

The W wingman

EAA Chapter 495 - Roseburg, Oregon

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Around the Patch:

by Joe Messinger
Newsletter Editor/Webmaster

Our latest meeting was a hum dinger. Too bad if you missed it since we started off with some of Mark Ralston's hand-made pizza using the special pizza flour he imports from Italy. Our meeting room was also filled with airplanes, even a Lockheed P-38. Oh well, they were models but they were airplanes and some were real beauties. All but one were control line (the kind that go around in a circle) and the odd one was a radio control float plane, which could be flown from water. The group, gathered by Chris Nicholls, son of Ken, was accompanied by Bob Lewis and Dave Shrum calling themselves, "The Not a Club Fliers." Works for me. They invited us to come out and take a look at their flying some Friday or Saturday at the Church on the Rise where we have our meetings. They also mentioned the Control Line Championships, which will be returning to Roseburg Airport on Memorial Day weekend and the annual Plat I Float Fly at the Plat I reservoir (in Sutherland about 5 miles east of I 5), on Father's Day weekend. This event is sponsored by the Umpqua Valley Modelers and is radio control models flying off the water.

Now that we have you caught up on the little airplanes, let's get to the bigger stuff. President, Dennis Rose had a call from a parent inquiring about Young Eagle flights and Kevin Bruton stepped up and said he'd make sure these kids got a ride. If you know Kevin, you know he doesn't need much of an excuse to go flying. And, while we're on the subject of Young Eagles, the national Young Eagle day is June 11 this year and members of the chapter would like to participate. Just one hitch. We need a Young Eagle coordinator. Dennis is looking for a volunteer so if you're looking for a job, here it is. The first year may be a little hectic but after that it should go pretty smoothly. It's just like learning to fly at first you're sure you'll never get the hang of it until you do.

This month's speaker will be a new member, Dennis O' Connor who is building a Bearhawk. This is a high wing kit plane that comes in three versions, four place, two place and light sport. You can put little wheels on it for operating off of paved runways or big wheels for back country flying. It can be set up as a STOL aircraft or put on floats for operating off water or skis for snow. It sounds like a pretty versatile little bird and Dennis will be talking about his adventures building the beast.

Treasurer Mark Ralston reports no nibbles yet on the Continental A-50 and accessories so it may go back into storage for a while until somebody has a need for such an engine if it doesn't sell this time around. Kevin Bruton reported that Tyree Oil is changing over to Mobile Oil and they don't make oil for aviation applications. We'll let everybody know if we run across a source for discounted oil in the future. He also said that as soon as Paul Schafer's daughter gets the paperwork on Paul's Piper Vagabond in order, it will go on the market and we will no doubt have a heads up before that happens. It sure would be nice to see that airplane stay in the chapter.

Myrtle Creek Airport will be hosting a Fly-in and Pig Roast BBQ on Saturday, May 7, 2022 from 11:00 AM to 4:00 PM. The cost is only \$10.00 per person (Cash Only, Please). There will be a Beer Garden by Taphouse, featuring local breweries. Fly or drive-in to the airport. Take I-5 to exit 106 and follow the signs to the airport. Myrtle Creek Airport wishes to thank the following for the generous donations: Myrtle Creek Tri-City Area Chamber of Commerce, Grocery Outlet, and Ray's Food Place. Sounds like fun and don't forget your designated pilot.

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Veterans Formation Fly-By for Parade

We got an email from Steve Kame about The Roseburg Veterans Day committee who have contacted him about having some of our local pilots do a formation flight for a flyover during the Veterans Day parade. He talked to his contact person and explained that it isn't a quick and easy thing to do as he will have to coordinate with the Oregon Air Guard, Reach Air Ambulance, and the FAA through McMinnville. That's the easy part. The hard part will be to sign up enough pilots to commit not only to fly that particular day, (IF we have a good VFR day to do it) but also to commit to structured practice in the weeks leading up to the actual event. We don't want to look like a bunch of yahoos in a big gaggle. Steve has gotten some printed material and talked to Mike Danielle and Rob Levin about the best and above all, safest, way to go about this project and it seems it is a doable thing.

Steve is looking for folks from the pilot community to help with this project. He goes on to say, "This should be an enjoyable, fun way to show our pride and professionalism with our aircraft to the local citizens. Nothing great is simple and easy. This project will require a commitment of pilot time, aircraft, and avgas. There will be a few mandatory meetings, and as it gets closer to Veterans Day, some mandatory event practices." Steve hopes to keep the speed down to 90 MPH, so slower aircraft can participate. More details will be given out at the EAA Chapter 495 meeting on May 17th. Participants and their aircraft must have a current medical, license, registration, insurance, etc. etc. **Participants do not have to be members of EAA as this is a Veterans Day Parade Committee function.** For more information contact Steve Kame (541) 672-8437 (H).



Oregon Aviators 2022 Scavenger Hunt Coming Up

Rhonda Sprague has been all over Facebook promoting the Oregon Aviators 2022 Scavenger Hunt. The event covers the entire state of Oregon and is open to all group members. If you aren't a member yet, contact Rhonda through Facebook. In order to participate, you must register prior to July 1, 2022 with exceptions made for new members of Oregon Aviators. You will need to pay the entrance fee. Since the announcement doesn't say, we don't know what the entrance fee is. You will be asked to take photos of items on the list provided by the committee. All photos must be taken between May 1 and August 31, 2022. You will be asked to create a photo album of all the photos you have taken. You will paste all "items" as photos in your album, which must be "public" to Oregon Aviators.

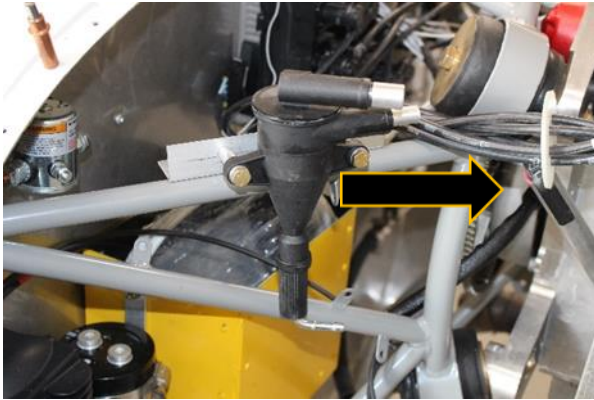
Each photo must have a caption that includes the item number you are submitting for that photo to count toward your score. The last date to submit entries is AUGUST 31, 2022 - 10 PM!! (no exceptions) Monthly leader announcements will be posted. Here are some of the 100 categories: Land at 15 different airstrips in Oregon prior to Sept 1, 2022. Land at S05 and take a selfie with Megan Flanagan's inside her hangar "Eagles Nest" (½ points for photo of hangar from outside), land in all adjoining states: WA, ID & CA, Airmail Arrows*, Abandoned Airfields*, Find "OREGON" written somewhere you can read from the air*, Fly a "Young Eagle" not related to you*, Attend an airshow and get selfie with pilot (performing in the airshow), Airport Mural, Join with other Oregon Aviators to share a \$100 Hamburger (must have 2 Aviators from different home airports) (Any meal is acceptable), Balloon aircraft in flight, Aviation License plate and/or holder, Formation flight (2x points if you are part of the formation), Roof Painting*, Airport Pet other than Dog or cat, Attend an aviation Fly-in, Seminar, Social Event or EAA Meeting, Selfie with your current flight hours (nearest 25?)*, Cockpit selfie with friends*, Airplane sticker on any vehicle other than a plane, Cockpit selfie with family member, Firefighting Aircraft, Photo with the Airport 'bums' or 'coffee group', P-51 Mustang Aircraft, Cirrus Aircraft, Crater Lake*, Land on a grass/unpaved strip, Alvord Desert*, Night Flight Selfie or "panel" shot*, Coast Guard Aircraft, Dutch Bros' drink in flight* or building from air*, Smith Rock*, Haystack Rock*, Virgin Valley Hotsprings*, Aviation museum at airport, Another Oregon Aviation Member, Antique (before 1945) or Classic Aircraft (1946-1955) (2X points if it is in flight!), Fly to airport more than 50 nm from home Airport, Airport Dog/Cat, Fly to an airport in another state, Find a famous Aviator, Kids play area at airport, Windmill*, Corn Maze*, Airport with camping area* (2x points for actually camping there!), Light house*, Crop Circle*, Indian Mounds*, "Nose Reflection" Selfie. The * means the photo must have been taken from inside an airplane. In this case it might be a good idea to take a friend along. For more information contact Rhonda Sprague.

Rose GlaStar April 2022 Build Report

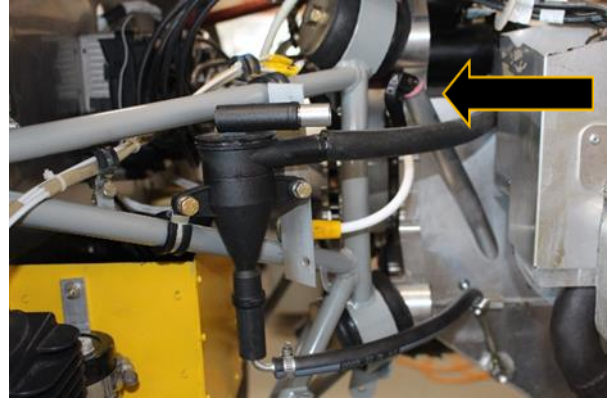
April certainly brought showers, including several inches of snow at my house, but also more building progress.

Last month, I installed the Glasair cabin heat/defrost valve onto the firewall. This month I continued with the piping of the defrost lines using plastic sink drain fittings from the local Home Depot Aircraft Supply store.

The ULPower engine provides for an oil breather oil separator which recovers oil droplets from the engine vent and returns them to the engine. This consists of a cyclone separator, hose from the engine, return hose to the engine and vapor exit hose. The separator has to go above the crankshaft elevation and hoses can't have any valleys that would collect oil. After lots of thought and trials, I designed a system using Adel clamps attached to the engine mount.



First Try



Second Try (note dip stick behind hose)

I then worked on the fuel system, starting with the installation of the Newton duplex left-right-both-off fuel valve with feed and return lines to each of the two main fuel tanks. Feed and return aluminum tubing ran to the firewall bulkhead fittings with a one-way check valve on the return line. Hoses included one from the bulkhead to the fuel coarse filters and pumps, one pressurized (43 psi) from the fine filter to the engine and a pressurized return line from the engine back to the firewall. I used Earl's Speed-Flex steel braided Teflon lined hoses (similar to Aeroquip 666 hose) and fittings with fire-sleeves. I also fabricated an assembly to attach to each hose to pressure test it with compressed air.



Duplex Fuel Valve



Fuel Lines



With Air Pressure Attachment

I riveted the stainless steel firewall to the fuselage. No turning back now.

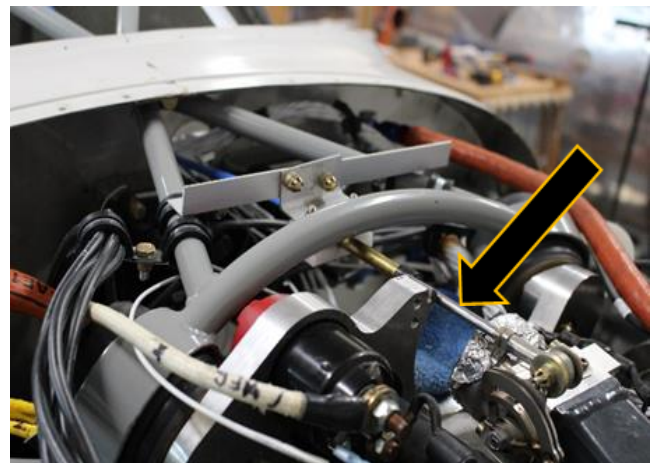
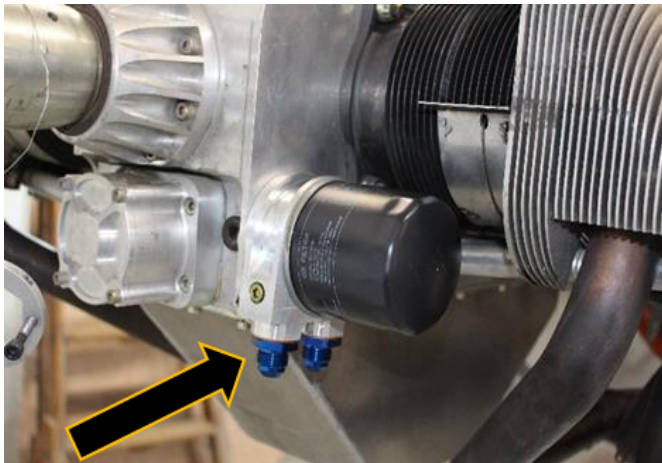
After trial fitting the engine cowling that came with the kit, I found that the engine prop extension that was on the engine is too long. The choices are to extend the front or back of the cowling or change the prop flange. Changing the prop flange is relatively easy by releasing and unscrewing a large internal nut (220 lbs. torque) and pulling it off of the splined drive shaft. The flange that came with the engine was the 90 cm one and I exchanged it for a 55 cm long one. The only complication was that the one listed in the Wicks parts catalog that I ordered is not the correct one for my prop. You have to call them to get the correct one.



I "switched" back to working on the instrument panel and installed seven toggle switches for various equipment and two more for the master electrical and master avionics systems on the left side. Then the two auxiliary fuel tank pump timer relays were installed in the center. These are programmable timers/on/off systems that will pump fuel from the left and right auxiliary fuel tanks to the main fuel tanks. Below them I cut in holes for the throttle control, prop pitch controller and cabin heat/defrost valve control. I finished this month's instrument panel work by installing a mini blade fuse/relay box and circuit breakers for it and the engine bus and the main power wiring.



While working on the wiring from the battery box, I noticed that you could not access the engine oil fill/dip stick tube because of the oil separator hoses and spark plug wire harness. So a day or two of rework hopefully fixed that problem.



Another small job was attaching the oil cooler bypass with vernatherm which is sandwiched between the engine case and oil filter. I still have to figure out the oil cooler placement.

The final challenge for the month was hooking up the throttle cable to the engine. After a couple of false starts, I think I have it working. There are no mixture or carb heat controls for the ULPower engine. For the throttle control, I used one from McFarlane that is a non-locking push/pull type with the ability to turn for fine control. I still have to get the cable routed to the panel, hopefully without redoing the connection.

I ordered a 10.1" GRT Horizon EFIS system with a Sun N Fun discount. 14 to 16 weeks for estimated delivery.

Plans for next month include cowl installation and/or wing aileron/flap cable routing and closing out the wings.

This is a continuing series our president, Dennis Rose has been contributing to each issue of the Wingman for several months. We wish to thank Dennis for taking time out of his building schedule to make this monthly contribution. In the next few months we expect to see more photos and comments. Needless to say we hope this will go a long way in helping Dennis with the FAA required documentation of his build. We invite your contributions in the form of flying adventures, repair tips etc.

This Month in Aviation History:

- 2 May 1952 (England/South Africa) -- The British Overseas Aircraft Corporation (BOAC), the national British carrier, first introduced a commercial jet airliner into service. The 36-seat Comet 1, built by De Havilland, flew for the first time on July 27, 1949 and BOAC inaugurated the world's first commercial jet service May 2, 1952. Initial flights took passengers from London to Johannesburg, South Africa, with stops in Rome, Beirut, Khartoum, (Sudan), Entebbe, (Kenya), and Livingstone, near Victoria Falls. At the time, the top cruising speed of the DC-3, was about 180 miles per hour. The Comet, could cruise comfortably at 480 miles per hour, making it a revolutionary leap in air travel. It was vibration-free and relatively quiet.



Unfortunately, the Comet was the victim of a number of tragic accidents, and BOAC suspended flights within two years. Engineers found that the planes suffered from metal fatigue, especially around rivet holes, due to the need to

repeatedly pressurize and depressurize the aircraft. In 1952, Pan American Airways had already put in an order for the new 76-seat Comet 3, but the crashes of the earlier Comet put the contract into doubt. By this time, American companies had begun their own programs to build jet airliners. Several factors, such as improved jet engines, now convinced these companies to reconsider their initial reluctance to build commercial jet planes

- 6 May 1937 (USA) — The Hindenburg disaster was an airship accident that occurred on May 6, 1937, at the Lakehurst Naval Air Station in New Jersey. The German passenger airship, LZ 129 *Hindenburg* caught fire and was destroyed during its attempt to dock with its mooring mast. The accident caused 35 fatalities (13 passengers and 22 crewmen) from the 97 people on board (36 passengers and 61 crewmen), and an additional fatality on the ground.

The disaster was the subject of [newsreel coverage](#), photographs and [Herbert Morrison's complete recorded radio report](#), (sound only) which runs approximately 39 minutes. [Another version with Morrison's commentary, and showing passengers aboard the ill-fated airship can be found here.](#) A variety of hypotheses have been put forward for both the cause of ignition and the initial fuel for the ensuing fire. The publicity shattered public confidence in the giant, passenger-carrying rigid airship and marked the abrupt end of the airship era. In researching this we found several videos of interest on this subject.



- 25 May 1927 (USA) — Outside loop demonstrated by Lt. James H. Doolittle. 25 May 1927: At Wright Field, now Wright-Patterson Air Force Base, Dayton, Ohio, First Lieutenant James H. "Jimmy" Doolittle, United States Army Air Corps, was the first pilot to successfully perform an outside loop.



Flying a Curtiss P-1B Hawk pursuit, out of Wright Field, now Wright-Patterson Air Force Base, near Dayton, Ohio Lt. James H. Doolittle, United States Army Air Corps, began the maneuver in level flight at 10,000 feet, then pushed the nose down into a dive. When he reached 280 miles per hour, Doolittle continued to pitch the nose "down" and the airplane flew through a complete vertical circle, with the pilot's head to the outside of the loop.



Jimmy Doolittle attempted to repeat the outside loop at the 1929 Cleveland National Air Races, with a Curtiss P-1C Hawk, serial number 29-227. The airplane's wings came off but Doolittle parachuted to safety. (The Curtiss P-1C used wing radiators instead of the large radiator under the nose of the P-1B. This substantially reduced the aerodynamic drag which allowed the airplane to accelerate to too high an airspeed during Doolittle's maneuver.)

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