



# The Beacon

The newsletter of Chapter 54  
Lake Elmo, Minn.

APRIL 2016

## May 2016

NEXT MONTH'S PROGRAM WILL BE ON

### MONDAY May 9, 2016

- Set Up Volunteers at 5:00
- Social hour from 5:00 to 5:30 PM
- Spring Picnic begins at 5:30 PM
- Open to Friends and Family
- \$5 each—includes normal picnic fare
- CHAPTER HOUSE, ENTRANCE B, LAKE ELMO AIRPORT 21D.
- Our Chapter Web site address: [www.eaa54.org](http://www.eaa54.org)

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## Upcoming Events

1. May Young Eagles Event — May 14, 2016
2. Oshkosh Work Party — May 21-22
3. Farnsworth Airport Tour — May 26, 2016
4. Pancake Breakfast / Aviation Day — August 14
5. EAA Chapter 54 Board Meeting — June 4

## EAA Chapter 54 Oshkosh Weekend Work Party

The Chapter volunteers have selected May 21 and 22 for our visit and volunteer event. Anyone can go over any of the other days and you will be welcomed and put to work doing what you can reasonable do.

It is fun and good opportunity for developing camaraderie.



### Spend a Weekend in Oshkosh and Join the Party

Join us for a weekend day or two in Oshkosh, meet some other great EAA members, and help the biggest fly-in in the world come to life by volunteering at an upcoming spring or summer [Weekend Work Party](#).

EAA is looking for volunteers to help prepare the grounds for AirVenture Oshkosh 2016. Over the years, projects have varied greatly and have included painting, building construction and remodeling, fence removal, material staging, grass cutting, tree planting, and more.

Volunteers are provided overnight accommodations in the EAA bunkhouse for the weekend, meals in the volunteer kitchen, and Saturday evening entertainment.

#### Weekend Work Party Dates & Entertainment:

May 14-15:	B-25 Presentation, Chris Henry
May 21-22:	Photography 101, Erin Brueggen and Jim Koepnick
June 4-5:	TBD
June 25-26:	CAF WWII Nose Art Exhibit Tour, Zack Baughman
July 9-10:	Pioneer Airport Tour, Jim Casper
July 16-17:	TBD

[More About Weekend Work Parties →](#)

If you'd like to organize a weekend work party, please contact Theresa Meixensperger at [tmeixensperger@eaa.org](mailto:tmeixensperger@eaa.org) or 800-236-4800 ext. 4819.

Ready to sign up? You can do so by [registering here](#).



## **General aviation drives business in Minnesota**

By **TIM HOWARD** Guest Columnist

As a global powersports leader, our company knows the importance of getting people where they want to go, no matter the terrain. So when we need to transport our personnel to plants across the U.S., we turn to general aviation.



In my role as senior pilot for Polaris Industries, I fly our employees from our headquarters in Flying Cloud, MN to plants across Minnesota, South Dakota, Ohio, and Alabama, even Mexico. With airlines cutting services to rural areas and smaller communities, the accessibility that our airplane gives us is a competitive edge.

For our business and others across the state, general aviation helps increase productivity and improve flexibility. In Minnesota, general aviation contributes over \$5.3 billion to the state's total economic output and supports 26,200 jobs. General aviation also supports our communities by providing services like disaster relief, law enforcement and medical care.

I know how important general aviation can be for supporting medical care because I fly missions for Veterans Air-lift Command, an organization that flies veterans across the state and country to receive medical care. One of my missions was to fly an Army National Guardsman's children from Minnesota to visit their father while he was recovering in the D.C. area. Whether it is organ transport, delivering specialty care to rural areas, or Medevacs and emergency care, helicopters and small aircraft are an important part of our national infrastructure.

But there are some people who still don't understand how important general aviation is to local businesses and rural communities. For example, some on Capitol Hill are pushing to privatize our air traffic control system. This would take away congressional oversight of our air system and give private interests a say in who gets to access where and when. This could cut off rural areas and harm small businesses that depend on general aviation. Fortunately, many of our communities and local officials have recognized the importance of general aviation and local airports for Minnesota and its people. Let's work to ensure our aviation system continues to serve communities and businesses of all sizes.

The graphic features the Minnesota Pilots Association logo at the top left, which includes a map of Minnesota with an airplane icon and the text 'MINNESOTA PILOTS ASSOCIATION'. To the right, it says 'the Minnesota Pilots Association presents' in a mix of blue and red fonts. The central focus is a large, stylized baseball with orange stitching. The words 'Pinch Hitter' are written across the baseball in a red, cursive font. Below the baseball, a small black silhouette of a propeller airplane is shown flying towards the right. The background of the graphic is a light gray with a subtle dot pattern.

**Cheryl Daml, CFI, CFII, presents this course, her version of the well-received AOPA course of past years, which will help give non-flying spouses and significant others the tools necessary to safely complete a flight if the pilot-in-command should be unable to do so.**

**APRIL 30 • GREAT MINNESOTA AVIATION GATHERING**  
ANOKA COUNTY • BLAINE AIRPORT • GOLDEN WINGS MUSEUM

## FAA Expands Drone Privileges

Certified drone operators may now fly small UAS, weighing less than 55 pounds, up to 400 feet AGL, the FAA said today, expanding the flight zone from the previous limit of 200 feet. The policy change follows a "comprehensive risk analysis," the FAA said. Operators still are restricted to daytime VFR. They also must still keep the drone within sight and stay away from airports and heliports. "This is another milestone in our effort to change the traditional speed of government," said FAA Administrator Michael Huerta. "Expanding the authorized airspace for these operations means government and industry can carry out unmanned aircraft missions more quickly and with less red tape."



The change applies to UAS operators with a Section 333 exemption and to government UAS operations. Other provisions of an FAA authorization, such as registering the drone and making sure operators are certified pilots, still apply. The Association for Unmanned Vehicle Systems International welcomed the change. "The FAA's decision ... provides greater flexibility to those receiving FAA exemptions and makes it easier for more commercial UAS operators to access the skies," said AUVSI President Brian Wynne. "However, the FAA still needs to finalize its small UAS rule as quickly as possible ... The new blanket COA altitude remains lower than the operating ceiling of 500 feet proposed in the small UAS rule." The final rule, expected this spring, is expected to make it easier to use drones commercially, especially if the requirement to hold a pilot certificate is eliminated, as anticipated by some in the industry.

## The Great Minnesota Aviation Gathering

Friday April 29<sup>th</sup> & Saturday April 30<sup>th</sup>  
Anoka County-Blaine Airport, Blaine, MN

*Meet hundreds of Minnesota and Wisconsin pilots and aviation enthusiasts!*

*Admission \$5.00 per person - per day. Free to MNPilots members and attendees 18 and under*

Flying to the Gathering

Location, Parking and area information



The Gathering will feature education sessions and a variety of vendors of aviation-related products. Education sessions will cover a broad range of topics, including owner-assisted maintenance, seaplane operations, ski plane operations, survival medicine, single pilot IFR, Minnesota aviation history, winter operations, engine management, how to promote your local airport and many others.

## Hello to EAA54 Young Eagle Volunteers,

Spring is here and we are working closely with the National Weather Service to provide VFR conditions for all Young Eagle events this summer. Dates for 2016 EAA54 Young Eagle Events will continue to be on the second Saturday of each month starting in May and going through October. Dates are listed below:

May 14, 2016  
 June 11, 2016  
 July 9, 2016  
 August 13, 2016  
 September 10, 2016  
 October 8, 2016

I will send an email request for help to all EAA 54 volunteers one week prior to each event. Please respond to the email with your preference for Ground Support or Pilot.

I would like to continue with the 0830 start time and if you are able to arrive by 0800 to 0815 for set up that will be helpful. If you know someone that would like to participate, or just watch, please invite them or let me know their name plus email, and they will be included in the reminders. If you prefer to be removed from this mailing list, please let me know that as well.

As you may have heard, there have been some changes made to EAA guidelines in regard to volunteers and the new youth protection program. EAA requirements for Volunteer partici-

pation have been dialed way back from what was first published. Pilots are being asked to complete a very brief education module and background check.

A social security number will no longer be needed for the EAA background check. If you have already completed the background check before the change, your social security number has been deleted. This new program has been developed due to current public climate but is largely intended to protect you as valued Volunteers.

If you would like to read more about the Youth Protection Policy, click on the link below:

[Youth Protection Policy and Program](#)

Thank you very much for your continued support of EAA 54's Young Eagle program.

If you have any questions, please contact me at the information below.

Linda Amble: EAA 54 Young Eagles Coordinator

Email: [youngeagles@eaa54.org](mailto:youngeagles@eaa54.org)

Phone: 651-353-4450



*Tim*

# Discover Aviation Days June 4th and 5th, 2016

## SAVE THE DATE for DAD 2016!

Come out to the Anoka County Airport in Blaine on June 4th and 5th to enjoy many aspects of aviation. See numerous aviation exhibitors, aircraft & helicopter rides, food booths, product vendors and more! On display will be general and corporate aircraft, experimental and homebuilt, WWII fighters, trainers and bombers along with vintage and modern military. Those interested in a career in aviation, can stop by the education tent, see flying demonstrations, and kid's activities. Meet many veterans and see our military history display area. A Pancake Breakfast & Lunch to be served both days.

**~ VOLUNTEERS NEEDED! ~**The DAD planning team is looking for more event volunteers and team leaders. If you are interested in helping create or plan this exciting event, please [contact us](#) as soon as possible for tasks needed and meeting dates.

[EMAIL US](mailto:linda@eaa54.org) | (763) 568-6072 | [Visit Our Website Online](http://www.eaa54.org)

## April Speakers Notes: James Aarestad

Have you ever tried to shoot video footage from a moving car? How about video footage from an airplane in turbulence? If you have, you know that it is next to impossible to obtain high quality, consistently smooth footage, especially with telephoto lenses.

James Aarestad, an aerial photographer from Buffalo, Minnesota, learned this when he was trying to shoot video footage out the side window of a Cessna 172. "I figured it would be easy to film out the side window," Aarestad explains. He quickly realized that this was not possible to do well. "No matter how carefully I held the camera, even with image stabilization, it was impossible to shoot quality video footage from a moving Cessna while circling above the target," said Aarestad. "The video quality was poor and my field of view was severely restricted with the wing strut and landing gear in the way. I ended up not charging my customer because the video footage was not up to my standard."

This led Aarestad on a yearlong endeavor to design and build a low-cost aircraft video stabilization system. As he puts it, "I wanted to develop a system able to do 80 percent of what the multi-million-dollar helicopter video systems can do for a fraction of the price." Over the next 12 months, Aarestad designed and built a self-contained removable camera pod that clamps to the wing strut of his C172. The size, shape, and weight of this system all had to be carefully considered as these factors affect flying characteristics.

Designing the internal components of the camera pod was just as challenging as designing the outside. Wiring up all of the electronics within the camera pod was extremely tedious work. "I would spend months in the garage just working on the camera controls, much of which was based on trial and error. I would often take three steps forward and two steps backwards, having to redesign the entire system after discovering a problem," he explains. Mitigating and eliminating aircraft vibration to the camera was by far the hardest part of the entire project. This process took hundreds of hours of research and trial and error experiments in his garage. The smallest airframe vibrations had to be eliminated, because otherwise the footage would be blurry.

Finally after six months of building, the system was ready to undergo the required FAA field approval certification process, including structural load tests, aerodynamic calculations and a lot of paperwork (the FAA does not allow aircraft modifications like this without going through an extensive certification process). Eventually, Aarestad obtained FAA field approval for flight operations in June of 2015 on his C-172.

Inside the pod, the camera is mounted on a three-axis gyroscopically stabilized gimbal, which keeps the camera steady to within .001 degrees. Using state-of-the-art accelerometers, and brushless gimbal control motors, the system can film in 4k resolution in moderate turbulence and achieve perfect results. The entire system is wirelessly controlled from the cabin, with a live video feed to the operator for composing shots. The end result is an airborne cinematography system that rivals the multi-million-dollar helicopter systems.

For additional information call Eagle Eye Photos LLC at 952-882-8570 ([www.blimpguy.com](http://www.blimpguy.com)).

## For Sale, Rent or Wanted

**Wanted:** Four place airplane, fixed gear, Mid time engine, STC for auto fuel or approved engine and airframe. Also looking for hangar to rent at Lake Elmo. Please call 651-246-8028

Please email [newsletters@eaa54.org](mailto:newsletters@eaa54.org) if you have an aviation related item to sell or looking to buy.



## Tailwinds Flying Club Welcomes New Members

Tailwinds Flying Club is based at Lake Elmo airport. We are a non-profit corporation of 39 pilots who equally own three aircraft and one hangar (25E). Our goal and philosophy are to fly great airplanes safely and inexpensively. We currently have a Cirrus SR20, Archer II and Cherokee Six. Some of our members belong to EAA 54 and we love to fly Young Eagles. Please stop by and visit us anytime! North side, Fairchild Lane, Hangar 25E. To inquire about membership, please call 612-584-1740 or visit [www.tailwinds21d.org](http://www.tailwinds21d.org).



## FROM THE FLIGHT DECK (PRESIDENTS REPORT)

*JIM PEARSALL*

### Suggestion Box

In the past month I have received several items for the EAA 54 suggestion box. Well not slips of Paper, but feedback and ideas. Receiving suggestions is nothing new, it is pretty much the job as President. It is also refreshing to know people are willing to bring things up.

Of those items, one I want to highlight here: welcoming new people. This is an important issue—here is what we do now. We always send a welcome email out to the new member (Thanks John Renwick). I have started including his intros in our monthly meetings but we need more, we can go beyond the initial communication. We always ask for visitors new to the meetings and most times the visitors tell us why they are at the meeting. We can then get a member application to them and sign them up right during the meeting.

Additionally, I would like to initiate having a designated host or greeter for all our meetings. Suggested duties are: make coffee, get name tags for people, introduce each other and track who might be new AND then report in the meeting.

Do I hear a volunteer to be the initial greeter? I would defer to those doing this to come up with a complete process. This is a great opportunity for a new member to contribute—they know what it feels like to be new. A proposed first assignment is document what is the current process, log what was done, how it worked, feedback to next volunteer, repeat until process is solid. An effective greeter only takes some effort and the effort is worth it.

For things that require funding or strategic planning, we have our board meeting June 4th. In the meeting we will also be discussing things with broader impact to get consensus. If you have a big idea, please let me know and it will be brought up then. Look for my proposed agenda soon.

As a part of the Great Minnesota Aviation Gathering in a couple of weeks, Craig Nelson of EAA Chapter 25 has put together an EAA Leaders Summit for local chapters to get together and discuss things pertinent to our area. This is an opportunity to put our ideas in a bigger suggestion box. There are a couple of things I plan on escalating that have been brought to my attention in the chapter. I will be reporting on what is in the big suggestion box at the June 4th meeting and subsequent June regular meeting. In the meantime, if you have something to discuss as always, find me at [president@eaa54.org](mailto:president@eaa54.org) or, talk to me at our Spring cookout in place of our May meeting on the 9th.



# FAA reauthorization debated in Senate

April 7, 2016

By Elizabeth A Tennyson AOPA

The full Senate has begun debating FAA reauthorization, passing amendments designed to increase security and rejecting a proposal to prevent airlines from shrinking seats and legroom.

“This legislation includes protections and reforms that are vital to the general aviation community, so we’re pleased the Senate is keeping it moving,” said Jim Coon, AOPA senior vice president of government affairs. “No one in the aviation community wants to see the FAA kept in a holding pattern, and we need reauthorization to ensure the agency can move forward with initiatives that matter.”

The bill, which would extend FAA funding through September 2017, is widely considered good news for GA because it includes third class medical reform language that passed the Senate in December but does not include user fees for GA. In addition, the legislation would authorize annual increases in Airport Improvement Program funding, streamline certification for light GA aircraft, support a transition to unleaded aviation fuel, and make it easier to install modern safety equipment in legacy aircraft.

## Weekend Work Party

Last year we assembled the posts and panels for this billboard next to the Theater in the woods



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