



High Desert Flyers

Chapter 1345 Bend, Oregon

February 2024 Newsletter

Next General Meeting

Wednesday, February 14

6:00pm

Dinner of chicken croissant sandwiches, salad and cookies for \$7 donation to cover our costs

6:30-7:30pm

General meeting

Location:

Bend Builders Assist
63030 Powell Butte Hwy
Bend, OR

Guests are welcome to attend up to two monthly meetings before becoming a member.

Message from the President

Welcome to our February newsletter!

Hope you all didn't miss us too much in January, and we are all looking forward to being back together on February 14th. I do realize this happens to coincide with Valentines Day, but I'm hoping most of you have discovered that celebrating a day before or after makes for a much easier restaurant reservation!

I had the pleasure of attending the Prineville EAA chapter meeting last month. If you haven't been I highly suggest you pay them a visit. They have their own chapter hangar, that allows them to do many things we cannot. Still it's worthwhile to attend to get some ideas for things we can do in our limited space.

Our next chapter event is EAA's Flying Start (see <http://tinyurl.com/ycyv6m3j> for more information) on April 27th. Our coordinator and Vice President Tom Wright is seeking volunteers, so if you think you could help with this valuable program, please send him an email at wright.thomas@yahoo.com.

As I've mentioned before our scholarship program is starting for 2024 and we are looking for good candidates. If you know of any aviation minded youths between the ages of 16 and 19 please bring them to our attention.

I am trying to set up some member tours. One possibility is we meet for lunch and a tour of the Erickson Collection in Madras, and I'm also trying to set up a tour of the Redmond airport control tower. If either of these sounds interesting to you let me know!

Safe Flying!

Chris Wallace



February Meeting Agenda

- Greetings and welcome visitors and new members
- Reminder to pay 2024 membership dues
- 2023 Financial Review Joel Haynes
- Student scholarship update Jeff Stolasz
- Flying Start Program and Young Eagles Events Tom Wright
- **Accident case study and discussion-Risk Stacking**
Moderated by Tom Wright
- Preview of March meeting guest speaker
- Closing remarks

2024 Chapter Events Schedule

February 14	Chapter Meeting
March 13	Chapter Meeting
April 10	Chapter Meeting
April 27, Saturday	EAA Flying Start Program at Bend Municipal Airport
May 8	Chapter Meeting
June 1, Saturday	Young Eagles Day in Madras during Madras Airport Day
June 12	Chapter Meeting
July 10	Chapter Meeting
August 14	Chapter Meeting
September 11	Chapter Meeting
October 9	Chapter Meeting
November 13	Chapter Meeting
December 11	Holiday Party

More events are in the planning phase. If you have any ideas, please let us know!

Volunteers Needed

Please consider volunteering for one of our many chapter events. It's a great way to get to know other members and give back to our community.

And we are always looking for ideas for speakers/programs for our monthly chapter meetings. If you or someone you know would be interested in presenting to the chapter, please reach out to Chris Wallace at highdesertflyers1345@gmail.com.

Updates from our Chapter Aircraft Builders



Our chapter has several members currently building experimental kit planes in varying stages. The builders have been busy this winter and below are some updates on their projects. If you are building a kit, we would love to include your update in a future newsletter.

Chapter Member: Gary Hood Kit: RV12

Gary finally has his wings back from the paint shop and is happily installing them on his plane. All that remains is some final assembly and an airworthiness inspection from a nearby DAR. Hopefully flying soon!



Chapter Member: Jeff Stolasz

Kit: Just Highlander

The Highlander is coming along. I'm still in the covering stage. I estimate I'm about halfway done with the fabric work now. Occasionally I get to work on other systems like attaching the autopilot servos and installing the ELT. I'm currently gluing down the fabric reinforcing tapes on the second wing. The fabric and tapes are complete on the first wing, fabric is on the control surfaces but the tapes still have to go on. Then on to the fuselage.



Chapter Member: Chris Wallace

Kit: Sonex Waix

Just finished work on my main wing spar. Lots of parts had to line up to make this work. Somehow all my errors cancelled each other and it fit perfectly. Will now start attaching ribs.



Ray Aviation Scholarship Update

From Ray Scholarship Coordinator, Jeff Stolasz

I am happy to report that our Ray Scholar Gabriella Favia passed her FAA written exam last month. Gabriella did the preparation and ground school portion of the certificate through Sporty's online ground school. She was assisted with some last-minute review by our chapter pilot mentors Tom Wright and Faye Phillips. Thanks to Tom and Faye for putting in the extra time and congratulations to Gabriella for making it through this milestone.

2024 Membership Dues Reminder

Annual membership dues are due! We are keeping the dues at \$25 for individuals and \$40 for a family. Dues can be paid electronically by credit card or PayPal on our website at <https://chapters.eaa.org/eaal345/yearly-membership-renewal>. If you prefer to pay by check, please make the check payable to “EAA Chapter 1345” and either bring it to the monthly meeting or mail it to:

EAA Chapter 1345
P.O. Box 6732
Bend, OR 97706

We welcome prospective members to attend up to two of our monthly chapter meetings to learn about the group and meet our members. After attending two meetings, we kindly ask that you join the chapter by paying the annual dues to help fund our activities during the year.

If you have any questions, please contact our Membership Coordinator, Faye Phillips, at Fayephil@gmail.com.

Chapter Member Name Tags

The Chapter is purchasing name tags for all current members who would like one. The name tag will include your name, and a second line of your choice. Maybe your aircraft N number, your nickname, board position, or anything you'd like to say about yourself.

If you would like a name tag, please submit your request to Jeff Stolasz (jstolasz@yahoo.com). We receive a discount on ten or more, so every ten requests we will place an order.

Wear your nametag with pride. You are part of a rapidly growing group!

Here is a sample of the name tag.



Treasurers Report

2023 EAA Chapter 1345 Financials

Balance Sheet as of December 31, 2023

Assets:	
Cash in Bank Accounts	<u>\$83,706</u>
Total Assets	\$83,706
Liabilities:	
Ray Scholarship Fund	\$(2,000)*
Equity:	
Prior Year Net Earnings	\$89,838
Net Income	<u>(4,132)</u>
Total Liabilities and Equity	\$83,706

Income Statement for January 1 to December 31, 2023

Income:	
Membership Dues	\$ 735
Sale of Donated Airplanes	12,500
Sale of Other Donated Items	300
Cash Donations	<u>100</u>
Total Income	\$13,635
Expenses:	
Chapter Meetings/Events	\$ 1,302
Young Eagles Event	1,254
Donated Airplane Kit Build	7,396
Jack Watson Scholarship	4,450
Operating Expenses	927
Miscellaneous Repair	<u>2,438</u>
Total Expenses	\$ 17,767
Net Loss	\$ (4,132)

* \$2,000 advance payment for scholarship recipient. Reimbursement from EAA National expected this month.

Upcoming Pacific Northwest Aviation Events

Airshows

May 17-19	Oregon International Airshow	Hillsboro, OR
June 15-16	Moses Lake Airshow	Grant County Intl Airport, WA
July 22-28	EAA AirVenture	Oshkosh, WI
August 23-24	Airshow of the Cascades Festival	Madras, OR
Aug 30-Sep 1	Oregon International Airshow	McMinnville, OR
September 6-7	Oregon Trail STOL	Ontario, OR
September 7-8	WAAAM Hood River Fly-In	Hood River, Or



Western Antique Aeroplane & Automobile Museum

Upcoming events at the WAAAM museum in Hood River:

February 10 - Second Saturday - For the Love of History: Restoration Projects

March 9 – Second Saturday – March through Time 1930s

Each month we fly and drive the exhibits. Come and enjoy the fun!

To see more details, please visit their website at www.waaamuseum.org.

Evergreen Aviation & Space Museum



Upcoming events at the Evergreen Museum in McMinnville, home of the Spruce Goose, include:

Thursday, February 15th

The Life & Times of Bessie Coleman – The First Black Female and First Native American Pilot

Join us as we explore Bessie Coleman's pioneering journey to become the first Black woman and first Native American to earn a pilot's license. Coleman's inspiring life story, related through a live theatrical performance by her grand-niece Gigi Coleman, encourages individuals to achieve their dreams.

Tuesday, February 20th at 2pm

Storytellers Series: NASA'S Amazing Mission To The Asteroid Belt

NASA's innovative DAWN spacecraft studied the conditions and processes of the solar system's earliest epoch by investigating in detail two of the largest protoplanets in the Asteroid Belt still remaining intact since their formations: the giant asteroid Vesta and dwarf planet Ceres, two main asteroid belt worlds that followed very different evolutionary paths. Using exceptionally efficient electric ion propulsion, DAWN became the first and only spacecraft to orbit two different deep space bodies on the same mission! Come see incredible photos of these two worlds, what it took to get there, and what we've learned!

Saturday, March 2nd

The Nighthawk Experience: Desert Storm

In commemoration of the 33rd Anniversary of Desert Storm, the Museum is hosting a Desert Storm-themed, "The Nighthawk Experience." If you were not able to make the first "The Nighthawk Experience" or you would like to learn more about Operation Desert Storm, this event is for you.

The event will feature Major General Gregory Feest, who piloted the our F-117 in Operation Desert Storm. Other experts will be available to answer questions about the role played by the F-15 & A-10.

For more information or to buy tickets, please visit their website at www.evergreenmuseum.org.

HOW WELL DO YOU KNOW YOUR RIVETS?

Submitted by Steve Gette, Member At Large

*Holding it all together since
times of ancient Egypt*



What kinds are there?

The most common general aviation aircraft fastener is the solid rivet. The concept is simple: Drill matching holes in two aluminum pieces, hold the components together, slide in a solid rivet until the manufactured head (the mushroom-shaped part of the rivet) is firmly against the aluminum, and drive down the tail of the rivet from the other side until you have a nicely formed shop head that holds everything together.

There are several advantages to solid rivets. They are quite strong by virtue of the fact that they fill the entire hole with solid aluminum, work-hardened by the driving process. But, another important factor is cost. They are so inexpensive that they are typically sold by weight rather than quantity. Considering that the average aircraft may have thousands of rivets, the cost of the rivets matters. However, there are also disadvantages to solid rivets. They require skill and sometimes more than one person to properly install, and they require access to both sides of the material in order to drive the rivet.

Pulled rivets, commonly referred to as “POP rivets,” don’t feature prominently in the construction of certified metal aircraft. Part of the reason is that they came quite late to the party. Historians have found evidence of wooden rivets dating from as far back as 3,000 B.C. in ancient Egypt, while the revolutionary “POP” brand rivet wasn’t invented until 1934. Other factors that limit the popularity of pulled rivets include the cost of the rivets and lower strength, compared to solid rivets.

So how do they work?

Pulled rivets, also known as blind rivets, are made up of two pieces: the rivet body and the shank. You begin with the same matching holes while holding two components together. The rivet is then inserted into the hole from one side, and a rivet puller (commonly referred to as a rivet gun) is used on the same side to pull on the rivet stem. Since the entire process is completed from one side of the

joint, the installer can be “blind” to the other side of the piece, hence the name: blind rivets. As the rivet gun pulls on the stem, it pulls the entire rivet body together, making it swell and forming the rivet shop head on the opposite side. The secret to the pulled rivet is a small notch in the shank that is an engineered weak point in the design. Once the rivet cannot be compressed further, all of the force goes into pulling on the shank until it breaks at that notch. You hear a “pop” sound, the rivet gun comes away, and the process is done. Voilà!

There are varieties of pulled type rivets.

Specialized pulled rivets, such as CherryMax structural rivets, retain the part of the stem that does not break away as a structural part of the finished rivet. However, most common pulled rivets rely only on the hollow rivet body for their strength and are not as strong as comparable solid, driven rivets, so aircraft designers have to use a greater number of pulled rivets to do the same job. For example, a designer may have to use five pulled rivets in a location that would require only three driven rivets.

So how many rivets should be used?

Using more rivets over the same span is not necessarily a bad trade off. It’s a fairly common practice on aircraft skins to use more rivets than are structurally necessary in order to obtain a smooth seam between overlapping sheets of aluminum. In some cases, if designers only used the minimum number of rivets required, overlapping skins would have gaps and bulges that would not have the look of a well-finished product.

This leads to the question: As long as you’re going to have a higher density of rivets for aesthetic reasons, why not substitute pulled rivets and save a lot of time in the process? This is exactly what we have been seeing in many recent aircraft designs in the experimental and light sport aircraft markets. Well respected kit companies such as Sonex, Murphy, Zenith, and Titan rely almost entirely on pulled rivets for their aircraft. It lowers both the expertise and time required to assemble the aircraft and makes it easy to build structures with limited access, such as ailerons or flaps.

So now, the next time you are flying with a co-pilot, feel free to spew forth your newly gained 'RIVETING' knowledge!

Courtesy in part to Jeff Simon/AOPA

EAA National Free Webinars

Below is a list of some of the webinars offered for *free* by EAA National to members this month. Preregistration is recommended since space is limited. For more information and to preregister, go to <https://www.eaa.org/ea/news-and-publications/ea-webinars>. If you miss the live webinar, you can still watch the video at a later date.

- Feb 13: F-86 Sabre (*museum webinars series*)
- Feb 15: Mental Health and FAA Medical Certification
- Feb 28: Maintaining Insurability
- Mar 5: Hosting a Flying Start Event 101

****The March 5th webinar is particularly relevant to our chapter since we will be hosting our first Flying Start event in April****

Chapter Board

President	Chris Wallace highdesertflyers1345@gmail.com <i>Term: Jan 2023-Dec 2024</i>	Vice President	Tom Wright wright.thomas@yahoo.com <i>Term: Jan 2023-Dec 2024</i>
Secretary	Jeff Stolasz Jstolasz@yahoo.com <i>Term: Jan 2023-Dec 2024</i>	Treasurer	Joel Haynes Joelroberthaynes@gmail.com <i>Term: Jan 2024-Dec 2025</i>

Chapter Committee Chairpersons

Membership Chairperson	Faye Phillips Fayephil@gmail.com <i>Term: Jan 2023-Dec 2024</i>	Young Eagles & Eagles Coordinator	Tom Wright wright.thomas@yahoo.com <i>Term: Jan 2023-Dec 2024</i>
Member At Large and Webmaster	Steve Gette Sgetteman@q.com <i>Term: Jan 2022-Dec 2024</i>	Newsletter Editor	Debbie Wallace highdesertflyers1345@gmail.com <i>Term: Jan 2023-Dec 2024</i>