

The **W**ingman

EAA Chapter 495 - Roseburg, Oregon

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Around the Patch

by Joe Messinger
Newsletter Editor

Come join in on the fun of Freedom Flight this New Year's Day. We will be meeting for breakfast at Elmer's Restaurant, 1400 Mulholland Drive (at Garden Valley Blvd.) in Roseburg. Breakfast starts at 8:00 am and at 10:00 am we will go to Roseburg Airport and, weather permitting, exercise our freedom to fly in this country. As of this writing, the weather gusser is predicting a day of sunshine between the raindrops. Rhonda and Dan Sprague announced they will be joining us for Freedom Flight but they will be a little south of the rest of us, in Arizona where they are snow birding.

We kicked off the 2022 holiday season with our annual Christmas party at the Church on the Rise on Diamond Lake Blvd. Chef Ken once again did a masterful job preparing the main course of barbecued tri-tip roast with parmesan red potatoes. The remainder of the meal was provided by the members cooking various veggies, sweet potatoes, a dish consisting of mushrooms and onions, a selection of salads and marvelous desserts. Live music was provided by Coleen (guitar and vocals) and John (harmonica) Roberts. Everybody who brought a gift for the exchange got to select a present from under the tree. The officers were announced and if you saw last year's list you knew who the 2023 officers are (hint: look at the bottom of this page.) Certificates and pins, recognizing the folks who help keep the chapter running were passed out and the "MVP" for the chapter, Ester Nicholls, was recognized for her hard work helping Ken prepare our monthly dinners.

16th Annual Freedom Flight this Sunday



China, Russia, Cuba, and Saudi Arabia, are just a few of the places around the world where you can't get in your airplane and take off to enjoy the exhilaration of watching the countryside pass below your wings. You would need a flight plan, which needs to be filed days, and maybe weeks in advance. You would need a purpose for the flight and it might or might not be approved. So, stop and consider just how lucky you are to be living in the land of the free. You have the freedom to fly almost anytime and anyplace you desire. Oh, of course there are some restrictions as to where you can fly such as over large public gatherings, military bases, government buildings, congested airspace, and a few other places. But, most likely you would just fly around the restricted airspace and be on your merry way.

Restrictions on our flying aren't made lightly. We have watchdog agencies such as the Experimental Aircraft Association (EAA) and the Aircraft Owners and Pilots Association (AOPA) keeping an eye on things. Most of the recent restrictions are common sense rules put in place following the attack on our country on September 11, 2001. The late Paul Schafer, a Marine returned to civilian life, who passed away a couple summers ago of an undiagnosed heart condition, decided one day that a celebration of our privilege to fly in this country was in order. He selected January 1 as the reoccurring date and a local tradition was born. Each year pilots gather at a local restaurant for breakfast and then retire to Roseburg Regional Airport to enjoy a day of flying. On the occasions that the weather gods have frowned on us, pilots gather in various hangars for more coffee and copious amounts of hangar flying. On other days the weather is cooperative and gallon after gallon of 100LL is burnt. Paul would brag that never a year had gone by without at least one intrepid aviator taking to the sky, even if it was just a scud run around the pattern.

Chapter Officers

Dennis Rose, President: 831-331-6517 • John Roberts, Vice President: 541-580-3860

Mark Ralston, Treasurer: 562-673-8499 • Benjamin Brewster, Secretary & Webmaster: 541-231-8456

George Dorius, Board Member at Large: 541-513-4579 • Ken Nicholls, Board Member at Large & Master Chef: 541-496-0808

Joe Messinger, Board Member at Large & Newsletter Editor: 909-851-3802

EAA Chapter 495 Christmas Blast



Top to bottom, left to right: Kevin and John don't talk, they just text. Girls give the cameraman the stink-eye. Only Dennis would wear that tie. Ester counts her fingers for Martha. The whole group is gathered.

Dennis, Mark, Steve and George do some serious hanger flying. John and Coleen play some favorites. Chef Ken checks the Tri Tip on the grill. Photos by Bonnie Rose and Joe Messinger. More photos on the next page.



Ester supervises, Ken slices and dices while Kevin waits. Mark and Dorothy get the serving line ready for the hungry pilots and friends. The gang descends on all the goodies. Another view of the meat slicing operation. Steve and others have theirs while Kevin ponders the situation. What's going on, Kevin?

OXYGEN FOR YOUR AIRPLANE. JUST IN CASE IT'S NEEDED!

There's a new "aviation" product on the market and it's not just for pilots. Being a guy that sometimes gets short of breath I've been considering getting a portable oxygen source to carry in my airplane. I usually don't have trouble breathing except when I've overtaxed myself, climbing stairs, walking a longer than usual distance and the like. But now my situation has been addressed by a company called BOOST+. They have come out with a new product, canned oxygen. It's billed as "95% Pure Aviators Breathing Oxygen. A 10 liter can will run you in the neighborhood on \$17.00 depending on your source. I have seen it on sale at Fred Meyer and Walgreens. I understand you can get it at Amazon, CVS, and Walmart, just to name a few. This will become popular with runners and other athletes such as skiers and football players.. You can also order it from Aircraft Spruce and pilot's stores will probably start carrying it.



Rose GlaStar December 2022 Build Report

This month has nothing to do with the wings!

The first half of the month was spent fabricating and installing the fuselage fuel tubing lines. The original GlaStar fuel feed design was as simple they could make it, consisting of a common feed line from both wing tanks and a simple on/off valve, minimizing pilot workload. Though simple, drawbacks included uneven tank feed and fuel loss in uncoordinated flight, when turning during taxi or when parked on a slope. I prefer the two individual tank feed system. The advantages are being able to balance a heavy sided plane by using fuel from the heavy side and in a low fuel situation, being able to drain all the fuel from one tank and then switching the other tank with all your remaining fuel.

In addition, the ULPower engine is fuel injected, needing a return fuel line to each tank for the excess pumped fuel. So my plumbing task went from running one line to a valve with one line to the engine to a total of six lines to the valve: four lines (a feed and return for each wing) to a valve and two (a feed and a return) lines to the engine. Instead of a simple on/off valve, my installation has a right/left/both "duplex" valve that returns fuel to the same tank that is feeding the fuel.



FUEL LINE DRAIN



LEFT SIDE FUEL LINES



CENTER FUEL LINES

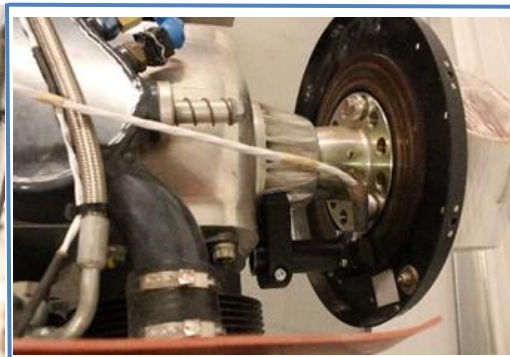
There was not room for all the fuel lines down the center fuselage as per plans so mine are routed along both the right and left sides, between the fuselage cage tubing and fiberglass walls and then to the lower center instrument panel where the duplex valve is located. To be seen is if this conflicts with the door and seatbelt installation.



DUPLEX FUEL VALVE FRONT



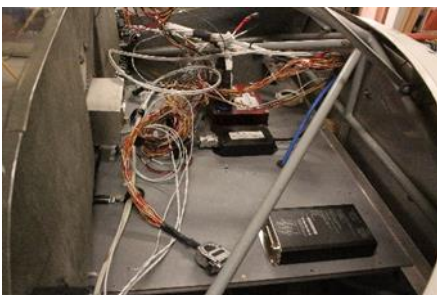
VALVE BACK



ELECTRIC PROPELLER PITCH CONTROL

The second half of the month was centered on the instrument panel

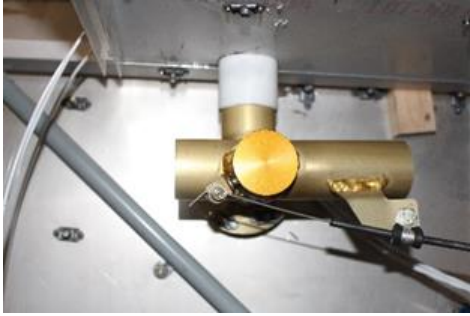
installation. Of course, this started in the engine compartment? I had to re-route some sensor lines to make room for the electric speed sensor unit at the propeller whose wires are fed through the firewall to



MGL COM RADIO

My com radio is a remote mount MGL V16 unit that is installed on the electronics shelf with the radio control head mounted on the instrument panel.

After the instrument panel was bolted to the frame, the throttle control, parking brake, and cabin heat/defrost cable controls were installed. The cabin heat/defrost valve installation was completed and the fresh and heated air hoses installed in the engine compartment.



HEAT/DEFROST VALVE



HEAT/DEFROST AIR HOSES



THROTTLE, PROP, HEAT, FUEL

Then it was on to wires. Hooked up the fuel flow, rpm, amp, power and ground wires to the Engine Information System (EIS) monitor. Installed USB outlets on the panel and ran wires. Hooked up wires from the battery area to the fuse box to the main and avionics bus bars, auxiliary fuel pump relays and engine controls. I also made some Plexiglas protective covers for the energized bus bars.



WIRES EVERY WHERE



BRAKE, USB, ENGINE SWITCHES



ENGINE BUS BAR COVER

The last system worked on before Christmas break was the com radio/intercom system. Headset jacks were located near the lower center of the instrument panel with control wires going to the stick grips, etc.

Next month continues with the instrument panel including the Grand Rapids Technology 10.2 inch EFIS, iPad mount, multi-button stick grips and lots more wires.

Freedom Flights Past



Homebuilders Week – Online Event Starts January 23

An online opportunity to learn about all aspects of building your own aircraft

By Charlie Becker, EAA Homebuilt Community Manager

EAA will be hosting our third annual Homebuilders Week online learning event for aircraft builders: (www.EAA.org/HomebuildersWeek). It will be five straight days of educational forums covering a broad spectrum of aircraft building topics. It will start on Monday, January 23, 2023, and run until Friday, January 27, 2023. The live online presentations will be open to everyone interested in building their own aircraft. Sessions will start at 11:30 a.m. CST and run until 8:30 p.m. CST daily. This event is an opportunity for a new person to jump in with both feet and learn a lot about the wonderful world of homebuilding. We will cover areas like getting started successfully and techniques when building with sheet metal, composites, steel, and wood. But it won't be just for the newbie; we are offering in-depth talks on panel planning, engine selection, FAA certification, flight testing, and selling a homebuilt aircraft. There will be something for every builder, whether you are just starting out, knee deep in a project, or just received your airworthiness certificate — it is going to be a great learning opportunity.

EAA is working with industry experts, kit manufacturers, and other subject matter experts to provide top-notch material for builders. The sessions will be live and allow time for attendee questions. Recordings will be archived and available to EAA members for review.

EAA Homebuilders Week coincides with the 70th anniversary of the founding of the Experimental Aircraft Association in 1953. Those founding members of EAA lit the fuse on the homebuilt movement that provides affordable access to aircraft ownership and today has spread worldwide.

EAA Homebuilders Week is possible through the generous sponsorships of Aircraft Spruce & Specialty Co., Dynon, Scheme Designers, Inc., and Van's Aircraft, Inc.

Visit EAA.org/HomebuildersWeek to review the schedule and sign up for a session.

CST	Monday 1/23/2023	Tuesday 1/24/2023	Wednesday 1/25/2023	Thursday 1/26/2023	Friday 1/27/2023
11:30-12:45	Building an Aircraft: What You Need to Know- Charlie Becker	Composite Construction Basics- Mark Forss	Top Five Project Killers- Lisa Turner	EAA's Homebuilt Movement: Past Accomplishments and Future Opportunities -Jack Pelton & Charlie Becker	Amatuer Built Aircraft Certification Process-Joe Norris
1:00-2:15	Wiring Basics - Dick Koehler	Buying a Used Homebuilt- Vic Syracuse	Flight Testing Basics-Gary Baker	Lycoming Engine Installation - Dave Prizio	Working with Wood 101- John Egan
2:30-3:45	TIG Welding-Charlie Becker & Earl Luce	The REAL Culprit in HB Accidents- Ron Wanttaja	Zenith Aircraft Kits & Plans- Sebastien Heintz	Panel Planning-Stein Bruch	Advocacy Update: MOSAIC, Fuels & More - Tom Charpentier & Rob Hackman
4:00-5:15	Sonex Aircraft & AeroConversions Products- Mark Schaible	Fabric Covering Basics - Mark Forss	Advanced Flight Systems- Rob Hickman	Garmin Experimental Avionics Solutions- Brad Brensing	Plans Built Aircraft: The Affordable Option-Tim Hoversten
5:30-6:45	Sheet Metal Basics - Mark Forss	Dynon Avionics-Michael Schofield	Gas Welding -Budd Davisson	Choosing Wheels & Brakes- George Happ	Van's New High-Wing RV-15-Greg Hughes
7:00-8:15	Kit Selection - Paul Dye	Van's RV Aircraft Kits-Greg Hughes	Finding an Engine for Your Homebuilt-Mike Busch	Painting Your Plane: DIY or Use an Expert?-Craig Barnett & Ken Reese	Maintenance Horror Stories - Vic Syracuse

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