H15383

Valley Flyers

"Just Plane Fun!"

885 Lancaster Dr SE Salem, OR 97317

February 2020



Annual Club Business Meeting Summary

Submitted by Isaac Mosgrove

As highlighted in the January 29th Annual Club Business Meeting, 2019 was yet another busy year that was full of exciting changes, and our future continues to look promising. A lot of information was covered during the meeting. The following are a few of the key points:

2019 Highlights:

- Our membership grew to 74 members (including flight instructors), with 64 member pilots and 10 student pilots. Many of our member pilots are also working on their advanced ratings.
- We continued to make more improvements to our fleet, our facilities, and resources!
 - N515ED: We installed a new interior, repainted the cowel, and installed a ground power plug for the avionics for when the is engine off.
 - N1636H: We installed a GNX 375 GPS Navigator with ADS-B IN/OUT, installed a GMU 11 to add heading mode capability to the autopilot, and purchased a second G5 in preparation to remove the vacuum system.
 - N5174E: We purchased this Cessna 172N to add to our fleet and we've ordered the new engine. We own this airplane.
 - N70574: We purchased a new engine instead of replacing the Skylane. N70574 will be put back online once the engine break-in period is completed.
 - Move moved to new hangars! All of our aircraft are now in the same building with a very nice flight planning room.
 - We purchased an electric tug and a battery powered portable air compressor.
 - We updated the software in the Garmin units in N515ED and N12382.
 - We added two more approved flight instructors (Scott Bragg and Joshua McKinney).



• We had a bunch of club activities!

- These included outings to Newport, Cottage Grove, Hood River, Sisters, Mulino, Madras, Bend, Reno, Chiloquin, and Seaside.
- We also had our Club BBQ and Strawberry Shortcake Picnic, a club meeting with one of the controllers from the Salem Tower, and had a fantastic Annual Club Christmas Party.
- We paid off the loan for N515ED!
- Our finances are healthy!
 - The checking account balance at the start of the year was \$65,911, and we ended the year with a balance of \$34,578.
 - All bills are paid (including the memberapproved, one-time extra-ordinary event).
- We flew a whopping 1472 hours (increased from last year's 1263 hours)!
 - Even with the flight extra hours, our aircraft maintenance costs (excluding annuals, upgrades, and engine replacement) were less than budgeted.
- We recognized our 2019 contest award winner who will get a free flight hour in 2019!
 - Brandon Biodrowski won the award for the most hours flown.

Other Business:

• Aircraft hourly rates will be increasing: Over the last five years, we've worked diligently to keep our dues and rates unchanged even though the cost of fuel, oil, maintenance, avionics improvements, and insurance costs have increased. reviewing the 2020 budget, the members unanimously approved a change to the aircraft hourly rates in order to maintain the financial health The members respected the of Valley Flyers. Board's recommendation for a minimal rate increase but asked the Board to monitor the budget throughout the year and make an additional minor increase if needed. Please see the New Plane Rates article for the changes that will become effective March 1, 2020.

- Officer elections were held: Congratulations to Isaac Mosgrove (President), Joan Johnson (Treasurer), and Al Gray (Safety & Maintenance Officer) who were re-elected to their positions.
- Potential conflicts of interest were disclosed by each Board Member.
- Please take care of our equipment to help reduce aircraft downtime. Improper starting procedures are causing early failure of batteries and starters resulting in flights being cancelled and extra maintenance costs. Also, the paint and plastics on the struts and wings are getting damaged from the ladders, hoses and nozzles during fueling. The airplanes belong to all of us, so let's work together to keep our equipment nice and our costs low.
- Thank you to members for working hard to submit accurate payment and fuel slips EVERY month. 2019 was better than 2018 which was helpful with the monthly billing. Remember, it is okay to have your bank send a check and to email your fuel slips to Joan. With the growth of the club, it is very time consuming to process the books each month when members do not make complete monthly payments (including fuel slips). If you encounter difficulties that will delay your payment, please contact Joan before the due date.
- Please help the Crew Chiefs by using squawks in aircraftclubs.com:
 - 1. When there is an item that needs to be taken care of
 - 2. To alert when regular maintenance is nearly due (AD checks, oil changes, etc).
- Please check aircraftclubs.com for squawks or maintenance reservations before each flight. The Board tries hard to notify affected members if an aircraft is grounded, but we cannot always do this before your scheduled flight.

A special thank you to the following members:

- Everyone who worked on the interior of N515ED. That was a huge undertaking!
- Everyone who helped on the new hangars.
- Brett Trammell for printing the newsletter.
- Todd Lindley for organizing the monthly club flights.
- Joan Johnson for all of her behind the scenes work that she does (buying supplies, washing rags, emptying garbage, and more in addition to managing the finances and billing).
- The volunteer Board who puts so much time into keeping the planes flying, addressing member inquiries, and focusing on the future success of Valley Flyers.



2020 Goals: (Budget permitting)

Aircraft Goals:

- N5174E: Replace the engine (which has already been ordered) and complete cosmetic repairs of the internal/external plastic pieces.
- N1636H: Install a second G5 and remove the vacuum system, install new seat cushions/covers, and replace the engine.
- N70574: Avionics upgrade (including ADS-B), add shoulder harnesses, and pay off 50% of the loan.
- N12382: Install new interior carpet, sidepanels, seat cushions/covers, repair the glareshield, and add an engine block heater.
- N515ED: Complete cosmetic repairs of external plastic pieces and add an engine block heater.
- Investigate adding ground charging power plugs to the aircraft and purchase a ground power supply or charger.

• Facilities Goals:

- Finish the flight planning room.
- Finish organizing and cleaning the hangars.
- Replace the hangar doors for N1636H.



Dehavilland Beaver for Isle Royale Seaplane Company in Houghton, MI – Chris Eriksson

• Club Goals:

- Research and implement changes for billing, maintenance, and other adjustments to better support the operations and growth of the club.
 Volunteers will be needed for beta testing the new aircraft reservation/billing system before it goes live to the entire club.
- Hold regularly scheduled quarterly club meetings. These will be held on the 2nd Tuesday of the 2nd month each quarter at 7:00 PM in the flight planning room. This year's meetings will be 2/11, 5/12, 8/11, and 11/10.

- Increase membership involvement in the daily operations of the club (washing/folding rags, maintaining cleaning supplies, cleaning hangars, emptying garbage, etc.).
- Hold monthly club fly out activities. Todd Lindley has volunteered to organize the events for 2020, so please contact him if you have ideas for fun activities.
- Continue doing more activities with Flights Above The Pacific Northwest (FATPNW) Facebook group.



Future Goals Beyond 2020:

- Pay off loan for N70574
- Upgrade N1636H to IRF capabilities (repair static line leaks and pitot heat)
- Remove vacuum systems from all aircraft
- Repair paint on the planes
- Purchase hangars. A Lease to Purchase Option Agreement has been drafted and reviewed by the Board. The next step is to have it reviewed by our lawyer. An overview of the agreement was presented to the members.
- Upgrade avionics in N5174E



New Plane Rates

As stated above, we've worked very hard to maintain our low flying rates despite the increasing cost of fuel, oil, maintenance, insurance and aircraft improvements. As reviewed at the Annual Club Meeting, in order to maintain the financial health of the club, the following rates will become effective March 1, 2020, so they will show up on your April invoice.

Monthly Dues		\$54/mo	Unchanged
N1636H	Cherokee 140	\$87/hr	\$5 increase
N12382	Cessna 172	\$92/hr	\$5 increase
N5174E	Cessna 172	\$92/hr	\$5 increase
N515ED	Cessna 172	\$103/hr	\$5 increase
N70574	Cessna 182	\$130/hr	\$5 increase

Have you had a memorable trip, flying experience, or words of wisdom from which others in the club would benefit, or that you would like to share? Please send your stories, tips, quotes and pictures to **Chris Eriksson** for inclusion in future newsletters.



Quarterly Member Meetings

Starting this year, quarterly club meetings will be held with the Board in order to provide members more opportunities to ask questions, make suggestions, raise concerns, and have increased visibility into the status and workings of the club. This is your club, so the Board wants to make sure you are aware of what is happening throughout the year. The quarterly meetings will be held on the 2nd Tuesday of the 2nd month each quarter at 7:00 PM in the flight planning room. This year's meetings will be:

- 7:00 PM, Tuesday, February 11
- 7:00 PM, Tuesday, May 12
- 7:00 PM, Tuesday, August 11
- 7:00 PM, Tuesday, November 10

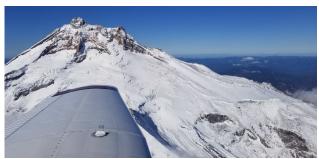
February Fly Outs

VFR Fly Out

Assuming the Salem monsoon season ends soon, on Saturday February 29th, we'll fly to Siletz Bay State (S45) and have lunch at the Side Door Café. We'll depart KSLE at 11:00 am and after lunch do some aerial sight-seeing along the coast.

IFR Fly Out

Saturday February 23rd - NW Aviation Conference. We'll fly to KPLU and take the shuttle to the expo center for a day of free aviation stuff and a few seminars. There is a restaurant on the field at KPLU so we can grab a meal there or go to an alternate food spot at KTIW or KCLS. Departing at 8:00 am freezing levels permitting.



Cascades in the winter - Chris Eriksson

N70574 New Engine

N70574, our C182 is nearly back from its engine overhaul. I wanted to take this minute to talk about engine care. When a new engine is installed, it needs to go through what is called an engine break in period. This break in is to wear in the cylinder wall and the rings simultaneously to create a good seal to reduce combustion gas blow-by and oil consumption. This aids the overall health of the life of the engine, so a proper engine break in is essential. To break in the engine, a special mineral oil is used, and the engine must be run hard. Generally, the engine needs to be run at 75% power for the first hour, and then between 65% and 75% for the next several hours. For the best break in, the aircraft should be operated at low altitudes, and avoid prolonged time at idle both on the ground and in flight. Break in usually takes between 10 and 25 hours. During this time, it will get more oil under inspections, and be more careful examination.

But after the break in is complete, we will go back to normal operations with the 182, which leads to the question of how we should be treating the high performance engine of the 182. Our C182 currently has minimal instrumentation, only an EGT, and CHT gauge for monitoring engine temperatures. And between those, the EGT has no numerical readouts, and the CHT does not give much more than a min and max number. So we must for now use best judgement to treat the engine properly. A few things that are important for the healthy operation of the engine are Cylinder Head Temperatures, Oil Temperatures, and fuel flow.

1. Cylinder Head Temperatures: CHTs are generally the fastest temperature to hit redline if not monitored. Especially during long climbs, keep an eye on Cylinder Head Temps. There are a few ways to control CHTs, the best of which being your airspeed and power setting. Since our engines are air cooled, increasing the

- aircrafts airspeed will cool down CHTs. Also, decreasing power will decrease CHTs. And finally, cowl flaps are helpful tools. Just keep in mind when performing a prolonged climb, that it may be necessary to perform intermediary level offs to keep the engine healthy. Also, anytime you have high power settings, cowl flaps should be fully open.
- 2. Oil temperature: Oil temperature is similar to CHT, and is a great one to monitor during prolonged high power settings. temperature can be decreased in similar ways to CHTs. A notable addition to means of control however is to make sure that adequate oil is in the system. If the oil quantity is low, the temperatures tend to rise. So especially before a longer flight, ensure that you have plenty of oil. But keep in mind that the oil capacity should not be set to the maximum allowable, or the engine will dispose of extra and cause engine wear. For the 182, no more than 9 quarts is really needed.
- 3. Fuel Flow: A 182 should be leaned on just about every flight. If we put too much fuel for the engine, it is not burning efficiently and can cause the engine to run rough. In flight, we should be leaning the mixture to achieve 50-100 degrees rich of peak EGT. Currently we can only see one cylinder's EGT, but that is enough to get a good feel for where the temperatures are at. Leaning the engine is good for it, and reduces our fuel consumption.

Understanding engine temperatures, and how we can affect them is critical to flying higher power engines, and learning to monitor and control the temps will make the engine work much better for you. Learning to handle the engine better will also help us take care of the engine, and understand when it is showing signs of work being needed.



Willamette Valley at Sunset – Chris Eriksson