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

Well we are in hot water NOW, thanks to Tom

Botsford. If you haven't been in the restroom at the hangar you should take a look at the new faucet Tom installed and it works too. Thanks, Tom.

As you all know the Mini Max is for sale. I have two people who are interested in putting some money into it and forming a small flying club with four to six members: with four members it would cost

you only \$1500 each, six members - \$1000 each. If interested contact me (Mike Arntz) sounds like fun.

We have the Ercoupe convention coming soon, real soon. It looks to be great fun and there will be a lot of things we all like, AIRPLANES and more AIRPLANES, so don't be left out. Sign up for a volunteer spot before they are all gone.

The Young Eagles dates and times are set. Chris and Renee are chomping at the bit to get going. They will need lots of help to make their goal this year. Let's show them they can count on us to help them out. Next month is our first rally. Flying Young Eagles is a lot of fun. For example, one of the young eagles I flew last year, as we were climbing out he panicked and

said he was scared and wanted to go back, so I said we would return to the airport. I set up for the downwind, by the time we were at midpoint, he said, "WAIT, I am not scared anymore but don't go any higher." So

we had a nice flight out over the state game area at pattern altitude. When we got back the kid was ecstatic about the flight. So if you have never flown a young eagle or worked a rally now is your chance.

I finally got the calendar of events finished so you will know what, when and where. Is as follows. More will be added

Board of Directors' Meeting

Wednesday, **April 10, 2002** 7:30 pm at Hangar

Chapter 55 Meeting

Saturday, **April 13, 2002** 8-9:00 am Breakfast 9:30 am Chapter Meeting

as events happen.

Mike Arntz, President &

Teams for 2002

APRIL TEAM #3

James AndrewsLynn BrownRaymond FinkPeter GreenfieldSam HinezDoug KoonsJohn MireleyDavid Paul

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 BotsfordKen DrewyorKen GerowGorden HempstoneDeanna KennedyMorgan McCallaGary NicolaThomas 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 – March 6, 2002

Young Eagles days for 2002 are 5/11 (half day), 6/8 (half day), 7/13 (full day), and possibly a fourth day TBD. Jeff Young expects to bring an LCC plane to participate in the 5/11 event. Half-day programs will

start at 11:00 and the full day at 9:00. There is a contest within EAA to get prizes for number of flights flown. > Minutes from previous meeting were approved >> Treasurer's report was approved. Greg indicated we are absorbing the \$15 minimum charge for gas in the builder's space since there are no active builders at present using gas. → The Board approved disbursement of \$250 for participation in the Great Lakes Regional Fly-in. → The speaker system purchase which was approved at the last meeting is no longer available. Gary Long will look at alternatives and report back. → We will have a display booth at the Mason Balloon Rally this summer. >> Bill Hanna has offered to work with program teams in advance of Chapter meetings as a facilitator. → Mark Jacob has volunteered to develop and maintain the Web Page for Chapter 55. A motion was made and approved to establish a policy not to publish member names and information without prior approval. >> Great Lakes Regional Fly-In is coming up. Chapter members Bill Hanna and Bill Purosky are serving as President and Secretary, Chapter 55 will participate as miscellaneous volunteers in the event. > A motion was made and approved to proceed with placing the Mini-Max on ebay for sale. Joe Pirch will handle it. → Motion was made and passed to cancel the Chapter 55 plans for a scholarship to the EAA Air Academy because no applications were received by the deadline. Bill Hanna will offer our points to other local chapters. If there are no takers, we will donate them back to EAA. > A July 4th picnic for Chapter members and guests was proposed. More discussion later. → Bill Hanna will make nametags for chapter meetings. → Bill Purosky is going ahead with work on the Ercoupe convention. We will need to help them find a facility for their banquet in case the Aero Genesis building is not available. → EAA is planning to have a Chapter Workshop in Lansing in February of 2003

EAA Chapter 55 Business Meeting

General Membership Meeting – March 9, 2002

There were 46 people in attendance, including members and guests. Bill De Groh was recognized as a new member. → Meeting minutes of February were approved → The Treasurer's Report was presented by Greg Cornell and approved. → Renee Arntz and Chris Bailey are looking for sign-ups of the Young Eagles day on May 11. We are working toward a goal

of raising the Chapter 55 total from 766 to 1000 this year. → Bill Purosky and Ted Lakin provided an update on the Ercoupe Fly-In. We need volunteers to head car Parking, Sanitation, Safety, and Facilities. We will have a big need for kitchen help throughout the event. Please contact Bill or Ted and please sign up on the posted sign-up sheets. CRAA is planning to fill holes in the grass areas in April. → Gary Long is researching options for a PA system. → Mark Jacob is the new Chapter 55 Web Editor. If you have content to contribute please contact Mark. → There is a video available on Sun-n-Fun if you are interested. → Russ Hilding presented background and a video on bush flying in Alaska.

Drew Seguin, Secretary &

Notes from Cape Juby

By Terry L. Lutz, Chapter 55 Flight Advisor

The month of March came in like a lamb, and went out like a lamb, but on March 9th, the lion raised its head and roared. After our EAA meeting on the 9th, the weather began to change. In last month's article, I wrote, "springtime weather can be unpredictable and sometimes violent". Violent it was. There were high winds with thunderstorms, followed by snow, and even higher winds on Sunday morning. I recall watching the wind pick up snow in a field behind my house on Sunday. It was if the frigid air was being poured straight down toward the earth. It slammed to the ground like a classic downburst, and blew snow into the air toward all points of the compass. It also blew tree limbs across power lines, and people lost power at all points of the compass.

The aftermath to the aviation community was equally damaging. I did a little post-storm reconnaissance in the Luscombe Silvaire Bullet, and noted that the wind sock at Kyle Bradford's airstrip was blown completely down. The worst damage was at Ron Cooper's airport. Donna's recently rebuilt Champ broke loose from one mooring strap, and started beating up on Ron's Cardinal. The Champ took the worst of it, but a wing skin and an aileron needed repairs on the Cardinal. It reminded me that when frost leaves the ground in the Spring, the combination of soft ground and high wind can actually lift a concrete anchor out of the ground. It's a dangerous time for any airplane tied down outside.

We were busy working on my RV-8 project when the storm hit. Mark Wolf was there also, working on his Rotorway Executive. We continued working until the power went out. So I helped Lou fire up his generator and

headed home. A few minutes after I left, a bright orange Chevy Suburban came roaring up Lou's driveway, with all the lights on and flashing. It pulled up near the house, and out stepped the Men In Black. "Do you own an airplane, Sir?" "Sure", said Lou, "It's over at the airport. Would you like to see it?" The Men In Black were pointing their alien detectors toward the barn. "We think you have an airplane here, Sir." The detectors went wild as they approached Mark Wolf's helicopter.

It turns out that it was the Civil Air Patrol responding to an ELT activation, one of several in the state recorded that day. Most were from jostled or overturned airplanes, but Mark's ELT was set off accidentally by Mark while he was working on the avionics. Despite the storm, our satellites, the Civil Air Patrol, and ELTs were all working as advertised.

The presentation by Russ Hilding about flying in Alaska was a dandy. I particularly enjoyed the part about the takeoff and landing contest the bush pilots have every year. Like they actually need to do that, because it seems like every takeoff and landing is a *real* contest. One takeoff in the video, the one where the pilot raises the tail before starting to roll, brought to mind how interesting the balance can be between braking control and pitch control on either takeoff or landing.

I first noticed this many years ago while flying with my friend Marvin Grahn, in his Dad's Cessna 120. We were landing at a small strip south of Ypsilanti, called Downwind Acres. It's still there, but no longer shown on the map. It was a warm, windless day, and Marv elected to do a wheel landing. The strip is short, so getting stopped really caught my attention. Marv put it down nicely on the wheels, then began braking with the tail still up in the air, and continued to do so until we were nearly stopped. I was scared totally to death, and thought for sure we would end up on our back. But we didn't. That landing haunted me for many years. (Note: the 120 had the old Goodyear brakes. Touching a new set of Cleveland brakes would have put us on our back....beware!)

Over the years, I had heard stories of people flying all kinds of airplanes, who were comfortable with using the brakes with either the tail wheel, or nose wheel still off the ground. One story was told to me by an American Airlines pilot flying a Boeing 707, who landed in Wichita one day with an engine on fire. He wanted to get it on the ground, get it stopped, and get the fire out. The fire trucks were waiting at the far end. He put it on the numbers, held the nose off, started in with the brakes and had it stopped in about 3,000 feet. The fire trucks had to race 7,000 feet back down the 10,000 foot runway to put the fire out.

Then I had a left seat ride in a DC-3 operated by NASA out at Edwards AFB. NASA test pilot Einar Enevoldson made our final landing on the dry lakebed so we would have a short taxi to the NASA ramp. He made a wheel landing, and used the brakes to slow the airplane down. It seemed so perfectly normal to do so, and after talking with him, I learned that it was a common practice in the DC-3. The physics suggest that if the brakes can be precisely controlled, the airplane can be balanced on the main wheels and still be braked enough to slow the airplane down, while the pilot counters the nose down force with up elevator control. And airspeed heads to zero, the elevator is no longer effective. The brakes can still provide pitch control, but it rapidly diminishes and is overcome by the weight on the nose or tail.

Well, as you might guess, this opened up the flood gates for clever experimenting. I found that it works in the T-38, KC-135, F-16, gliders, and the DeHavilland Beaver. While flying gliders, we would routinely land in the first third of the runway, and keeping the tail up with elevator, we would roll to the start line and try to stop exactly on it. To do this required a combination of brake and elevator. Eventually, of course, you have to stop. The trick was to lower the tail by releasing a little brake control just before the line. If you didn't, the brake was not strong enough to hold the tail up, and it would go "bam" on the ground. If observed, this would usually upset the management.

The Beaver was a special case. It has three fuel tanks in the belly and the way we burned was from the aft, center, then forward tank. So when you were by yourself with just forward tank fuel, the tail was fairly light. I was practicing Beaver landings up at North Base with a 20 mph steady wind blowing (wind helps, because you have some pitch authority down to zero ground speed). I lined up into the wind, and tried to bring the tail off the ground without moving forward. To do this, you have to push full forward yoke, add power, and slowly release the brakes. As the brakes begin to release, the airplane will rotate about the wheels, and the tail will come up, but the airplane will not roll forward. So "there I was" sitting at the end of the runway with the tail in the air and not moving. Cool! I figured I could release the brakes, add power, and go roaring forward. Wrong. "Bam" went the tail to the ground. Not Cool. What I learned was that the brakes have to be released ever so slowly, and power increased ever so slowly, and I could do a complete takeoff with the tail in the air from zero speed.

Which proves nothing, other than to say that you can do it. The airplane has to have a forward cg, and you had to have a steady wind blowing right down the runway. Because you are using the brakes to takeoff, the takeoff roll will likely be a little longer. I tried this once in the Luscombe Silvaire Bullet. Heel brakes are just not controllable

enough to provide the precise control you need from the brakes. I ended up doing the funky chicken, and rather than go into the toothpick business with my wood prop, I decided it was a bad idea.

I call this next piece my "lost and found" story, because I lost it for a while, then found it again. Many of us have seen the movie "Pearl Harbor", in which Ben Afleck and his screen buddy manage to get airborne during the attack and shoot down a few Japanese planes. What follows may be the real story behind those air-to-air victories for the good guys on that fateful day.

Army Air Corps pilot George Welch completed pilot training in early 1941. He was assigned as a P-40 pilot at Hickam Field. It seems that George was always in some sort of trouble. Like the time that he and his buddy Ken Taylor were denied access to a swanky beach party at the Royal Hawaiian Hotel. So they took their parachutes, entered the water a few hundred yards up the beach, swam out some distance, pulled the ripcords, and swam back toward the hotel. Carrying their parachutes to shore, their story was that they had just bailed out over the ocean. Of course, they were welcomed as heroes and had a fine time at the party.

Well, this didn't sit well with their Commanding Officer. and George and Ken were restricted to Hickam for two weeks, and on the weekends, they were scheduled to fly their P-40s out to Haleiwa to practice air-to-air gunnery. Which they did, but they still managed to sneak back to a party at Wheeler Air Base, and ended up in a poker game at the Bachelor Officers Quarters in the wee hours before the attack. When the first wave of airplanes swept over the island, George and Ken jumped into Ken's car and drove to Haleiwa where their airplanes and crews had been overlooked by the attackers. They both got airborne, and found themselves in a terrible situation between enemy aircraft in the air, and the intense anti-aircraft fire from the ground. Still, George managed to shoot down 2 Japanese "Kate" dive bombers with the ball ammunition that was loaded on the P-40 for air-to-air gunnery practice. After expending all their ammo, George and Ken returned to Haleiwa to refuel and rearm with the appropriate combat mix of armor-piercing and incendiary ammunition. As George was just getting ready to taxi, another wave of Japanese aircraft strafed the field. A Colonel jumped up on George's wing and ordered him to taxi to a revetment to save the airplane. George opened the throttle, blew the Colonel off the wing, and took off. On that second sortie, George destroyed an A6M2 "Zero', and a "Val" bomber, bringing his victory total to 4 airplanes on the first day of U.S. combat in WWII.

For this heroic action, George Welch was promoted and sent back to the States to participate in a cross country War

Bond selling tour by train. It was somewhere in South Dakota that he got off the train during one of the stops, found a local bar, and missed the train. The Army Air Corps managed to fly him forward to rejoin the tour, but after he missed the train a second time, they decided to ship him back to the Pacific to rejoin his unit. George, it seemed, had a bit of a party streak in him, which always seemed to get him into trouble.

One year to the day after Pearl Harbor, flying the P-39 out of Milne Bay, New Guinea, Welch was flying a P-39 when he shot down 2 "Vals" and another "Zero", giving him 7 kills and making him one of the earliest Aces of the war. His unit was then withdrawn to Australia, re-equipped with the P-38, and returned to New Guinea, in the Port Moresby area. On 21 June 1943, he shot down 2 "Zeke" types, with a probable third. On 20 August 1943, he managed to shoot down 3 "Tony" types. Then on 2 September, George fought his way through a fighter escort to down a "Dinah", while shooting down 3 of the escorting "Zekes". These were the last of his kills, bringing his total to 16 confirmed victories.

He also managed to get into trouble along the way. George was sent to Australia for R&R, and liked it so well he stayed there to the point of becoming AWOL. The MPs found him and dragged him back to Port Moresby where he was confined to a "bamboo brig" as company punishment. There he was, one of the leading aces of the war, at a jungle airfield flying combat missions during the day, and spending the rest of the time in a bamboo constructed jail.

After his combat tour, George Welch returned to the U.S. and became an instructor pilot in the P-51 (There is definitely no justice here. For being a problem child, this guy got to fly the P-40, P-38, and P-51!!). He was stationed at Pinellas Air Base in Florida. His reputation as "Hap's Bad Boy' continued to build. It happened that Dutch Kindelberger from North American Aviation approached General Hap Arnold to make available an experienced combat pilot for N.A.A. to hire as a test pilot. George was Hap's serendipitous choice.

October 12, 1954 was the date of George Welch's last flight. J.O. Roberts and Bob Baker were sitting in the test pilot's lounge at Palmdale when they got a frantic call from the tower, stating that they thought there had been a mid-air collision and they couldn't contact Welch. Roberts and Baker jumped into the company Navion, and took off in the general direction where the tower had seen the fireball. They spotted two parachutes descending. One was smaller and obviously the drag chute from the F-100 that George was flying. Under the other parachute was George Welch's lifeless body. They observed him touch down in an alfalfa field, and then managed a successful landing with the Navion in the same field. Their initial look confirmed that

he had suffered severe injuries, and the Air Force rescue chopper, piloted by Pete Everest, took him to the Edwards AFB hospital where his death was confirmed.

The early models of the F-100 had a relatively small vertical fin. George was tasked to do a symmetrical pull out at 1.55 Mach and 7.33G. To do this, he started at 38,000 feet and put the airplane into a dive to accelerate to 1.56 Mach, which he achieved at 23,000 feet, whereupon he applied the g up to 7.33. For some unexplained reason, the airplane was allowed to yaw slightly. At this point, the shock wave had traveled over the canopy and enveloped the vertical fin, rendering it ineffective for directional stability. The airplane yawed beyond design limits, and suffered a catastrophic structural failure at high Mach number. An improved vertical fin 127% larger in size was already being fabricated, and all subsequent F-100 aircraft models had this larger fin. It came too late to save George Welch, whose meteoric career lasted longer than most, but finally burned out.

I hope you folks heading home from Sun and Fun will manage to keep it subsonic, and the yaw string in the center. And always remember to lend a hand to your fellow pilot when it's needed.



Winging It

Some rules of the air for flyboys:

- Every takeoff is optional. Every landing is mandatory.
- When in doubt, hold on to your altitude. No one has ever collided with the sky.
- The propeller is just a big fan in front of the plane used to keep the pilot cool. When it stops, you can actually watch the pilot start sweating.
- The only time you have too much fuel is when you're on fire.
- Stay out of clouds. The silver lining everyone keeps talking about might just be another airplane traveling in the opposite direction.
- You start out with a bag full of luck and an empty bag of experience. The trick is to fill the bag of experience before emptying the bag of luck.
- There are three simple rules for making a smooth landing. Unfortunately, no one knows what they are.