



Squawk 902



Vol. 37 Issue 1

<https://chapters.eaa.org/ea902> January, 2024



What's Inside:

President's Message	2
Show me the Money	3
Meeting Minutes	4

Board Meeting Minutes	5
Woman with wing	6
EAA 902 Articles	7,8,9



President's Message
EAA 902
January 2024

Welcome to 2024! With the New Year upon us and some movements in chapter leadership positions I want to reiterate the challenge the Larry put forth last year. Namely, this chapter does not belong to the officers or board members; it belongs to all of the members. As such, it is imperative that members voice what they would like to experience, learn or contribute in the coming year. As President, I could fill our meeting agendas with a host of stories or videos from my blessed Air Force and airline experiences. I doubt that the membership would find that beneficial month after month. Because of that I will be requesting each member to list presentations, tech tips and/or discussion topics that they feel will benefit everyone at our meeting on 10 Jan 2024. The goal of meetings should be to strengthen our bonding as experimental pilots and enhance flight safety. Please give your ideas some serious thought and expect to write them on index cards during the above meeting.

One of the things I will be leading at most meetings is the discussion on EAA National's VMC Question of the Month and VMC mishap/accident scenarios. These scenarios generally have a short video to watch that will layout the conditions up to the event at which time a pause is taken to discuss the "What would you have done" or "What can be learned" from the event. I have advised National that we are only interested in the VMC scenarios as there are few instrument rated members in the chapter.

I would like everyone who comes to January's meeting to find and dust off their first logbook (hopefully the one that lists your solo and certificate check ride) and bring it to the meeting. It should be interesting to ask a few audience questions and see who gets awarded a Joe's donut. Also, please have available your total time in all aircraft as it might be fun to discover who the time hogs might be.

I will also make an effort to shame, coerce or embarrass members to author Newsletter articles because I know there is a wealth of flying experience in our chapter from which much can be learned. Put your thinking caps on and start considering what you may have to offer members in the world of aviation. Please!

Finally, I will be including event slides for two months forward of the current month's meeting so if you have something planned such as Fly Outs/Ins, pancake breakfasts, air shows and/or OPA information please email me such items to be placed on the calendar.

Keep the greasy side down...see you on 10 Jan 2024.

President,
Dave

EAA Chapter 902

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

President

David McGraw falcon16@rconnects.com 503-630-3510

Vice President

Larry Stevens PilotLarry1944@yahoo.com (503) 632-1944

Secretary

Philip Groelz pgroelz@yahoo.com (503)-266-5662

Treasurer

Steve Miller miller.sr@frontier.com (503) 758-4947

Board of Directors

Bob Armstrong armstrong@canby.com (503) 263-8853

Len Fierling fierles77@gmail.com (503) 630-7547

Pete Gauthier gauthier0421@msn.com 503-982-0421

Michael Harfst mdharfst@gmail.com 503-351-0481

Henry Pflegl hpflegl500@msn.com 503-680-5295

Dan Forney dforney@bctonline.com 503-632-8643

Newsletter Editor

Cody watkins codywatkins93@gmail.com (615) 906-1389

Webmaster

Cody Watkins Codywatkins93@gmail.com (615)906-1389

Young Eagles Coordinator

Christine Stevens 65skyhawk@gmail.com 503-362-1944

Technical Counselor

Phil Groelz pgroelz@yahoo.com (503) 266-5662

Show me the Money

November/December 2023

Chapter balance as of 10/31/2023 ----- \$7,572.95

General fund balance as of 10/31/2023 ---- \$3,839.15

Income ---- Donation from OPA ----- \$200.00

50/50 Raffle ----- \$47.00

Membership ----- \$35.00

Fred Meyer Rewards ----- \$32.20

Coffee/Pop ----- \$6.00

Expenses --- PGE----- \$109.75

Chapter renewal & Insurance \$647.00

Mulino Water ----- \$56.61

General fund balance as of 12/31/2023 ---- \$3,345.99

Young Eagle fund as of 10/31/2023 ----- \$2,061.10

Digital camera, Printer, Film and Ink -- -\$443.80

Young Eagle fund balance ----- \$1,617.30

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

Jackson ----- \$1,161.70

Chapter balance as of 12/31/2023 ----- \$6,600.99



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

David McGraw is Chapter President and you can reach him at (503) 630-3510

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 you right. **13801 S. Darnell Rd.**

Chapter Meeting: Next meeting on the 10th At 7pm

Dues are Due



Remember that 2022 dues are due before March 31st so that we can have an up to date roster on our website. Please fill out your roster information and make sure it's legible.

Dues are \$35.00 for the year.

Make out checks to: Mt Hood Chapter 902

Cover: Photo

Mt. Hood Chapter 902 Experimental Aircraft
Association

n/a

Mt. Hood Chapter 902 Experimental Aircraft
Association

n/a

WOMAN WITH WINGS

The 99's

Amelia was one of the founders of the 99's and the first president. This has become the most famous organization of women pilots in the world. Named for the number of charter members, it has grown to become international in scope with members in Europe, Australia, Canada, Mexico and South America as well as the United States. The 99's have always been in the forefront of women's activities in aviation. They have established the Amelia Earhart Scholarship Fund in honor of their first president, and have promoted many other activities to further the interests of women in aviation. Many of the charter members are still active pilots. These include such names as Blanche Notes, who after a long career in air racing become head of the air marking operations of the Department of Air Commerce; Viola Gentry, who after a career of record making has recently been named consultant to the University of Texas "History of Aviation" library collection; Melba Beard who is active in the Arizona area, and has antique aircraft as a hobby; Teddy Kenyon, who flew fighters as a test pilot during WW2; Betty Gilles, who is extremely active in the Powder Puff Derby, the annual women's race from coast to coast; Louise Thaden, who although retired from racing still flies her own plane for pleasure; and several others, who although less famous are still devoted to the cause of women in aviation. At least two of the charter members are Caterpillar Club members — — those who saved their lives by parachuting from disabled craft. Fay Gillis escaped death in this manner in 1929 and Mildred Kaufman had a similar experience in 1930.

Submitted by;
Downwind Lenny

Are You Using the Codes on Your Canopy?

When I first started flying the F-4 Phantom and then subsequently the F-5 Freedom Fighter one of the first things a young lieutenant learns is how to find bogies and bandits called out for you by GCI (Ground Controlled Intercept) controllers. There were few digital watches back then so we became very proficient in using GCI information inside the cockpit to gain a "Tally Ho" as quickly as possible. A transmission from GCI usually sounded like this: "Mig 01 you have bandits at 1:00 o'clock, 15 miles, angels 17 headed southwest; flight of two". Updates would be provided until you responded with a "Mig 01 is tally two, engaged" (meaning you see the bandits and it's time to open up a can of "whoop ass"). Yes, there were times when GCI would transmit "You're merged" (meaning his radar returns have merged together) and I was still "blind" (No joy on bandits!) This is when you start sucking the seat cushion up your behind because the bandits are most likely rolling in behind you with missiles or guns blazing! Not good!

What does all this have to do with a bunch of Experimental aircraft pilots who tend to be weekend warriors or perhaps request flight following from ATC enroute to AirVenture or Seaside for a \$100 hamburger? Many Experimental aircraft today have a transponder and while flying for Horizon Air I've heard hundreds request flight following on an ATC frequency. After radar contact is established, ATC will provide information, and often separation from, other aircraft in their sector and along your route of flight. It's entirely reasonable to receive a call from ATC such as: "Experimental 521DM traffic 10 o'clock, ten miles at 8,000 feet crossing left to right is a Duchess enroute to Salem". So where exactly do you slew your eyes? How many of us know exactly where the clock positions are as we sit in our aircraft? Most Experimental aircraft seats are bolted to a specific position on the floor and only the rudder pedals are adjustable. This means 10 o'clock should always be the same place relative to our airplane and we should know where these clock positions are on the canopy bow, glare shield or windscreens. Do you actually know where the "hour hand" relates to your environment? We should. Now wait just a minute Sky King...

Let's be reminded of some things that can make a traffic call by ATC good, but not great information. First, most ATC controllers are working with a radar sweep that takes 12 seconds to update. In essence, they are really advising you where they last saw a squawk or raw radar return not where it might actually be. In close-in situations, like airliners in a descent or F-15s

blasting out of Klamath Falls, the closure rates may be significant. Next, you may be following a line on your map, Dynon or Garmin display and the nose of your airplane might be 15-20 degrees crabbed into the wind which can alter that clock position a lot. My personal best was 22 degrees from Glacier Park to Seattle years ago. The jet stream was unreal and the fuel burn was insane during this particular winter flight. In an Experimental scenario this could make 10 o'clock look more like 11 o'clock in a left crab. ATC only knows your flight path; they don't really adjust for crab angles. Consider the pilot who receives a traffic callout and then leans way forward over the instrument panel to find the culprit. Just be advised, any clock position reference you may be familiar with has just changed in a major way. In the airline business, most pilots try to adjust their seats so as to be sitting at "design eye" heights and positions. I have debriefed numerous First Officers that the habit of sliding the seat all the way aft and reclining the back rest into the circuit breaker panel when the autopilot is engaged is not the best of habits. This often leads to them asking "How is it that you always pick up traffic so quickly?" To which I reply that "it takes an incredible amount of talent...which you don't have!" (Joke)

Where should pilots be looking vertically? This is where many pilots look in the wrong place. While I don't calculate Angle of Elevation during a traffic scenario, I've watched many a young aviator look totally in the wrong place vertically. Here are a few actual calculations to make my point:

Distance	Height Above	Angle of Elev
10	1000'	1.08°
10	5000'	5.5°
5	1000'	2.2°
5	5000'	10.7°
1	1000'	11.0°

Note that if the traffic is within a couple of thousand feet of your altitude at 10 miles you should be essentially looking level. I tend to focus on the 1000' above me situation where I would look "level" at 10 miles, just above the horizon at 5 miles and 11° approaching the merge. Obviously if the traffic is below me I would use negative angles.

Numerous studies have been conducted by the military on improving seeing aircraft in both combat and "see and avoid" scenarios. It's interesting to note that when you move your eyes from one piece of sky to another, it takes 4-6 seconds for focal lengths to adjust and for the pupil to handle various changes in light intensity. So we should look...pause...look...pause, etc.

Finally, multi-function displays (MFD) offer good information on traffic should the correct components be installed. But I have also observed that focusing excessively on the MFD, TCAS or ADSB information can hinder acquisition of a "threat" aircraft. If you bury your head in the MFD watching an electronic traffic display then your eyes and attention are in the wrong place. Bring your attention outside the aircraft starting at 12 o'clock level, high, then low and expand from there. I will close with a real "there I was" story.

On a clear, smooth fall day climbing out of KBOI passing 7500' enroute to KPDX in a Q400 Dash 8 a mid-air collision was narrowly avoided. It was my FO's leg and he was the pilot flying. He had engaged the autopilot leaving 1000' and all was normal. ATC assigned us a higher altitude and as I reached up to set 12,000' in the alerter my head moved just enough to see a Piper Cub that had been hidden behind the rail that divides the front window from the side window less than 500' away and on a perfect collision course with our aircraft. I simultaneously told the FO "My airplane", hit the autopilot disconnect button and "zoomed" the aircraft above and over the Cub. Once things returned to normal ATC wanted to know the N-number (YGBSM!), the closest distance between the aircraft and heading of the Cub (looked like he might have been heading to the McCall area). They radioed that they had no IFF or raw radar return on the Cub and that he was legal to be where he was. They wanted any additional information and I told them "The pilot was wearing a blue shirt and wearing Buford T Pusser reflecto sunglasses". Chuckles over the frequency. But at cruise altitude I discussed the situation with my FO and asked what were you doing when I took the aircraft? He explained he was "playing" with the FMS! I explained that making sure the nose of the aircraft is clear of traffic is both of our responsibilities and from his seat, the Cub should have been seen much sooner. So lesson learned for all with FMS capabilities: When you're flying at altitudes where most GA airplanes fly keep your focus and eyes outside as much as possible. Play with the FMS at altitude or in the hangar on battery power!

In the fighter business a common quote is "check six". In our world of Experimental aviation I'm thinking "check twelve" might be of more importance.

Dave

Chapter Flyouts.

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

Next Board of Directors Meeting

- The board will meet next on January,17, 2024 7pm

Next General Meeting Chapter 902

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

