



# Squawk 902



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President's Message  
EAA 902  
April 2024

Hello Chapter members of EAA 902. At March's Chapter 902 meeting we had 30 people present. Not a bad turnout at all. Our guest speaker, David Graves, gave an informative review of the dynamics of flying for Butler Aviation as a "Forward Air Controller" during efforts to fight fires. His review of the zones of a TFR, length of flights associated with the suppression efforts and equipment used to fight forest and brush fires was very interesting.

At this month's Chapter 902 meeting we look forward to Ron Coulter's presentation on owning and flying a Stearman aircraft over the past few decades. As most know, open cockpit flying presents some thrills and experiences that are often absent from our experimental flights.

On 19 March 2024 I was notified via email that our Chapter 902 had successfully reached the Gold level EAA recognition status for the 2023 year. This program was developed and measured in partnership with EAA's Chapter Advisory Council and is based on 11 criteria that are consistently found in active and highly engaged chapters. Point accumulation is based on a calendar year (2023) and our score is reflected below:

Attends a chapter leadership training session	(1)
Growing or steady membership	(1)
Offers IMC or VMC Club programs	(1)
Participates in YE or FS programs	(1)
Has EAA approved Technical Counselor	(1)
Participates in EAA's annual chapter member survey	(1)
Participates in YE Build & Fly, YE Workshops Ray Aviation Scholarship program	(1)
Host at least two public events each year	(1)
Owns/leases a facility	(1)
Requests an EAA Chapter Blast email	(0)
Extra credit activity	(0)

President's Message  
EAA 902  
March 2024

Participating in the VMC program raised our point total from 8 to 9 and thus the Gold level was achieved. We expect to receive a chapter recognition banner to be displayed as we wish.



I want to thank Henry and Philip for their Newsletter contributions last month in regards to short/soft field takeoff reminders for tail wheel and tricycle gear aircraft. Good stuff.

Additionally, Henry accomplished some necessary mower maintenance and several members completed the first round of mowing at the airport. Thanks to all. By the time you read this we will need another round of mowing. Please be reminded to clean the mower off that you use (leaf blower), fill with fuel (in the garage) and lube the mowers prior to use. List the zones that you mowed on the dry erase board so other volunteers have an idea of where to mow next.

The next board meeting will be at the Clubhouse on 8 May 2024 at 5:50 pm. This will be followed by our first Chapter BBQ for 2024 starting at 6:30 pm and monthly meeting (Jim Ott speaker) at 7:00 pm.

Finally, I would like to know if any member recognizes this individual:

See you in a few days,

Dave



## EAA Chapter 902

Web Site: <https://chapters.eaa.org/ea902>

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## Show me the Money

### Show Me The Money

March 2024

Chapter balance as of 02/29/2024 ----- \$7,196.40

General fund balance as of 02/29/2024 ---- \$3,870.65

Income --- Membership ----- \$245.00

Coffee/Pop ----- \$6.00

Expenses --- PGE----- \$69.52

Mulino Water ----- \$56.91

New battery and mower gas - \$129.99

Young Eagle fund as of 03/31/2024 ----- \$2,061.30

General fund balance as of 03/31/2024 ---- \$3,865.23

Ray Scholarship funds --Gavin ----- \$476.00

Jackson----- \$788.45

Chapter balance as of 03/31/2024 ----- \$7,190.98



EAA Chapter 902, meets on the 2nd Wednesday of each month at 7:00 PM. (6:30 For BBQ's)

**Chapter Meeting: Next meeting on 4/10/2024 At 7pm**

**David McGraw** is Chapter President and you can reach him at (503) 313-5142

### Directions to Mulino airport:

From I-205 take exit onto Hwy 213 south-bound. Continue on Hwy 213 to the town of Mulino. The EAA Chapter Clubhouse is about 1/4 miles past the restaurant, on your right.  
**13801 S. Darnell Rd.**

Photo by David McGraw

**Mt. Hood Chapter 902 Experimental Aircraft Association**  
**General Meeting Minutes March 13, 2024**

President Dave McGraw called the meeting to order at 7PM. About 25 members and guests were present.

Dave Graves discussed his experiences flying as the pilot for the Forward Air Controller for fighting forest fires, and the requirements for the aircraft used (twin turbine). Dave and his wife Jane also have an aircraft painting and upholstering business; a current project is a Waco at Lenhardt's.

No raffle - Len Freling was not available to conduct ticket sales.

The EAA HQ Question of the Month was how to explain to a non-aviation passenger why more "right rudder" is needed during the take off.

Tech Tip: Philip Groelz explained why a soft field take off is substantially different for a typical lightplane at full gross weight than many of the higher performance home builds.

Correction to February Chapter Meeting notes: One Ray Scholarship will be managed by Chapter 902 this year.

We have entered the heavy grass growing season and President Dave recruited additional volunteers for operating the chapter's mowers. More help with the mowing is needed.

Dave McGraw will be purchasing an EAA Young Eagles "Build and Fly" model airplane kit and he will be mentoring teen age aviation enthusiasts in the Estacada area. The kit appears to be based on the lessons learned in the kit airplane world - complete package of materials including rubber band power, and clear proven instructions for completion. Dave will keep the chapter informed about the project.

Members indicated an interest in supporting a similar project for the Mulino area.

The meeting adjourned about 8:30.

The next Board Meeting is scheduled for 5:30 PM on May 8 in the Chapter Clubhouse. The chapter meeting that evening will be a BBQ/potluck.



## Mt. Hood Chapter 902 Experimental Aircraft Association Board of Directors Meeting Minutes March 13, 2024

President Dave McGraw called the meeting to order at 6PM with pizza. Attendees were: President Dave McGraw, Christine Stevens, VP Larry Stevens, Pete Gauthier, Cody Watkins, Treasurer Steve Miller, Dick Scott, Scott Crockard, Henry Pflegl, Bob Armstrong, and Secretary Philip Groelz.

Meeting minutes and Treasurer's report as presented in the newsletter were approved.

As clarification, the chapter will administer only one Ray Scholarship this year.

An individual has been recommended as the next Young Eagles scholarship candidate.

The guest speaker planned for the April meeting is Ron Coleman. Topic: Stearman.

The YE dates presented in the newsletter were confirmed. Best use the \$1,140 YE credit from 2023 was discussed.

Most of the needed mower maintenance has been completed. The "Blue Mower" battery will be replaced.

How could information in the Chapter 902 website be corrected? Allowing a second person access was considered desirable.

An unrequested proposal for replacing the clubhouse roof was discussed but would cost more than the chapter could afford. The repairs made a few months ago should be adequate for a few more years. Larry Stevens plans to replace some of the weathered siding with west exposure with Hardie siding.

Dave McGraw suggested members write newsletter articles based on their experiences such as "Reusable Oil Filters" and "What Should Your Aircraft Emergency Kit Contain?" Henry Pflegl suggested emergency kits be aircraft specific - based on items you probably would not be able to find most airports, such as inner tubes.

Next Board meeting will be May 8 at 5:30 just before the BBQ potluck.



# EAA VMC Club

## Question of the Month

What is the difference between torque and P-factor?



## EAA Chapter 902 Photo Submissions



Caleb waving at Grandpa (Dave) landing at PDX in the Q400

Dave McGraw, All rights reserved





## EAA Chapter 902 Photo Submissions



Reds Horse Ranch, Jim Ott, All rights reserved



## EAA Chapter 902 Photo Submissions



Christavia Fuel Test, Philip Groelz, All rights reserved





## EAA Chapter 902 Photo Submissions



### **A Fascination with Mt St Helens, in pictures Mike Harfst**

Here is another picture of the month, a series this time. When I moved to Portland in May 1979, I did not know that Mt St Helens was one year away from a historical explosion. It stated to have ash explosions in early 1980, that were often obscured by the clouds. One evening in April 1980 with a clear sky, a friend and I flew up to Mt St Helens and took this picture. We were just exactly outside the red zone as required and I took this picture of the small crater on the top. Old film pictures just don't match the quality of new digital pictures.



## EAA Chapter 902 Photo Submissions



Fast forward 25 years and this is what the volcano looked like on a windy day in the summer. The dust and ash blowing off the rim to the west is a clear and present danger to a plane.



Jump another decade and this is what the mountain looks like in the winter



## EAA Chapter 902 Photo Submissions



Jump ahead one more decade, and this is what the mountain looks like in the summer of 2021. The summer smoke really impacts the quality of the pictures now.



## CHALLENGER OIL FILTERS FOR AIRCRAFT ENGINES:

**By: Larry Stevens**

This article is on the reusable Challenger Oil filter. A couple of years ago, there was a shortage of oil filters for the general aviation fleet. No one knows why there was a shortage, but it was hard to obtain oil filters of any make and model for about 16 months. As the maintenance officer for Aerodynamics flying club, which has three aircraft, I change the oil and filters in all three airplanes, sometimes as much as once a month for each aircraft, depending on flight hours. I change the oil and filters every 50 tach hours.

Due to the shortage of single-use filters, I started looking at reusable oil filters and the pro and cons for these types of filters. I decided on the Challenger oil filters, which are being used on my Vans RV-12, Rotax 912 motor; the flying club Piper Archer, Lycoming O-360 motor; Cessna 172, Continental O-300 motor; and a Cessna 177, with a Lycoming IO-360 motor.

I have completed about eight oil and filter changes on each of the flying club motors and a couple on the Rotax. Cleaning the oil filter is a lot easier and faster than the old canister type. I can say that it is a cleaner process since the filter is not cut open. Instead, after draining the oil, remove the filter from the motor. Push down on the filter element, turn it a quarter of a turn and it comes out of the main filter housing. The filter screen is stainless steel and has a magnet on the top of the housing that should be inspected for large particles. The stainless screen is cleaning smaller particles than the oil canister filter did and it is much easier to inspect the screen, versus the cardboard filter. After inspecting the screen .....

and magnet, simply take cleaning solvent and wash out the screen and magnet. Put the screen back in the housing and turn it a quarter of a turn or until you feel it lock into place in the housing.

To install, make sure the rubber O-ring is in the groove, put some light oil on the O-ring and then screw it back on to the motor. The filter comes with safety wire holes on the outside of the filter, which are used to safety-wire it back to the motor. I use an oil filter wrench that has a torque setting of 60 ft. lbs. The only problems I have seen with these filters, is making sure the O-ring is in the proper place and getting the filter tightened correctly. When you purchase one of these filters, a backup O-ring is provided.

Another item that I found on the first time use is related to oil samples. When the test report comes back and the test numbers are up that is because the new filter seems to have micro-particles. I have cleaned the filters really well and still have had elevated particle counts for the first oil change. But after the second oil change the particle numbers are back to the previous numbers. The particle numbers that were reported were a very small increase that was still well within operating ranges. This is just a heads-up on the first report.

The big question: "What do they cost?" For the certified motors, each was around \$330.00. Currently single-use Champion filters for the flying club airplanes are \$48.50 each. After seven oil changes, the reusable filters have more than paid for themselves in cost. Filters for non-certified motors are about half of the cost of filters for certified engines.

If you decide to purchase one of these filters, just use the same filter number from the canister type, (48110-2 would be a 48110-c). For.....

certified aircraft, the company provides an STC. An A&P mechanic has to complete a FAA-337 form, which is sent to the FAA with a copy to the aircraft owner for the aircraft logs. For the flying club and my RV-12, I have been pleased with the Challenger oil filters.



This is a typical reusable oil filter.

# Aircraft Survival Gear

By: Christine Stevens

As most EAA members know, in the past, I have done a bit of long cross-country flying. I participated in women's air races, mostly from Santa Monica, California to Bend, Oregon. One year I flew with a friend in the Air Race Classic which went from Reno, Nevada to Huntington, West Virginia and back home. I also flew to California several times to visit my daughter and her family who live in the Salinas area. Over the years, we have flown to Missoula, Montana, Coeur d'Alene, Idaho and to Orcas Island, WA on various overnight jaunts.

On long cross-country flights, it has been my practice to carry some survival gear with me. The flying club airplanes have boxes in the back that contain oil, spare inner tubes, cleaning gear, rags, a survival kit that contains waterproof matches and a bunch of other items; a first aid kit and other things that can be useful in the event one gets stranded someplace. It weighs around 28 pounds.

If the flights were long or over mountains, I added a sleeping bag and a foldable cot (these two items weigh about 9 pounds total). In survival situations, being able to keep yourself off the ground can be critical to maintaining your health. (In addition, at my level of gimpyness, I am not sure I could get back off the ground if I spent the night sleeping there.) I usually take bottles of water, protein bars, a cell phone with charger, and a Leatherman tool.

If I were to make any more long cross-country flights, I have a small water purification kit that I would carry. Have required medications along. A small tent would be helpful in protecting a person from weather. A brightly colored tent would be more visible. If you can afford the weight a small hatchet or bush knife would be useful. Aircraft with ADSB would be easier to locate than those without. A.....

personal locator beacon (PLB) or a Satellite Messenger can be carried to help direct rescuers. Neither of these options is cheap, but can be a life-saver if needed. I would seriously consider putting together a survival vest to wear, which would have pockets to hold the most critical necessities. Sometimes what you wear is all that you have following an emergency landing.

Survival gear is always limited by the weight. A person could load enough gear in a small airplane to survive Armageddon, but you could not get off the runway. So it is incumbent to pare down what is really needed to survive as opposed to everything that would be nice to have in the event of a problem.

A survival kit need not be expensive or large, but having a basic one can help save lives in the event of an unexpected emergency landing.



Examples of a Satellite Messenger and a Personal Locator Beacon.



Example of a compact commercial survival kit.



## Turning final on Runway 32 at 4S9, Mulino Oregon

By. Mike Harfst

I mounted a still/video camera on my right horizontal stabilizer wingtip about 15 years ago. It finally died about 5 years ago, but only after providing volumes of flight videos and still pictures. It provided a perspective that I don't often see in externally mounted camera pictures and videos. I could see ground views, my aileron movement, flap timing, coordination, runway alignment on rollout and touchdown dynamics. Sometimes everything clicks and great weather coincides with an "on the money" alignment on rollout to final, resulting in an excellent picture.



# Women with Wings

## AVIATION'S FIRST LAD

JACQUELINE COCHRAN HAS BEEN MENTIONED IN CONNECTION WITH HER ACTIVITIES IN THE "PILOTS TO BRITAIN" AND WASP'S DURING WORLD WAR II. ACTUALLY SHE HAS BEEN A PILOT SINCE 1932, AND HAS THE DISTINCTION OF HAVING ESTABLISHED MORE WORLD RECORDS THAN ANY OTHER PILOT IN THE WORLD. HER RECORD-BREAKING STARTED IN 1937, WHEN SHE ESTABLISHED WORLD SPEED RECORDS USING A SEVERSKY MONO-PLANE.

IN 1938, SHE WON THE BENDIX RACE AND IN THE COURSE OF THE SAME FLIGHT MADE A NEW TRANSCONTINENTAL SPEED RECORD FOR WOMEN. AFTER WORLD WAR II, IN 1961 SHE FLEW A NORTHROP T-38 JET FIGHTER TO BREAK EVERY SPEED, ALTITUDE AND DISTANCE RECORD FOR WOMEN. IN 1962 SHE TOOK A LOCKHEED JETSTAR ON A TOUR OF THE UNITED STATES AND EUROPE, ESTABLISHING OVER 30 SPEED RECORDS IN THE TRANSPORT CATEGORY BETWEEN CITIES ALL OVER THE WESTERN HEMISPHERE.

IN 1963, SHE FLEW A LOCKHEED F-104G FIGHTER TO A NEW WORLD'S SPEED RECORD FOR WOMEN AND IN 1964 SHE FLEW A SIMILIAR PLANE TO THE PRESENT WOMEN'S RECORD OF 1429,346 MPH. AT THE PRESENT TIME, JACKIE IS THE MOST FAMOUS AND ENTHUSIASTIC BOOSTER FOR THE ROLE OF WOMEN IN THE AIR. SHE FLIES HER OWN PLANE, WHICH SHE USES IN THE PROMOTION OF HER MANY INTERESTS, AND ADDS GLAMOR AND CHARM TO THE CAUSE OF WOMEN PILOTS WHEREEVER SHE APPEARS.

AT THE PRESENT TIME WOMEN WHO FLEW IN THE 1930'S STILL MAINTAIN THEIR PROMINENCE IN THE AVIATION PICTURE. EDNA GARDNER WHYTE, NOW A GRANDMOTHER, WHO WAS WINNING RACES BACK IN 1934, IS STILL RACING AND WINNING, PROVING THAT SUCCESS IN THIS EXCITING SPORT IS NOT DIMINISHED OVER THE YEARS. HER LATEST TRIUMPH WAS AT THE 1967 CLEVELAND AIR RACES WHERE SHE FLEW HOME WITH FIRST PRIZE.

SUBMITTED BY

Downwind Lenny

### Chapter 902 Future Events:

April 10: Ron Coleman Speaker

May 8: Jim Ott Speaker



YE Events (Mulino):

May 18

June 15

July 13

August 24

September 14

Fly/Camp Out:

Nehalem Bay– June 29-30

Oshkosh– July 22-28

Fun Fly Valley View– Aug 3



Chapter BBQ—May 8, 2024

6:30 pm

Monthly meeting to follow @

7:00 pm



### Bottle Drop: The Good, The Bad and The Ugly

I just wanted to remind everyone about the Bottle Drop and how it helps the Chapter. This program has been a great success for us. The money it brings in is the reason our dues have not had to increase over the last several years. Please keep up the donations.

That being said, in the past, I have gotten a couple of, not so subtle, reminders that not all of our bags have the appropriate containers in them. Last month, I collected bags out of the garage and did open one that looked pretty nasty. There were a couple of moldy coffee cream containers and others ( see picture) that did not belong in the blue bag.



So please watch what you put into the blue bags. Only Oregon bottles and cans that you paid a deposit on at the store. We don't want to lose this revenue.

Steve Miller



EAA National has suggested chapters sponsor a youth RC aircraft build and fly event to promote aviation in interested youth participants. Your member thoughts?

### The Contents

- Custom Old School Model Works Fifty-Six model airplane kit
  - Motor/Servos/Speed Controller
  - Handheld Transceiver
  - All finishing components
  - Tools and consumables
- RealFlight RC Simulator
  - Software and Handheld
- Vapor Ready-to-Fly Airplane



[EAA.org/YEBuildandFly](https://EAA.org/YEBuildandFly)

### Chapter Flyouts.

Link at: <https://chapters.eaa.org/ea902/yearly-fly-outs>

### Next Board of Directors Meeting

- The board will meet next on may,8th 5:30 pm

### Next General Meeting Chapter 902

- **Wednesday April,10 2024 7pm**

