

Valley Flyers

"Just Plane Fun!"

885 Lancaster Dr SE Salem, OR 97317

July 2015





This mountain wave formed near Crater Lake while we were at Prospect State Airport. Chris snapped this picture as Alison was doing a trip around the pattern.

Prospect (64S) BBQ Club Flight

Submitted by Alan Lasneski and Chris Eriksson

The Prospect BBQ flight was a fun success. We took two club planes down to Prospect State Airport (64S) on Sunday, June 21st. Alison, Mark, Isaac were in 5ED, and Chris, Pristene, and Alan were in 574 (Alan used this as time toward getting checked out in the Skylane). It was a really nice trip down. The group in 5ED went to Roseburg and over to Prospect. The group in 574 took a trip over various state airports in the mountains, did a quick pass by Crater Lake, and then on to Prospect. The weather was nice and sunny, but not too terribly hot yet. We met the nice gentleman who lives on the airport and takes care of things, and had a nice talk with him. After a nice BBQ with burgers, chips, and cherries, we took a walk through Prospect State Park, which is right next to the airport. We hiked along some well-maintained trails to a waterfall down on Mill Creek (which joins the Rouge River at the end of the park). It was super cool in the canopy of the trees with this waterfall.

We hope to see you at the next event in July!



After taking off, the pilot got on the speaker and said, "Bear with me folks, this is my first time."

Aviation Humor

Annual Club BBQ & Strawberry Gathering

Thank you to all who made it to the Annual Club BBQ and Strawberry Gathering on June 20th. The weather was perfect, the food delicious, and the company superb. It is always fun to get together and share stories and laughter.



Club Poker Run

You won't want to miss the July club even that Alan Lasneski and Chris Eriksson are planning. July will feature a poker run where you will fly to several pre-determined airports to collect playing cards. The person with the best poker hand wins. The intent is for several pilots to be in each plane and to rotate flying the various legs. The specific date for the Poker Run is still being determined, so keep an eye on your email for more details.



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Words of Wisdom

Remember, you're always a student in an airplane.

N12382 Update...

Well, we expected N12382 to be back online by now. As with many things in aviation, there have been unexpected and ongoing delays at Lycoming. The engine for us was found to have bad cylinders, so Lycoming has to replace the cylinders before shipping it out to us again. Our shop has been in contact with Lycoming nearly daily, and has 382 all ready to be reassembled as soon as the engine arrives.

We'll let everyone know as soon as the plane is finished. Unfortunately, it could be another month before the plane is back online. Although the delays are definitely disappointing, our first priority is to have a good, solid, and safe engine.

Most hours flown in June

Congratulations to Brad Stoller for flying the most number of flights and the most hours in June.

Welcome Our New Members

A very warm welcome to our newest members:

Max Duke is a new member. Max grew up in Orange County, California and then joined the Marine Corp. After five years in the Marines, Max used his GI Bill to attend Embry Riddle, where he graduated with a degree in Mechanical Engineering and flight ratings. After working as a flight instructor at Embry Riddle, he moved to the Mojave Desert to work for Scaled Composites. In April, Max moved to Oregon where he now works for Garmin as an Aircraft Systems Engineer. Max is married, has a 2 year old son with another little one expected in October.

Tim Burnett is a new student pilot flying with John Barringer. Tim was raised in the Pacific Northwest and moved back to Oregon last year when he started working at Garmin as an engineer. He never thought it was a reasonable goal to be a pilot until he learned about the Garmin incentives. Tim is looking forward to the new freedoms that flying creates and to making new memories with his kids (who are super excited about flying).

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 Isaac Mosgrove for inclusion in future newsletters.

Southern OR/Northern CA Adventure

Submitted by Corey Drechsler

I took the long route to Grants Pass, OR on a hot summer weekend, getting plenty of practice calculating density altitude, and visiting several new to me airports. After a landing at the hilltop airport in Oak Ridge, we took Joan's email advice to climb to a cooler altitude, and crossed over Crater Lake at 10,000 ft. It was still 60°F outside, but the view was incredible! A landing at Medford on the way to our destination offered a rather different sight picture with its 8800 ft runway.

On a slightly cooler day, we took a morning sightseeing trip, visiting the former smokejumper base at the Illinois Valley airport before heading over to the coast. We flew by the Point St. George Lighthouse, located several miles offshore from Crescent City, CA. The clouds had cleared up enough for a landing at Crescent City (CEC), but our goal of a lunch stop further north was scuttled due to low clouds lingering over Brookings and Gold Beach. Nonetheless, the flight was deemed a success by the passengers.



Wizard Island in Crater Lake, with Mt. Bailey, Diamond Lake, Diamond Peak and Mt. Thielsen in the background.



Point St. George Lighthouse, Crescent City, California.



Low clouds lingering over Brookings, Oregon

Most Visited

It is exciting to see many of you visiting lots of airports this year. The top contenders right now are:

19
13
9
8
7
7
6

Everyone is encouraged to participate. If you've visited airports earlier this year, please send your list Isaac Mosgrove.

New Airports Visited

Corey Drechsler hit seven new-to-him airports, including Oakridge (5S0), Prospect State (64S), Medford (KMFR), Illinois Valley (3S4), Crescent City (KCEC), Myrtle Creek (16S), and Roseburg (KRBG).

Ryan Skogstad flew to Pierce County Airport (KPLU) in Puyallup for the first time. He was attending the U.S. Open! PDX thought he said Pearson and set him up to land at Pearson. Little hassle but all worked out.

Isaac Mosgrove flew into Davis (6S4) at Gates to practice soft field take offs and landings on turf (watch your density altitude).

Chris Eriksson, Alison Irish, and Isaac Mosgrove each landed at Prospect State (64S) for the club BBQ fly out.

Upcoming Events

- Every Fourth Saturday: Hot dogs and Refreshments, Albany (S12). Hosted by Infinite Air Center.
- July TBD: Club Poker Run.
- July 18th: Wings and Wheels, Roseburg, OR (KRBG). The event features local airplanes and others flown in from around the Pacific North West. Lovingly restored classic cars mostly from the time of flashy paint jobs with flames and striping, tuck and roll and loud pipes will be on display. This is a free event for spectators and flyin aircraft.
- August TBD: Club flight to Nehalem Bay airport (3S7) with a BBQ lunch at the airport
- August 14th-16th: Independence Fly In and Vans Homecoming (7S5).
- August 15th: Second Annual NWAC and Highway 30 Cruisers Fly In and Drive In, Scappoose (KSPB), 8:00AM – 6:00PM with food, music, and activities.
- Sept TBD: Club flight to Copalis airport (\$16).
- Sept 12th & 13th: Annual Hood River Fly-in, Hood River, OR (4S2) at WAAM (Western Antique Aeroplane & Automobile Museum).

Instructor Insight

The flight instructors have graciously agreed to share tidbits of knowledge with us through the newsletter each month. The topics and formats will vary. There may be questions to ponder and research, refresher items, tips and tricks, or new things to think about. We all need to work diligently to remain proficient, and flight instructors are here to help.

Take Offs and Landings

Submitted by Al Gray, CFI

Reasons for practicing:

- According to the 2004 Nall Report, 50% of all pilot related accidents occur during the take off and landing phase.
- Pilots with less than 100 hours of total time or time in type have a higher risk of accidents.
- Accidents during take off are much more likely to be fatal.
- More than one out of three pilot related accidents occurred during landing.
- Loss of control is the leading cause of takeoff accidents followed by configuration.
- Knowing the density altitude is most critical for a short field take off.

All this being said, it is very import to spend plenty of time staying up to speed on takeoffs and landings in all types of weather. If you're not comfortable with gusty cross winds or any windy conditions, then grab a CFI and go get some instruction.

Fly safe...Be safe.



Pilot's Safety Corner

Submitted by Dennis Wyza, CFII

"What are the safe procedures for switching fuel tanks in low wing aircraft? What are the dangers of running one tank dry?"

Every time you switch fuel tanks, you cause a slight increase in the probability of having an engine failure.

So, for example I never switch tanks just prior to take off. I always take off on the tank I did the run up on. I never switch tanks at low altitude, like in the pattern. En route, I try not to switch tanks unless I am within gliding distance of an airport.

Why am I so cautious? I have seen a fuel selector valve come off as a pilot was switching tanks. Then there is always the possibility of an internal failure in the fuel valve. So why put yourself at risk if you can avoid it.

What about running a tank dry? I think it is a silly risk to actually starve your engine of fuel to the point it begins to shut down, allegedly to get all the fuel out of the tank. First of all, since you cannot predict the precise moment it will happen, it could happen at a bad time. Further, if there is any contaminates in the fuel they will be in the bottom of the tank so now they are in your system.

In addition running out of fuel, restarting at high power can't be any good for the engine and it scares your passengers. If you have such a tight fuel plan that you require those last drops, you have already made a lot of poor decisions in my view."

-From Pilot Works

How High Can you Go?

Submitted by John Barringer, CFII

One of the performance items all certificated aircraft must have established is what is termed a *service ceiling*. This is generally regarded to be the maximum altitude that the aircraft can maintain a 100 foot per minute rate of climb in standard atmospheric conditions. For the 1975 Skyhawk, the service ceiling is stated to be 13,100 feet.

The catch is when we pilots don't take this in to account when it's a warm, hot and/or humid summer day. Luckily, many ASOS reports will give a density altitude for the field in question. We need to pay careful attention to that information, because it is the density altitude that affects our aircraft performance, not the true altitude noted on our charts.

We get spoiled here at our near-sea level airports here in the valley, and might assume that the performance we are used to will be present all the time. It's not unusual to see 800-1000 FPM on the vertical speed indicator, but don't expect that performance will be available when you really, really need it up in the mountains. Excess thrust is what we climb with, and at high-density altitudes there is little excess beyond the power needed to maintain level flight. And, remember, DA not only affects engine power output (which can be significant), but it also affects airfoil performance. The effects of the propeller and the lifting surfaces will be reduced significantly.

Let's look at an example. I will assume we are about to leave the Sunriver Airport (S21), where the field elevation is 4,163' MSL, and the runway (18-36) is



5,461' long. The high for today is projected to be 84°F. So what is the "standard" temperature at this elevation? Figure 3-2 in the Pilot's Handbook of Aeronautical Knowledge gives $44.7^{\circ}F$ at 4,000 feet MSL (if we don't have a chart handy, we can calculate this using the standard temperature lapse rate of $3.5^{\circ}F$, or $2^{\circ}C$, per 1000' [59°F - (4.163×3.5) = $44.4^{\circ}F$]). So today, when we are leaving Sunriver (assuming at the hottest part of the day), the temperature is 40 degrees hotter, nearly double the standard temperature at this altitude. And, it can get even hotter there during the summer months.

So what is the effect of this higher than standard temperature? What does it equate to? If I use my handy-dandy electronic E6B from Sporty's, and the Bend Airport altimeter setting of 30.09 (no report at S21), I find that the density altitude today will be 6431'. The POH Take-Off Data sheet tells us that (and this takes some interpolating) our take off run over a 50' obstacle will take about 3510'. That is almost 65% of the available runway. As a comparison, taking off of runway 34 at KSLE with the same temperature, you will clear the obstacle in 1678', or about 30% of the 5145' available.

And that's just to get off the ground. The temperature aloft at both 6,000 and 9,000 feet is reported at "ISA +9", meaning 9°C above standard. A couple of conversions puts that temperature at 48°F, and with the Bend altimeter setting, a density altitude approaching 10,851'. You are now approaching the airplanes service ceiling as we cross the Cascades at an indicated 8,500' MSL.

What's the take home message? Engine and aircraft performance can be severely reduced at higher density altitudes, and the airport elevation doesn't tell the whole story. Your best bet is to leave early in the morning, always lean the engine for best power and be careful how you load the airplane.

