



**Next Meeting: Thursday, April 19, 2007
7:30 PM at the EAA 113 Aviation Center
The Fantasy of Flight - The Kermit Weeks Museum in
Polk City, Florida Hosted by: Scott Rigstad**

EAA Chapter 113
Mark Freeland
42636 Faulkner Drive
Novi, MI 48377

EAGLE'S PROPWASH

April 2007 Issue



CHAPTER 113

"The Backyard Eagles"

.....
Mettetal Airport (1D2), Canton, Michigan



**Chapter 113 Member Tom Smith and his new
Evektor SportStar Special Light Sport Aircraft!**

Our Web Site: www.eaa113.org

Meetings: 7:30 p.m. the 3rd Thursday of each month at the

EAA113 AVIATION EDUCATION CENTER!

EAA113@yahoogroups.com

Member Services

President: Dave Buck (734) -4535375

Vice President: John Maxfield (248) 348-1417

Secretary: Bob Wagner (313) 274-8292

Treasurer: Grant Cook (734) 223-2688

Board of Directors:

Al Bosonetto David Forsman

Pete Waters Bill Brown

Dave James Mike Scovel

Bob Skingley Tom Smith

Joe Griffin Roger Gehle

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Membership Committee:

-**Roster:** Mark Freeland (248) 624-9654

-**Dues:** Grant Cook (734) 769-2432

Technical Counselors:

Joe Hillebrand (480) 895-6314

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Scholarships: Howard Rundell (248) 344-1969

Library: Bob Paulson (313) 274-2853

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Dave Buck (734) 453-5375

Bill Brown (734) 420-2733

Bob Skingley (734) 522-1456

Mission Statements Chapter

“EAA Chapter 113’s major focus is on the relationships with people who have diverse aviation interests, centered around their love of flight, fellowship, learning and fun. Chapter members have a passion for flying and are willing to share it with others. Chapter 113 provides the opportunity for exchange of information as well as the interaction that leads to friendships that last a lifetime.”

Board

“The Board of Directors are to provide both advice and assistance to the chapter officers on an ongoing basis.”

President’s Podium



Dave Buck (734) 453-5375
dbuck19208@aol.com

Make sure to set aside May 20th for the “**Backyard Eagles & Friends BBQ**”. Chapter 113 is putting together a chicken & ribs BBQ picnic for about a dozen neighboring Chapters. It promises to be a fun event with a chance to meet some old friends and make some new ones. The BBQ will start at 3:00 pm so it will not interfere with any dawn patrols.

This will be a fly-in/drive-in event for neighboring EAA chapter members and their friends. We hope everyone can fly-in, but if our Michigan weather does not permit, we are just a short drive away. The BBQ will be catered to allow all our chapter members time to socialize with our guests. We will need to know in advance how many will be attending. Tickets for this event will be \$15.00 per person. Deadline to purchase tickets is May 12th. Invite your friends and family for great food and good friends.

The Annual Fathers Day Pancake Breakfast is coming up fast. This is our major fundraiser of the year and also when we present the chapter scholarships. We need a large number of volunteers to have a successful event. Set aside the morning of June 17th for a little work and some good times. Contact John Maxfield if you can help. John is counting on everyone who had an assignment last year to do the same thing this year.

Hope everyone has a safe trip to Sun N Fun. Enjoy the show.

Dave Buck

Calendar of Events

Saturday Morning Breakfast

Every Saturday 8:30am at the Coney Island on Lilley Rd. across the street from Mettetal airport.

Back Yard Eagles & Friends BBQ

Sunday May 20, 007 3:00pm to 6:00 pm at the EAA 113 Sport Aviation Center \$15/person
Purchase tickets by 5/12/07
Contact Dave Buck (734)223-2675 dbuck19208@aol.com

Message from Lansing Flight Service Station:

Lansing AFSS will close on Monday April 9, 2007 at 12:01 am for refurbishment and employee training on the new FS21 system. Re-opening is scheduled for May 21, 2007. Calls into the facility will be routed to the DCA hub. Pilots should continue to call: 1-800 WX-BRIEF

3/19/07

The Voice Retrieval System is out of service at LAN AFSS. The loss of this unit means that the facility Greeting, TIBS, and Fast File functions are all out of service.

Pilots calling in will get ringing and no announcement or further instructions. However, the FSS is still open for business until April 9, 2007. Specialists are still answering the phone calls. Pilots should remain on the line and DO NOT HANG UP!

Thank you for your patience during our transition to FS21. We look forward to better serving you in the near future!

Please visit the Lockheed Martin website for updates on our progress and for questions at www.afss.com <<http://www.afss.com/>>

Secretary's Scribbles



Bob Wagner (313) 274-8292
wagner16@mindspring.com

CHAPTER 113 MEETING MINUTES

Meeting Date: March 15, 2007
Meeting Time: 7:30 PM

Number of Members Present: 41
Number of Guests: 2

There have been 31 responses so far on the dues notice mailing. Tim Miranda, former scholarship winner, sent us a \$100 dollar donation toward the Scholarship Fund.

Minutes of the March 3, 2007 Board of Director's meeting were read.

Rick Tittsworth summarized the results of the Chapter poker tournament held on February 24, 2007. We had 42 players and the Chapter made a profit of approximately \$850. He thanked all Chapter members who participated and or, helped out.

Bob Skingley reported on the new (used) heavy-duty gas stove he obtained from a source in the Upper Peninsula. He and Lou Lambert piped it up, and it is now ready for use.

President Dave discussed contacts that were made with other Chapters at the recent Great Lakes International Aviation Conference. Interest was expressed in some combined activities. Dave proposed we sponsor a catered barbeque and extend an invitation to all chapters in the southeast Michigan region. A tentative date of May 20, 2007 was set.

Our annual awards banquet will be held this Saturday, March 24, 2007, 7:00 PM, at The Fellows Creek Country Club.

Friday Night at the movies will be discontinued until next fall.

Guest Speaker:

Name: Norm Donaldson

Topic: Chapter 113, the Early Days, and --
The Building of His New RV-6

Norm was one of the original charter members of Chapter 113, joining in 1961. He remained a member here until 1973 when he moved to Grosse Ile, and transferred to the newly formed Chapter 457 there. Chapter 457 has since been disbanded, and he is now again a member of our chapter.

Back in the 60's Norm joined the Air Force Reserve, took flying lessons, joined Chapter 113, went to school at Wayne State University and took a job as an engineer at the Ford Motor Company structures test lab, from which he is now retired.

Norm was partner in owning several aircraft and showed many photos of early chapter members, the names of which are too numerous to mention, and the various airplanes that chapter members flew back then, both home-built and store-bought.

Norm finally decided to build his own home-built, an RV-6. He showed us detailed photos of the construction, and his first flight, which was only last year. He now has almost 30 hours flown off. Norm was awarded a plaque for successful completion at our annual Awards Banquet.

Recorded by,

R.C. Wagner, Secretary

Anyone Interested in Flying to Oregon?

Tim Doyle, EAA 113 Member, RV9A builder and owner, is planning a trip this summer from Ann Arbor, MI to Astoria, Oregon following the Lewis and Clark expedition route. Tim is looking for other people interested in flying their homebuilts or certified aircraft across the country. The flight out and back should take about 9 days traveling 600 miles per day leaving a couple of days for sight seeing, a side trip to the Vans Aircraft factory and weather. The trip west will end with a visit to Fort Clatsop in Astoria, OR and the salt camp at Seaside, Oregon.

Here is the planned route.

Day 1 - Ann Arbor flying south of Chicago to Sioux Falls South Dakota. An easy trip over flat country. This is 612 NM.

Day 2 – Sioux Falls to Great Falls Montana. Follow the Lewis and Clark expedition along the Mississippi and Missouri Rivers. You will see the beautiful views of the Missouri Breaks. This is 746 NM.

Day 3 – The plan is to fly from Great Falls to Astoria, OR with stops at Lewiston, ID and Scappoose, OR via the Snake and Columbia Rivers. You will spend a couple of hours flying at 9,500 feet over the mountains. The flight will exit the mountains close to the Weippe Prairie in order to minimize the time over mountainous terrain. This is 600 miles for the day.

Days 4 and 5 are sightseeing on the Oregon coast.

Day 6 – begin the trip home retracing the westbound flight until Missoula. Then the flight will follow the Jefferson, Gallatin, and Yellowstone Rivers to Billings, Montana. You will fly over Three Forks, Montana. This was an important objective of the expedition. Total mileage 691 NM.

Day 7 – Billings Montana to Sioux Falls, SD 562 NM. This day will include a flyover of Pompey's Pillar 30 mile east of Billings, Custer's Battlefield, the Badlands, and Mount Rushmore.

Day 8 – Sioux Falls to Ann Arbor. Same track as Day 1.

If you are interested in doing this trip with a group of adventurous people, please contact Tim Doyle at 734-434-7763 or at tdoyle@emich.edu

EAA 113 PAULSON LIBRARY

Newest items March and April 2007

Thanks to our new computers, the internet connection, and many donations, both monetary and media, here are some of our newly cataloged items:

- | | |
|------------------|---|
| 358.1 183 19 | Ghosts: Vintage aircraft of WW II (gift of D. Brann) |
| 358.401 83020 | Curtiss hawks |
| 358.400 947 19 | Soviet Air Force at War (EPIC OF FLIGHT SERIES)
(gift of D Zammit) |
| 387.7 065 073019 | PanAm:an airline and its aircraft |
| 623.7 464 21 | Nighthawk: F-117 Stealth Fighter (gift of H Moore) |
| 623.7 46042 | Flying legends (gift of A Bosonetto) |
| 629.13 009 | Concise History of Aviation (gift of H Moore) |
| 629.13 009 | Aviation: An Illustrated History (gift of E. Rhodes) |
| 629.13 08 | Best of Flying (magazine) |
| 629.133 340 423 | Legacy of the DC-3 |
| 629.13 0092 4 | Kill Devil Hill: Discovering the secret of the Wright Brothers |
| 629.13 092 4 | Search for Amelia Earhart (gift of D Zammit) |
| 629.13 092 4 | Amelia Earhart: The mystery solved (gift of D Zammit) |
| 629.13 092 4 | Amelia Earhart (American Women of Achievement)
(gift of D Zammit) |
| 629.13 0092 | Wright Brothers (gift of D Brann) |
| 797.5 2 09042 | Speed Seekers (gift of F Abar) |
| 940.54 21 | Paddles: Foibles and finesse of one WWI landing signal officer (gift of F Abar) |
| 940.54 4 JAB2 | Terror from thee Sky, Tragic Victories |
| 940.54 4 JAB1 | Outraged Skies, Wings of Fire |
| 940.54 4973 JAB1 | Flying Fortress: illustrated biography of the B-17s and the men who flew them |

NOTE: Any member of a Chapter member's family may check out a library item. Just sign and date the card, and put it in the box on the counter.

WATCH for new labels on each shelf. Barb Cook

Mach 3.18 In-Flight Breakup Of An SR-71 Blackbird By Bill Weaver, Chief Test Pilot, Lockheed

Among professional aviators, there's a well-worn saying: Flying is simply hours of boredom punctuated by moments of stark terror. But I don't recall too many periods of boredom during my 30-year career with Lockheed, most of which was spent as a test pilot. By far, the most memorable flight occurred on Jan. 25, 1966.

Jim Zwayer, a Lockheed flight-test specialist, and I were evaluating systems on an SR-71 Blackbird test from Edwards. We also were investigating procedures designed to reduce trim drag and improve high-Mach cruise performance. The latter involved flying with the center-of-gravity (CG) located further aft than normal, reducing the Blackbird's longitudinal stability.

We took off from Edwards at 11:20 a.m. and completed the mission's first leg without incident. After refueling from a KC-135 tanker, we turned eastbound, accelerated to a mach 3.2 cruise speed and climbed to 78,000 ft., our initial cruise-climb altitude.

Several minutes into cruise, the right engine inlet's automatic control system malfunctioned, requiring a switch to manual control. The SR-71's inlet configuration was automatically adjusted during supersonic flight to decelerate airflow in the duct, slowing it to subsonic speed before reaching the engine's face. This was accomplished by the inlet's center- body spike translating aft, and by modulating the inlet's forward bypass doors.

Normally, these actions were scheduled automatically as a function of Mach number, positioning the normal shock wave (where air flow becomes subsonic) inside the inlet to ensure optimum engine performance. Without proper scheduling, disturbances inside the inlet could result in the shock wave being expelled forward - a phenomenon known as an "inlet unstart."

That causes an instantaneous loss of engine thrust, explosive banging noises and violent yawing of the aircraft, like being in a train wreck.

Unstarts were not uncommon at that time in the SR-71's development, but a properly functioning system would recapture the shock wave and restore normal operation.

On the planned test profile, we entered a programmed 35-deg. bank turn to the right. An immediate unstart occurred on the right engine, forcing the aircraft to roll further right and start to pitch up. I jammed the control stick as far left and forward as it would go. No response. I instantly knew we were in for a wild ride. I attempted to tell Jim what was happening and to stay with the airplane until we reached a lower speed and altitude. I didn't think the chances of surviving an ejection at Mach 3.18 and 78,800 ft. were very good. However, g-forces built up so rapidly that my words came out garbled and unintelligible, as confirmed later by the cockpit voice recorder.

The cumulative effects of system malfunctions, reduced longitudinal stability, increased angle-of-attack in the turn, supersonic speed, high altitude and other factors imposed forces on the airframe that exceeded flight control authority and the stability augmentation system's ability to restore control.

Everything seemed to unfold in slow motion. I learned later the time from event onset to catastrophic departure from controlled flight was only 2-3 seconds. Still trying to communicate with Jim, I blacked out, succumbing to extremely high g-forces.

Then the SR-71 literally disintegrated around us. From that point, I was just along for the ride. And my next recollection was a hazy thought that I was having a bad dream. Maybe I'll wake up and get out of this mess, I mused. Gradually regaining consciousness, I realized this was no dream; it had really happened. That also was disturbing, because I COULD NOT HAVE SURVIVED what had just happened.

I must be dead. Since I didn't feel bad- just a detached sense of euphoria - I decided being dead wasn't so bad after all. As full awareness took hold, I realized I was not dead. But somehow I had separated from the airplane.

I had no idea how this could have happened; I hadn't initiated an ejection. The sound of rushing air and what sounded like straps flapping in the wind confirmed I was falling, but I couldn't see anything. My pressure suit's faceplate had frozen over and I was staring at a layer of ice. The pressure suit was inflated, so I knew an emergency oxygen cylinder in the seat kit attached to my parachute harness was functioning. It not only supplied breathing oxygen, but also pressurized the suit, preventing my blood from boiling at extremely high altitudes. I didn't appreciate it at the time, but the suit's pressurization had also provided physical protection from intense buffeting and g-forces. That inflated suit had become my own escape capsule.

My next concern was about stability and tumbling. Air density at high altitude is insufficient to resist a body's tumbling motions, and centrifugal forces high enough to cause physical injury could develop quickly. For that reason, the SR-71's parachute system was designed to automatically deploy a small-diameter stabilizing chute shortly after ejection and seat separation. Since I had not intentionally activated the ejection system--and assuming all automatic functions depended on a proper ejection sequence--it occurred to me the stabilizing chute may not have deployed.

However, I quickly determined I was falling vertically and not tumbling. The little chute must have deployed and was doing its job. Next concern: the main parachute, which was designed to open automatically at 15,000 ft. Again I had no assurance the automatic-opening function would work. I couldn't ascertain my altitude because I still couldn't see through the iced-up faceplate. There was no way to know how long I had been blacked-out or how far I had fallen. I felt for the manual-activation D-ring on my chute harness, but with the suit inflated and my hands numbed by cold, I couldn't locate it. I decided I'd better open the faceplate, try to estimate my height above the ground, then locate that "D" ring. Just as I reached for the faceplate, I felt the reassuring sudden deceleration of main-chute deployment.

I raised the frozen faceplate and discovered its uplatch was broken. Using one hand to hold that plate up, I saw I was descending through a clear, winter sky with unlimited visibility. I was greatly relieved

to see Jim's parachute coming down about a quarter of a mile away. I didn't think either of us could have survived the aircraft's breakup, so seeing Jim had also escaped lifted my spirits incredibly.

I could also see burning wreckage on the ground a few miles from where we would land. The terrain didn't look at all inviting--a desolate, high plateau dotted with patches of snow and no signs of habitation.

I tried to rotate the parachute and look in other directions. But with one hand devoted to keeping the face plate up and both hands numb from high-altitude, subfreezing temperatures, I couldn't manipulate the risers enough to turn. Before the breakup, we'd started a turn in the New Mexico-Colorado-Oklahoma-Texas border region. The SR-71 had a turning radius of about 100 miles at that speed and altitude, so I wasn't even sure what state we were going to land in. But, because it was about 3:00 p.m., I was certain we would be spending the night out here. At about 300 ft. above the ground, I yanked the seat kit's release handle and made sure it was still tied to me by a long lanyard. Releasing the heavy kit ensured I wouldn't land with it attached to my derriere, which could break a leg or cause other injuries. I then tried to recall what survival items were in that kit, as well as techniques I had been taught in survival training.

Looking down, I was startled to see a fairly large animal, perhaps an antelope, directly under me. Evidently, it was just as startled as I was because it literally took off in a cloud of dust.

My first-ever parachute landing was pretty smooth. I landed on fairly soft ground, managing to avoid rocks, cacti and antelopes. My chute was still billowing in the wind, though. I struggled to collapse it with one hand, holding the still-frozen faceplate up with the other. "Can I help you?" a voice said. Was I hearing things? I must be hallucinating. Then I looked up and saw a guy walking toward me, wearing a cowboy hat. A helicopter was idling a short distance behind him. If I had been at Edwards and told the search-and-rescue unit that I was going to bail out over the Rogers Dry Lake at a particular time of day, a crew couldn't have gotten to me as fast as that cowboy-pilot had.

The gentleman was Albert Mitchell, Jr., owner of a huge cattle ranch in northeastern New Mexico. I had landed about 1.5 mi. from his ranch house--and from a hangar for his two-place Hughes helicopter. Amazed to see him, I replied I was having a little trouble with my chute. He walked over and collapsed the canopy, anchoring it with several rocks. He had seen Jim and me floating down and had radioed the New Mexico Highway Patrol, the Air Force and the nearest hospital. Extracting myself from the parachute harness, I discovered the source of those flapping-strap noises heard on the way down. My seat belt and shoulder harness were still draped around me, attached and latched.

The lap belt had been shredded on each side of my hips, where the straps had fed through knurled adjustment rollers. The shoulder harness had shredded in a similar manner across my back. The ejection seat had never left the airplane. I had been ripped out of it by the extreme forces, with the seat belt and shoulder harness still fastened.

I also noted that one of the two lines that supplied oxygen to my pressure suit had come loose, and the other was barely hanging on. If that second line had become detached at high altitude, the deflated pressure suit wouldn't have provided any protection. I knew an oxygen supply was critical for breathing and suit-pressurization, but didn't appreciate how much physical protection an inflated pressure suit could provide.

That the suit could withstand forces sufficient to disintegrate an airplane and shred heavy nylon seat belts, yet leave me with only a few bruises and minor whiplash was impressive. I truly appreciated having my own little escape capsule. After helping me with the chute, Mitchell said he'd check on Jim. He climbed into his helicopter, flew a short distance away and returned about 10 minutes later with devastating news: Jim was dead. Apparently, he had suffered a broken neck during the aircraft's disintegration and was killed instantly. Mitchell said his ranch foreman would soon arrive to "watch over Jim's body" until the authorities arrived. I asked to see Jim and, after verifying there was nothing more that could be done, agreed to let Mitchell fly me to the Tucumcari hospital, about 60 mi. to the south.

I have vivid memories of that helicopter flight, as well. I didn't know much about rotorcraft, but I knew a lot about "red lines," and Mitchell kept the airspeed at or above red line all the way. The little helicopter vibrated and shook a lot more than I thought it should have.

I tried to reassure the cowboy-pilot I was feeling OK; there was no need to rush. But since he'd notified the hospital staff that we were inbound, he insisted we get there as soon as possible. I couldn't help but think how ironic it would be to have survived one disaster only to be done in by the helicopter that had come to my rescue.

However, we made it to the hospital safely--and quickly. Soon, I was able to contact Lockheed's flight test office at Edwards. The test team there had been notified initially about the loss of radio and radar contact, then told the aircraft had been lost. They also knew what our flight conditions had been at the time, and assumed no one could have survived. I explained what had happened, describing in fairly accurate detail the flight conditions prior to breakup.

The next day, our flight profile was duplicated on the SR-71 flight simulator at Beale AFB, Calif. The outcome was identical. Steps were immediately taken to prevent a recurrence of our accident. Testing at a CG aft of normal limits was discontinued, and trim-drag issues were subsequently resolved via aerodynamic means. The inlet control system was continuously improved and, with subsequent development of the Digital Automatic Flight and Inlet Control System, inlet unstarts became rare.

Investigation of our accident revealed that the nose section of the aircraft had broken off aft of the rear cockpit and crashed about 10 mi from the main wreckage. Parts were scattered over an area approximately 15 miles long and 10 miles wide. Extremely high air loads and g-forces, both positive and negative, had literally ripped Jim and me from the airplane. Unbelievably good luck is the only explanation for my escaping relatively unscathed from that disintegrating aircraft. Two weeks after the accident, I was back in an SR-71, flying the first sortie on a brand-new bird at Lockheed's Palmdale, Calif., assembly and test facility. It was my first flight since

the accident, so a flight test engineer in the back seat was probably a little apprehensive about my state of mind and confidence.

As we roared down the runway and lifted off, I heard an anxious voice over the intercom.

"Bill! Bill! Are you there?"

"Yeah, George. What's the matter?"

"Thank God! I thought you might have left." The rear cockpit of the SR-71 has no forward visibility--only a small window on each side--and George couldn't see me. A big red light on the master-warning panel in the rear cockpit had illuminated just as we rotated, stating: "Pilot Ejected." Fortunately, the cause was a misadjusted micro switch, not my departure.

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Bill Weaver flight-tested all models of the Mach-2 F-104 Starfighter, and the entire family of Mach 3+ Blackbirds - the A-12, YF-12 and SR-71. He subsequently was assigned to Lockheed's L-1011 project as an engineering test pilot, and became the company's chief pilot. He later retired as Division Manager of Commercial Flying Operations.

(Internet circulation – submitted by Dave James)

**EAA 113 – YAHOO!** To access our YAHOO Group Site, go to <http://groups.yahoo.com/group/EAA113/> New users click "SIGN UP." Already a member of a YAHOO Group? Click "JOIN THIS GROUP" You'll have to sign in every time to access all the features. Contact Donna Monson for further information.

# BACKYARD EAGLES & FRIENDS BBQ

**Fly-In or Drive-In!**



The Backyard Eagles of EAA Chapter 113 invites all neighboring EAA Chapters for good food and an opportunity to catch up with some old friends and make some new ones.



**WHEN: Sunday, May 20th, 2007**

**TIME: 3:00 p.m. - 6:00 p.m.**

**WHERE: Mettetal Airport (1D2)  
Lilley & Joy Roads, Canton**

**COST: \$15.00 per person**

## Join Us!

For more information contact: Dave Buck, EAA 113 President  
(734) 223-2675 or [dbuck19208@aol.com](mailto:dbuck19208@aol.com)