



Valley Flyers

"Just Plane Fun!"

885 Lancaster Dr SE
Salem, OR 97317

October 2019



October Fly Out

On Saturday October 5th and we'll either fly north to Shelton (KSHN) for the Oyster Fest or south to have breakfast at Melita's Café next to the Chiloquin airport (2S7). Departure time TBD.

Member Accomplishments

Mikel Wynn

Mikel completed his instrument checkride with Lisa Dahl on September 24th! Congratulations Mikel! He did his training with Devin Burroughs out of Albany with Infinite Air Center. He flew their Piper Cherokee for the checkride.

Reno Air Races

We departed in 5ED on Wednesday morning and planned on a fuel stop in Klamath Falls (KLMT) enroute to Reno (KRNO). The morning was overcast so we departed IFR and after a climb through 4000' we broke out on top for the sunny flight southbound. KLMT was reporting VFR but there was a cloud layer right in our descent path to runway 14. The controller asked us to report the airport in sight, but that wasn't possible, so we requested a clearance for the RNAV 14 and that approach got us down to a point where we could see the airport and land. We took on fuel and switched pilots for the next leg to KRNO. An interesting site while we were getting fuel was the taxiing and departure of about eight F15's from the Kingsley Air Guard Base at KLMT.

The leg from KLMT to KRNO was via V452 and the IFR minimum enroute altitude (MEA) is 11000', and there is no radar coverage for most of the 182 nm flight so we elected to file a VFR flight plan so that someone would come searching for us if we encountered a problem and had to land in the Nevada desert. The other kink in the route to KRNO was the fact that there was a fire TFR adjacent to V452, the air race TFR just north west of KRNO, and another fire TFR north east of KRNO. About 30 miles from Reno, NorCal Approach was able to see us on Radar and asked us to join the runway 16R localizer into KRNO. Coincidentally the two TFRs are on opposite sides of the localizer so this flight path kept us out of restricted airspace. About 10 miles out we contacted Reno tower and they cleared us to land on 16R. Since this is a fairly busy commercial airport, listening to ATC for how they were spacing 5ED with 737's was entertaining. The 737 in trail to us, requested s-turns for spacing and was initially denied and told to either slow it down or execute a missed approach. Turned out fine for the 737 as they were granted s-turns and we kept 5ED blazing along until short final to help out with spacing. After taxiing to Atlantic Air, we unloaded, put in a fuel order for the return trip and boarded a shuttle to our hotel



Thursday morning, we headed over to Stead (KRTS) for a day at the air races. If you haven't been

Al Gray CFI
503.932.9374

Chris Eriksson CFII
847.345.5258

Todd Lindley CFI
425.681.9994

Joshua McKinney CFI
904.535.9624

Scott Bragg CFI
970.219.0661

Dennis Wyza CFII
503.428.7111

to Reno for the air races, there are static displays, merchandise vendors, and always some type of aircraft in the air throughout the day. They alternate all day between race heats and aerial performances. Some of the highlights of the day we're STOL drag races. This event pits two STOL aircraft head-to-head and they take off, land, come to a complete stop, pivot 180 degrees and do the same in the opposite direction. They are confined to specific landing spots and the race is timed. More info here: <http://www.stoldrag.com>



Another highlight was the Thunderbirds' arrival. They didn't perform their full show on Thursday, but still showed off their precision flying skills with some formation flying and high-speed passes. Then of course the 500 MPH jets and Mustangs:



After a day in the sun and lots of junk food, we headed back to the hotel for some rest for the return flight the next day. On Friday we arranged for the FBO shuttle to pick us up at the hotel and return to KRNO. After a pre-flight inspection we started up and got our VFR clearance for departing the KRNO class C airspace. After departure ATC gave us some vectors away from the KRNO 16R final approach course and we proceeded on course for our fuel stop at KMTM. After landing at Klamath Falls, we fueled up 5ED and grabbed some snacks from the vending machine for the flight to KSLE. The skies from Reno to Eugene were clear VFR, but north of Eugene the ceilings were MVFR to IFR. Our plan was to depart VFR from KMTM and pick up an IFR clearance around Eugene for the descent into KSLE. We contacted cascade approach over Creswell and negotiated a pop-up clearance direct to KSLE for the ILS 31. We encountered about 15-minutes of IMC conditions during the descent and vectors into Salem. All-in-all total Hobbs time for the round trip was 8.7 hours and 76 gallons of 100LL consumed.

What the P-Lead is going on here?

By Alan Lasneski

During engine runup, which we all do before takeoff as part of the runup check list, we check the mags. Something like 1700 RPM, two to the left, note RPM, two back to the right, one to the left, note RPM, and one back to the right. Sound vaguely familiar? It should, if it doesn't let one of the club instructors know. What you are doing is checking that both magnetos, those things that keep the engine running without any electricity (i.e. battery or alternator power) are working properly. The magneto's create ignition electricity, by spinning a magnet driven by the engine – hence the engine would continue run even with a dead battery and alternator.

So back to what the P-Lead is going on, what is a P-Lead? That is a wire (actually two, one for left, one for right) connected from the mags to the ignition switch you just switched above during the runup check list. This wire connects that magnetic generated electricity to the ground of the airplane. Electricity, including ignition electricity will always take the shortest path to ground, when the engine is running that path is through the spark plugs, but when you switch the ignition switch to full left that is connecting the mags directly to the engine block

itself (a much shorter path to ground than through the spark plugs).

Think of the ignition switch as a switch with three off positions. One off position is all the way to the left shorts both left and right P-Leads to the engine shorting out the circuit to the spark plugs, no energy at plugs, no spark, no engine running. The second off position is the left mag position, this shorts the right P-Lead so the right magneto ignition electricity goes directly to ground but the left one still goes to the spark plugs – hence a slight drop in RPM under a normal case. The third off position is the opposite of the second off position just mentioned above except the right mag keeps running, while the left mag is shorted to ground. By switching to both positions you are checking that indeed the P-Leads actually are connected to ground due to the observed RPM drop, if you did not observe a loss in RPM one would seriously consider one of the P-Leads is not shorting to ground as required. If this ever happens DO NOT touch the prop after shut down – one of the mags is probably HOT and even a short few degrees of the prop turning could start the engine.

It might be of interest to note that each left and right mag spark plug wires goes to opposite top/bottom of the opposing cylinders of the engine. I.e. the left mag spark plug wires goes to the bottom two cylinders of one side of the engine while the other two mag sparkplug wires of the top side of the cylinders on the opposite side of the engine. The best way to understand that is go look at an engine and trace the wires. Since I'm a self-professed engine type person, I have some personal theories why that is, reach out to me and I'll share them with you. Some have to do with fowled plugs, i.e. the rough engine run up at times.

Please always follow the POH for aircraft engine runup process, and if you are interested in more knowledge here are a few links:

- Lycoming Service instruction for performing Magneto Drop-Off check (i.e. Mag check) :
 - <https://www.lycoming.com/sites/default/files/Magneto Drop-Off.pdf>
- AOPA training:
 - <https://www.aopa.org/news-and-media/all-news/2002/january/flight-training-magazine/the-magneto-check>

Airport Debris

By Mikel Wynn

After finishing my instrument checkride, I had to take Infinite Air Center's Cherokee back to Albany. As I taxied the plane into the run-up pad by Runway 34, I noticed some debris, which turned out to be a fuel sump much like the ones found in the club's Piper Cherokee. I reported my finding to Salem Ground so someone could pick it up. That fuel sump probably ended up in the middle of the Runway 34 run-up pad because it went for a little ride on top of the wing during taxi after someone simply forgot about it and left it there before it ultimately fell off. Flying a low-wing airplane like the Piper Cherokee I was in made me realize how easy something like this could happen, especially when there's a tendency to rush pre-flight and there happens to be a tendency to use the wings of low-wing airplanes as makeshift tables where we might place fuel sumps, knee boards, iPads, and even entire flight bags in the middle of a pre-flight and walk-around. The things we could leave and forget about on the wings (including fuel caps that should always be secured!) are no longer fuel sumps, knee boards, or iPads, but potential foreign object debris that could end up in places where they shouldn't be, and that includes getting sucked up into a jet engine! So in addition to making sure the fuel caps are on and secure (whether it be a low-wing or high-wing airplane) during the final walk-around of pre-flight, double check the entire wing environment of the airplane to ensure that there are no loose foreign objects that might get accidentally left behind.



Formation with N12382 from N515ED – Chris Eriksson