

Monday March 23<sup>rd</sup>, 2015

Located at:

8891 Airport Rd NE

Blaine, MN 55449

We hope to see you there!

#### The President's Soapbox

By Robert Heavirland

What a crazy winter! I hope you have been able to squeeze in some flying and building time this winter. I went from flying on skis one Saturday to flying on wheels the next Saturday with snow gone and frost out.

Some of the chapter members were at the Ice Port Fly-in on the 7<sup>th</sup> and had a great time. The weather was good and lots of friendly faces. Jim and Steve Borg were there to greet us when we landed. Last Saturday the 14<sup>th</sup> a good group of about 15 flew and drove down to SteinAir in Lakeville. What an energized discussion Stein led! He is one of the Premier Radio and Electronics shops in the country dealing with homebuilt aircraft. Stein touched on the basics of wire selection, terminating and routing. We saw examples of his shop's work on panels and he had display panels setup for our chapter to experience some hands-on time with a few different GPS navigation radio panels.

We are coming into some better flying weather and would like to encourage members to invite non-flying members to ride along to fly-ins and other activities this summer. At our last Board meeting it was suggested that we plan some fly-outs to other fly-ins as a chapter activity. Please pass along suggestions. Milaca was mentioned and they have camping the night before with a bonfire, movies, and good fellowship. Siren, WI and Aitkin might also be another opportunity.

Fly safe and happy landings. Bob

### Bathroom Closet Doors - Newly Installed & Awesome!

Maybe you noticed or maybe you will soon notice, but Dick McKenney and Ron Fichtner have installed the doors onto the bathroom closet. This is the final finishing touch to Ron's earlier

work in creating the closet shelves. They are looking mighty fine and keep our supplies nicely tucked away. I am not sure what the air holes are for and maybe I might not want to know. Maybe we have live animals stored in there? Or maybe it is where the members who are seriously overdue in dues are kept. One may never know the mystery... or maybe I could have just asked? I think it is more fun to just guess though!

This really ties the room together! Great job guys!



### **EAA Chapter 237 Calendar of Events**

March: -

March 21st - Breakfast social at our chapter hangar March 23<sup>rd</sup> - Chapter Meeting starting at 6pm

Presentation - Video of a Kitfox trip across Canada

April: —

April 10<sup>th</sup> & 11<sup>th</sup> - MN Pilots Association Gathering using our chapter building and the Golden Wings museum.

April 12th - Movie Night

April 18<sup>th</sup> - Last Breakfast Social until next fall 7:30am - 11:00am

April 27<sup>nd</sup> - Chapter meeting & EAA 237's 50<sup>th</sup> Year Celebration! (This is one meeting you will <u>not</u> want to miss!)

> AOPA Seminar - April 7th at 7pm "After the Crash—Surviving an aircraft accident"

"Of the millions of GA flights every year, only a few end with unplanned off-airport landings. But even though the odds of a crash are slim, the potential consequences are harsh—which is why smart pilots prepare and take basic precautions. That's where our new seminar comes in. From route planning and emergency rations to signal mirrors and sat phones, our presenters take a user-friendly, common sense approach at maximizing your chances of survival and rescue after a crash. We'll talk about: • The essential ingredients of a good survival kit • Simple but effective ways to help searchers find you • The first steps you should take after a crash • Survival strategies while awaiting rescue."

**AOPA Air Safety Institute** in association with

EAA Chapter 237 presents...

Tuesday, April 7th, 7pm - 9pm Where:

Kev Air Twin Cities KANE 9877 North Airport Rd. NE Blaine, MN 55449

**Cost: FREE** 

AOPA Contact: 800-638-3101

FAASTeam "Wings" credit eligible (1 Credit for Basic Knowledge Topic 3) (Chapter members: Some help setting up for the AOPA event is needed.)







5pm - 7pm Videos and EAA HQ videos 7pm - 9pm MAIN FEATURE Movie

Tasty pizza, ice cold pop, hot coffee & other goodies are free! If you haven't attended, take some time & come out and enjoy! We have some great movie choices along with plenty of videos for April. In March, we enjoyed a double feature movie night showing both the "L-Bird: The Little Plane That Did" and "The Golden Age of Ultralight Flyers" Haven't attended yet...what's keeping vou?



### Approximately fifteen chapter 237 members attended the SteinAir workshop on Saturday 3/14/2015.

The morning started with an informal gathering at 08:00 in the chapter hangar for coffee, bananas, apples, donuts and cookies. We departed at 09:00. Indeed there was a lot of knowledge learned about electronics, wire & connection testing, 3D printing, laser cutting, instrument panel layouts and just about anything you wanted to learn about aviation electronics! I learned that what seems simple is only simple with the right skills and tools. SteinAir does very neat things and the quality shows as a testament to the company and its employees. It was very interesting to listen to all the different stories and learn about all the different tools and equipment.





## A note to EAA Chapter 237 members about the power of your membership and benefits. By Randy Delfel, EAA 540773

**Did you miss the February chapter meeting on 2/23?** If so, you missed out on a great feature presentation where Chapter 237 member Al Lindh did a full PowerPoint presentation on "Mountain Flying" sharing lots of photos (*see below*) and the instruction he received taking a course in the mountain states. There were a lot of lessons to be learned and plenty of things that one does not normally think about, when flying in the mountains. We also had some videos with hands-on demos and training for how to properly tie down your aircraft.

Remember, EAA Chapter 237 strives to provide great presentations and events to enhance your flying knowledge and simply to have lots of fun! If you have not been to a meeting in a while, you are missing out on many new events and presentations. In January, we had a great presentation by Steve Schultz and his Ion Aircraft company and Ion airplane progress and innovations. (photo>)

Make the most out of your membership today by participating in meetings, movie night, chapter workshops and classes, hangar project visits, annual BBQ's, Christmas party, B-17 & B-25 "work" parties, Tree of Hope, B-17 and Tri-motor tour stops, auctions, flying events (including flying out to others events) and volunteering together, just to name a few of the great things we do as a chapter. Members are actively working on airplanes in our chapter hangar's newly setup workshop.

Keep in mind that your membership spans a full 12 months, so if your dues are coming up please make sure to renew. Nancy is very good at reminding folks when their renewal date comes up. You can renew online on our chapter website using PayPal or simply drop a check in the mail. Dues are still a measly \$20 (with emailed newsletters) / \$25 (with USPS mailed newsletters). Chapter 237 has roughly 100 members at any given time, but there are many I have not seen in quite some time. While I am glad you are a member, I hope to see you not only as a member but as an actively participating member enjoying all EAA Chapter 237 has to offer.

If you have not been active for a while, come and see what your chapter has been up to! I know you'll like what you discover!



# B-25 Work Parties January 29th-31st and February 26th-March 1st, 2015

### by Dick McKenney

Ever since the EAA started to build a permanent home in Oshkosh, WI, there have been volunteer work parties from local chapters. Our chapter 237 has had work parties for several years. Sometimes there are only three or four members but other times as many as twenty members. Some dads bring their boys and this is a great way to introduce the young men into what EAA is all about. (You need permission from headquarters to do this.)

In 2015, we have had two work parties so far. In both cases, work at the Kermit Weeks Hangar was done on airplanes. The primary plane was the North American B-25 that is being restored from its civilian version back to its original wartime military version. The goal is to get it into flyable condition. The second project was to disassemble a radial engine to salvage its useable parts for the Boeing B-17. We are pretty good at taking things apart and this was a dirty two day job.

The B-25 work was on polishing the Plexiglas from the nose, replacing fuel and hydraulic hoses on the engines and preparing the civilian window openings to be closed up as in the military B-25. Because of money, EAA wants all the labor to be done by volunteers. The supervisors are paid but the funds available are needed for parts and materials as the project progresses.

We had about seventeen volunteers. Some flew in on Saturday and flew home that evening. Nancy Carter was our only woman worker and we gave her all the heavy jobs. Nancy got to stay in the bungalow by the maintenance building. She was there all by herself in payment for her help on the dirty jobs. The rest of us slept with the snorers at the Binder House. EAA provided lunch and supper on a Friday and Saturday. Great food and entertainment with no cover charge, in fact, no bill!

Work parties are great fun. You get to know other members of 237 in an atmosphere of working together. Entertainment, as I said, was free and consisted of jokes and storytelling in the evenings. The best (or worse) joke was that when a swarm of bees got tired traveling cross-country they stop at a BP service station. Come on. Join the next work party! ~Dick



# Chapter 237 at Weeks Hangar: Airplanes, Fun and Birthdays! From EAA Volunteer Newsletter, February 2015 Issue By Michelle Farr, EAA 1103304, HR Business Partner

February - EAA Chapter 237 from the Minneapolis/St. Paul area has always been an active, hands-on group, and its trip to Oshkosh on January 30th-February 1st maintained its reputation. It was the first EAA chapter to organize a weekend work party to Oshkosh in 2015, with its mission helping at the Weeks Hangar.

First assignment: restoring the B-25 recently moved from the AirVenture Museum by polishing the acrylic windows, buffing the engine sheet metal and making the airframe look like new. After a long day's work, the chapter enjoyed EAA staffer Chris Henry's presentation on "B-17 The Final Mission." Many Chapter 237 members had a hand in helping maintain the B-17 throughout the years. Chris shared stories of veterans and their family members who got to experience another memorable flight on the B-17, connecting the chapter's hard work to the positive effect on many lives.



It was also a special weekend for one Chapter 237 members, as Al Eke (EAA 56571) celebrated his 80th birthday. Al has been attending weekend work parties for more than 10 years and he said he "couldn't think of a better place to celebrate" than Oshkosh.

Weekend Work Parties are a great way to build camaraderie, touch a piece of history and experience new opportunities. An example: one exchange student from France, Sammy, attended the Weekend Work

Party at Weeks Hangar. He has a passion to become a pilot and during the week he worked on the B-25 engine and sheet metal for the very first time.

A huge thank you to Chapter 237 for their time and hard work! There are opportunities at Weeks Hangar year-round for you too.





# EAA HQ Skiplane Fly-In 2015

### Reported By Randy Delfel Event date: February 7th, 2015 at Pioneer Airport

Perfect temps near freezing with just enough snow combined together to make the 2015 EAA Skiplane Fly-In a huge success. We had more cars arrive than I have ever seen in the four years of my marshalling airplanes at this event. They filled every spot in front of the hangars and all the lots and access roads leading around to the museum where cars were also parking. We had 27 aircraft fly in but expected over 50. My job each year is to stand right next to the flightline about halfway down the runway and direct the planes to their parking marshal. It is always a great time! From my position, I have the perfect spot to capture some great pictures and video of incoming and departing planes. The general public does not have access to being nearly this close!

Over the last few years our chapter sends about 3 members to this event. This year it was down to Becky and myself so we were a bit short staffed for this large of an event. Friday night, Becky and I were treated to pizza and beer at West End Pizza, a place where after work on Friday's the EAA staff tends to show up. If we had some warbirds we could work on, I know we would have about 20 people volunteering for the event. Some of the great amenities are the free lunch during the event and staying in the Admin Staff Lodge for the Friday and Saturday nights. Each room has its own bathroom and thermostat plus there is a nice main kitchen and living room with lots of DVD's to watch as well. After volunteering, we can also take a "behind the ropes" tour of the museum. Make sure to volunteer next year. We sure could use the help out there!



### Here is what EAA HQ had to say:

#### EAA Skiplane Fly-in 2015: A Huge Success! Hundreds Come Out to Watch the Skiplanes.

Paul Poberezny often said that "airplanes bring us together, but the people keep us coming back". That was true on Saturday, February 7th, as several hundred winter aviation lovers reunited at EAA Pioneer Airport in Oshkosh, Wisconsin, for the annual EAA Skiplane Fly-In.

Locally the flying conditions were favorable, with light winds and partly cloudy skies, allowing 26 skiplanes to participate. Not so much, unfortunately, to areas further south of Oshkosh as harsher weather prevented a number of pre-registered skiplane owners from flying in. Relatively mild temperatures helped to bring out the large crowd of local enthusiasts. A total of 27 skiplanes (actually 26, plus a Cub on Tundra tires) from four states attended the event, which ran from mid-morning to mid-afternoon. Poor weather to the north and iffy weather elsewhere caused a number of cancellations and held down the grand total from the more than 50 airplanes that had registered to attend. The bulk of pilots arrived from other points in Wisconsin as well as Illinois, while one pilot flew in from Minnesota and another from Indiana. Of the 27 planes flying in were six Aeroncas – three Champs, a Chief, a Sedan, and an 11BC; five Piper J-3 Cubs; four Cessnas - 140, 170B, 180, and 185; a pair of Citabrias; two Maule M4s; two Super Cubs, and single examples Champion 7EC, Sport Trainer/PA-11, Quad City Challenger II, Experimental V6 STOL, Zenith 701 STOL, 1949 Piper Clipper, and a Ridgerunner E-LSA. "Counting the planes was much easier than keeping track of the drive-in attendees," said Fred Stadler, who helped lead fly-in coordination efforts. "The crowd was certainly the largest I've seen at this event, and they seemed to have a good time. All in all, a very successful event!"

As the skiplanes landed in the mostly sunny morning, close to **1,000 people** poured into Pioneer Airport on Saturday for EAA's annual Skiplane Fly-In at Oshkosh, Wisconsin. Inside the cozy Pioneer's Phillips 66 Hangar, EAA hospitality was well under way inside where volunteers prepared and served **268 pounds of chili** to hungry attendees with all the fixings and **128 pounds of broccoli cheese soup** and bread sticks, along with untold cups of hot chocolate, coffee, and soda. Topping things off, three sheet cakes were also served to honor the 61st anniversary of EAA's first-ever meeting, which took place on January 26, 1953, at Curtiss-Wright (now Timmerman) Field in Milwaukee, Wisconsin.

New event enhancements included pilot and aircraft information displays for all attending aircraft, outdoor heaters set up on the Flightline, and a slide show with images from past EAA Skiplane Fly-Ins.

Increasing clouds in the early afternoon signaled time to depart, and skiplanes began to head for home from Runway 13 as attendees watched and cheered.

EAA's skiplane fly-in at Pioneer Airport was a huge success, thanks to the pilots, volunteers, and community. **A big salute goes to the 14 volunteers** worked together to put in a combined 90 hours on the day of the event. The majority of the volunteers are current Pioneer Airport hands, but the group also **included a few who traveled from Minnesota** and New York to help. A huge thank you goes out to the volunteers during the skiplane fly-in. Without volunteer support events such as these would not be possible.

Volunteer tasks ranged from handling the arrival and departure briefings, aircraft traffic, and flight line safety. One of the biggest tasks this year was parking cars, as there were more guests this year than ever before that extended auto parking from Pioneer Airport all the way around on the service road to the Eagle Hangar.







## The Spirit of Aviation



Date—- Time—- Webinar Subject——

3/25/15 7 pm Vertical Power - The Benefits of Electronic Circuit Breakers

In the last decade there has been a significant shift from the use of mechanical systems to all-electric systems in experimental aircraft. Consequently, electrical system complexity has increased substantially and many builders find it challenging to wire the advanced features necessary to support the latest avionics and components. Chad Jensen from Vertical Power discusses how their systems reduce the complexity of installation and provide opportunities for an enhanced electric system. Qualifies for FAA AMT credit.

4/1/15 8 pm The Decision Point

During every annual inspection, there's a specific moment in time when the aircraft owner needs to get involved in the decision making process to ensure he stays in control and obtains a satisfactory outcome with no surprises. Maintenance expert Mike Busch defines this crucial "decision point" and explains what steps an owner should take to make certain the right things happen when it comes. Qualifies for FAA Wings and AMT credit.

4/8/15 7 pm Ten Ways to Get Your Spouse to Fly

Sharing the joy of flight is every Pilot's dream, but sometimes finding someone to fly with is more difficult than it should be. This light hearted presentation by Michael Combs, a world record holding pilot who flew a Light Sport Aircraft into all fifty states while filling that right seat nearly every mile. Michael will describe ten creative ways that can be implemented immediately and are sure to not only fill seats, but provide memories that will last a lifetime.

4/15/15 7 pm Introduction to Float Plane Techniques

Ever dreamed of flying float planes? Learn the basic techniques and procedures for Seaplane flying. From step taxi to glassy water landings. Presented by Drew Haag, a 16 year Alaskan Seaplane Instructor at Above Alaska Aviation, LLC. Qualifies for FAA Wings credit.

4/29/15 7 pm How to Buy a Used Light-Sport Aircraft

Discover the secrets of a successful LSA pre-buy examination. Shopping for a used LSA can be a gamble because so few people understand the FAA rules and ASTM standards under which LSA are manufactured and certificated. Join LSA maintenance rated repairman Prof. H. Paul Shuch as he explains how to avoid the most common pitfalls during the purchase process.

5/6/15 8 pm CDT Engine Teardowns

The decision to tear down an engine is one of the most serious and expensive that any aircraft owner will have to face. Maintenance expert Mike Busch discusses the right way to make this crucial decision, and how to avoid the kind of unnecessary or premature engine teardowns that happen all too frequently. Qualifies for FAA Wings and AMT credit.

5/13/15 7 pm CDT Flying a Jet-Powered Glider and the SubSonex Jet

Do you ever dream of flying a jet? Jeremy Monnett from Sonex Aircraft discusses his experience completing the BonusJet TST-14 training program. This transition training program offers those with a glider rating to earn a endorsement for a jet powered self-launch glider, and a LOA (letter of authorization) to fly the SubSonex Jet. Qualifies for FAA Wings credit.

5/21/15 7 pm CDT Emergency Bailout Procedures for Pilots and Survival Equipment

IAC member Allen Silver speaks on all aspects of emergency parachute usage and bailout procedures. Including mental attitude, preflight preparation, exiting a disabled aircraft, deploying your parachute, and landing safely back on earth. Allen also discusses steps you can take to increase your chances of surviving a bailout once on the ground. Qualifies for FAA Wings credit.

6/3/15 8 pm CDT Safe vs. Airworthy

We often hear the terms "safe" and "airworthy" used interchangeably as if they were synonyms. But they're not. Maintenance guru Mike Busch explains why it's quite possible for an aircraft or components to be quite safe but absolutely unairworthy. He discusses how these two words differ in meaning, and explores the implications of that difference on maintenance decision making. Qualifies for FAA Wings and AMT credit.

6/10/15 7 pm CDT Tips for Flying into EAA AirVenture Oshkosh 2015

EAA AirVenture NOTAM Chairman Fred Stadler shares some hints and tips for reducing your pilot workload when flying into AirVenture 2015. Discussion highlighting the special requirements and procedures of the FAA issued NOTAM.

7/1/15 8 pm Warranty Schmarranty

Maintenance expert Mike Busch discusses the terms and conditions of manufacturer and repair station warranties, with primary focus on engine warranties. He explains what's covered, what isn't, and how to factor competing warranty terms into your decision to have your engine field overhauled or exchanged for a factory rebuilt or factory new engine. Qualifies for FAA Wings and AMT credit.

Registration is required, and space is limited.

# As a VFR-only pilot, one of the biggest fears is accidently flying into a cloud at night. Are there any clues that you may be getting close to clouds?



**The first step** in avoiding an encounter with clouds at night is a good weather briefing. This weather briefing will give you an idea of where the cloud layers are expected. However, don't expect these forecasts to be precise because they are simply that: forecasts.

Be sensitive to the possibility of encountering unforecasted clouds while flying VFR at night. Do this by observing the intensity of ground lights. If they begin to dim, there may be clouds or increasing moisture below you. Also observe other aircraft in flight, if possible. If you see blooms around your position lights, suspect increasing moisture in the air. When you see these signs, you can suspect that you are close to the clouds.

Be sure to watch for other signs of increasing humidity that may occur close to or just beneath the clouds. You can test for this by briefly turning on your landing light to see if there is a bloom around the light.

Be prepared to make a 180 degree turn if any of these conditions negative to continued VFR flight exists. This is another good reason to be proficient at basic instrument skills gained through practice.

### The Secrets of Aviation

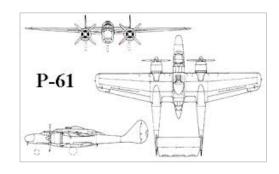
Powered flight may have started with the Wright brothers, but many other aviation pioneers made significant contributions. Every month I will provide one of the fascinating individuals, facts, or accomplishments that are The Secrets of Aviation.

While not exactly one of the biggest *Secrets of Aviation*, the Northrup P-61 "Black Widow" lived and worked in the "Dark Side", never letting enemy aircraft know they were about to become a victim of her deadly sting. On the night of 14 August 1945, a P-61B of the 548th Night Fight Squadron named "*Lady in the Dark*" was unofficially credited with the last Allied air victory before VJ Day.



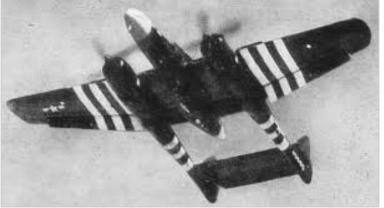
From July 6, 1944, when it claimed its first victory, to war's end, the P-61 distinguished itself as one of America's most unique fighting machines. The heavily-armed Black Widow was the first U.S. aircraft specifically designed night fighter to locate and destroy enemy aircraft at night and in bad weather, a feat made possible by the use of on-board radar. Its innovative slotted flaps and spoiler ailerons allowed operation from short airstrips and improved handling. The radar carried in its nose made it the dominant force in the night skies of the European Theater, the Pacific Theater, the China Burma India Theater and the Mediterranean Theater during World War II. After the war, the P-61 served in the United States Air Force as a long-range, all weather, day/night interceptor for Air Defense Command until 1948, and Fifth Air Force until 1950.





While the world looked on in terror as the Battle of Britain raged on, the need for a night fighter capable aircraft became readily apparent. John Northrop submitted an aircraft design that could accommodate the weight and bulk of radar equipment without compromising aircraft maneuverability. The finished result would be the P-61: a twin boom, three-man night fighter the size of a small bomber. The plane was equipped with four 20 millimeter Hispano M2 cannons capable of holding 200 rounds and a state-of-the-art turret with .50 caliber machine guns was mounted on the top of the aircraft. The radar operator could locate enemy targets and relay locations to the gunner/pilot who would use the plane's firepower to eliminate the enemy threat. Each P-61 would thus prove to be an efficient search and destroy operation.





The prototype first flew in 1942. P-61 combat operations began just after D-Day, June 6, 1944, when Black Widows flew deep into German airspace claiming its first kill, bombing and strafing trains and road traffic. Operations in the Pacific began at about the same time. By the end of World War II, Black Widows had seen combat in every theater and had destroyed 127 enemy aircraft and 18 German V-1 buzz bombs.

Only 750 Black Widows were manufactured during World War II and relatively few saw combat. Of the 750 manufactured, only four P-61's remain, all of them on static display only. Mid-Atlantic Air Museum's P 61 B #42-39445 will be the only model in the world that flies. Since 1991, the Mid-Atlantic Air Museum has worked tirelessly to restore this majestic plane to her former glory. With the help of over 50 volunteers, 110,000 hours of work and \$900,000, the Black Widow is well on her way to soon return to the skies.

### Northrup P-61 Black Widow Specs:

Crew: 2–3 (pilot, radar operator, optional gunner) Length: 49ft 7in Wingspan: 66ft 0in Height: 14ft 8in Wing area: 662.36ft² Empty weight: 23,450 lbs Loaded weight: 29,700 lbs Max. takeoff weight: 36,200 lbs Powerplant: 2 × Pratt & Whitney R-2800-65W Double Wasp radial engines, 2,250 hp each Fuel capacity: Internal - 640 gal, up to four 165 gal or 310 gal tanks under the wings Maximum speed: 366 mph at 20,000ft Combat range: 610 mi Service ceiling: 33,100ft Rate of climb: 2,540 ft/min Armament: 4 × 20 mm Hispano M2 cannon in ventral fuselage, 4 × .50 in M2 Browning machine guns in remotely operated, full-traversing upper turret, 4 × bombs of up to 1,600 lb. each or 6 × 5 in. HVAR unguided rockets Avionics: SCR-720 (AI Mk.X) search radar, SCR-695 tail warning radar









