is nigh

The summer flying season is already here, with some great weekend weather and more to come. Fly as safely as you can, and remember that you have to work at it. And don't forget to lend a hand to your fellow pilot when it's needed.



**Sun 'n Fun, Lakeland, Florida
April 7 to 13, 2002 by Dick Wilke**

My son, Steve, and I went to Sun 'n Fun on Thursday and I stayed over on Friday. It was warm but breezy and there were lots of visitors and exhibits, but not as many planes as we have seen in earlier years. My primary interest was to see what was being shown in kit planes and engines to meet the Light Sport Aircraft and Sport Pilot proposal.

One of the most interesting was the Jabiru J250 -- a high wing composite monoplane which is built in Australia and comes with the six cylinder, four cycle, Jabiru 3300 engine. The fuselage comes in a top and bottom section that the purchaser assembles. The wings are assembled at the factory. I've never been enthused about composite planes because of all the work in finishing, but this one comes with a smooth white gelcoat finish and only the seams need to be finished. The completion time is stated as 600 hours which, if true, is very appealing.

The engine is rated 120 HP at 3300 RMP and the 107 HP at 2750 RPM. It is now rated 2000 hours TBO and 1000 hours top overhaul, and is built like a watch. The cylinders are machined out of solid blocks of steel and the crankcase is machined out of solid blocks of aluminum and it weighs only 180 lb. With equipment. It has dual ignition, automotive spark plugs and a pressure compensated carburetor. I spoke with Andy Sylvester who has moved from England to Naples, Florida to represent Jabiru. They also have a flight center in Menasha, Wisconsin.

www.suncoastjabiru.com

Another interesting plane was the Zenith Zodiac XL. This plane is, of course, a low wing aluminum monoplane based on the 601 Series and built in Mexico, Missouri. It was shown with the Jabiru 3300 engine which was very appealing to me. Chris Heintz who was a presenter at one of the workshops designs the Zenith planes. His sons run the plant in Missouri and I spoke with Nick Hentz. Zenith claims that this plane can be assembled in 600 hours primarily because it employs aircraft type pop rivets. This also makes it possible for one person to do most of the assembly. Zenith has been around for a long time and is well known. www.zenithair.com

Another interesting composite high wing monoplane is the Pelican Sport 600, now being built in Quebec and marketed by The New Kolb Aircraft Company of London, Kentucky.

This plane uses the Rotax 912S engine, rated 98HP and a Warp Drive propeller. This firm is, of course, primarily known for its line of ultralight planes.

www.kolbaircraft.com

Guess Who????

The old departing Editor, riding off into the sunset on his new motorcycle. Chuck hasn't traded in his plane, just has another type of transportation for fun and games.

