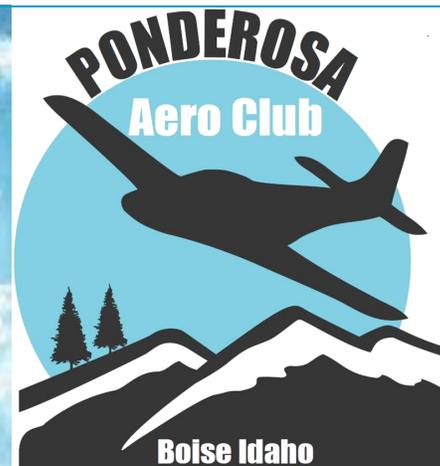


# AeroTalk!

February 2017

Volume 1, Issue 2



## Manager's Message

Winter, winter, and more winter!

It has been a fairly soul crushing winter for most of us pilots here in the valley this year. Snow and ice just seem to be hanging around a lot more than we'd like, accompanied by lower freezing levels, fog, ceilings, and low visibility. It has been challenging keeping pavements dry and safe. From snow-blowing to four-wheeler plowing, we have managed to keep the snow at bay. Try not to get too discouraged though, because we have been able to get quite a few of you flying on the limited sunny days in between all of this frustrating white stuff. Many of you may have noticed on the schedule that a number of planes have been down for maintenance. Here at Ponderosa, we have been attempting to put the bad weather to good use by getting airplanes in the shop for much needed maintenance, repairs, new engines, and cleaning. SP Aircraft has been very accommodating by working with us to the best of their ability, to get our airplanes up to speed. If

you see their mechanics please make sure to give them a big thank you. We hope the silver lining in the clouds is that these airplanes will be ready to rock soon, and the weather will follow suit.

We are getting excited for Ponderosa's Annual Winter Party. Set your calendar for the 18<sup>th</sup> of February and find your best wig, grow your finest mustache, or allow your back hair grow out of your collar. HAIR! is the theme. After an extensive search, we were fortunate to find an inexpensive alternative to our hangar this year as SP Aircraft charter airplanes will need to be inside given the potential for snow and freezing temps. Fellow aviator, Mark Schmidt is a local retired Air Force pilot who owns a brewery called the Powderhaus Brewing Company on Chinden near the Ada County Fairgrounds. The place offers a great space for the right price. We will socialize with our friends and meet new pilots and their guests. We will play games and win prizes. There will be the option for adult beverages as well as their famed bucksnort root beer, soda and water. For more details see winter party article on page 5. We are looking forward to seeing the crazy fun hairstyles, and all of your smiling faces. (cont. on page 2)

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## Manager's Message...cont.

Here is an update on our aircraft. **Cessna 7728G** continues to run well and be a great trainer for private pilots at a reasonable price. We decided to move 28G under the shade hanger for a few months while a spot was temporary available. Little did we know that massive amounts of snow were going to fall which would have buried 28G in its tie down by the fuel pumps had we not moved it. The students and aircraft owner, Pete Bair, are grateful too. **Cessna 4427R**, our other trainer, has a fresh engine and is back on line as of this week. **Cessna 2863E** our 180 HP 172 was the first plane to get a new engine this year and we're looking forward to taking it into the backcountry with its new STOL kit installation. **Cessna 9912Q** is SP Aircraft's 180 horse power 172 which we put on line while the other Cessnas are getting their new engines and repairs. It flies very much like 2863E. **Frankenhawk 5700R** is getting some flying time with those devoted tailwheel pilots, and if you want to get checked out in the backcountry this year, spring is the best time to start (contact Rick Reiersen). Both **Piper Archers 2171Y and 2965W** continue to fly as the dedicated instrument and



occasional primary training aircraft, with no major mechanical issues this winter. **SPArrow 4906J**, has timed out, but it's a very well behaved complex aircraft and is looking for a new owner and a new engine. We want it to stay in the club. There has been some interest in purchasing it from our members, but we'll have more information on that rolling into next month. Our other **Arrow 9099K** is in process of getting it's new engine as well and it should be up and running sometime in February. **8456C, the turbo twin Piper Seneca**, is getting some flying time with a couple dedicated multi-engine students. A few more pilots have shown interest as the weather improves. **101CT our Cessna 210** also received a new engine and a new oil cooler. It's available to take some cross country flights like this plane is well equipped to do. (cont. on page 7)

## Pilot Accomplishments in January

Tanner Busacker soloed on January 16th and he was sure it was the coldest day we'd had all winter. The sun was finally shining that day because the sun Gods moved the inversion moved away from the Boise Airport for a few hours to remind us that a sun exists far far away. Tanner said he was shaking, not from being nervous but from being frozen! Tanner was ready to solo a few weeks prior and finally got his opportunity. This is also Ponderosa's first and only accomplishment for 2017. Tanner is training with Rick Reiersen.



## Pilot's License to Learn Q&A

1. At what altitude is supplemental oxygen required for the pilot and when is it required for passengers (for a Part 91 flight)?
2. What is the difference between Part 121, Part 125 and Part 135? And when is an ATP required?
3. What does "sterile cockpit" mean and when is it required by the FAA?

Answers on  
back page.

# ENGINEERING & SCIENCE FESTIVAL

Saturday, February 4, 2017  
9am-4pm



Here are just a few examples of activities designed for grades K-12:

- Meet Astronaut, Steve Swanson
- Geothermal Exhibit
- World's Fastest 5 Ball Juggler
- Chemistry with Dr. Picklestein
- Exploration of the Rock Cycle
- Physics and Astronomy Demos
- Design within Constraint using LEGO
- Weather Jeopardy
- Build an Edible Aquifer
- Explore the STEMbusUSA
- FIRST Robotics in Action
- Ride a Segway
- What's a Watt?
- Rocketry Fun
- Build Snap Circuits
- Computer Programming with Scratch
- Jelly Bean Binary
- Liquid Nitrogen Volcano
- 15,000 Volt Demonstration
- Discover the MakerLab
- Tie Dye Chromatography
- Build a Mini-Hovercraft

Thank you to our sponsors:



FREE parking available at the Lincoln Parking Garage, on the corner of University and Lincoln.  
Plan your day in advance by visiting our website <http://coen.boisestate.edu/STEMExploration> or  
Contact Leandra Aburusa-Lete at 426-4432, laburusa@boisestate.edu

# Winter Wonderland at Ponderosa

In case you haven't been to the airport to fly this winter and you are wonder what it looked like on the Ponderosa ramp most of January, yes, we too have been buried in beautiful heavy sticky snow. We've shoveled and plowed and shifted planes about the tie downs; moving them indoors and out getting ready for the rare and precious opportunity to fly. Below is the airport with only taxiways Juliet, Kilo, Bravo, Alpha and Mike open. There was alotta taxing going on.



After 3 hours of freezing rain. How would that feel on your airplane? If you hear anything about freezing rain in the forecast or at your destination, you should stay clear or not fly.



# Ponderosa Aero Club Winter Party 2017

**Date:** Saturday, February 18th

**Venue:** Powderhaus Brewing Company

7919 W Chinden Boulevard, Garden City, Idaho

**Time:** 6:00 Mixer, 7:00 Dinner and Entertainment

**Theme:** "HAIR" – Find a babysitter, coif your hair, eyebrows, mustache, beard, wear a wig, toupee, comb over, don your party duds, be creative and come have a fun evening.

**Catering:** A Lively Chef Catering

**Beverage:** As customary, Ponderosa will provide water and non-alcoholic beverages, but does not provide alcohol. The brewery sells beer, cider, and wine but does not have a liquor license, so if there's something special you want, bring it.

**Mingling and Entertainment:** Come meet Ponderosa's new members, visit your old friends, staff, instructors, and hopefully make some new friends. We have some games planned that will inspire mingling but nothing embarrassing or difficult. There will be door prizes!

**Cost:** \$10 per member and guest. \$20 for non-members

**RSVP is required by Monday, February 13th**

**(208) 344-5401 or [acesharki@gmail.com](mailto:acesharki@gmail.com)**



Be Smart, Fly Safe and Have Fun!

## Ice: Just Enough to Chill Your Drinks 2...by Justin Perkins

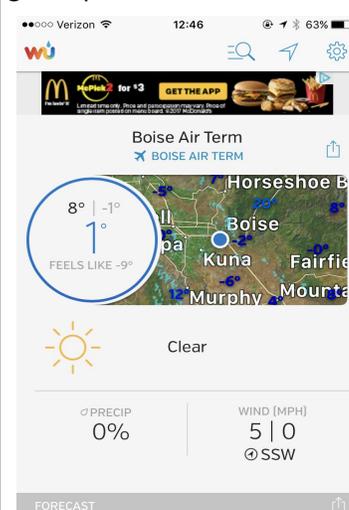
In last month's newsletter readers learned about the three main types of ice: Rime, Clear, and Mixed. Additionally, readers learned about the dangers posed by SLD (supercooled large droplets). This month comes part two of the article in which we will discuss where you are most likely to find the different types of ice and how to effectively deal with them. As stated in the last article, I flew cloud seeding airplanes last winter in order to increase snow pack in Idaho's Central Mountains. During that operation I was exposed to an insane amount of ice, which uniquely qualifies me to discuss how to deal with ice and how to avoid it all together.



After reading the last article you may have been asking yourself, "Well now I know a little more about the different types of ice and at what temperatures they are likely to form, but what types of clouds can I find them in?" And the answer to that question is "it depends". If you are flying in an inversion versus in a standard atmosphere, you will find different types of ice in different places. However, there are a few constant rules about ice here in the Treasure Valley that we can use. First, if you fly into a cloud in the winter time in Boise and the temperature is at most 2 degrees Celsius you will undoubtedly find some form of ice. If you are at the tops of the cloud and it is between -5 to

-8 degrees Celsius then you will most likely find rime ice. If you are anywhere else in the cloud you will probably find a variety of mixed ice depending on the temperature and the water content inside the cloud. Secondly, if you are flying in an inversion and you encounter rain there is a high probability that it will be freezing rain and it will accumulate at an astounding rate. Thirdly, if you are unsure if you are going to collect ice or not and/or are not completely confident that you or the airplane have the skills/equipment to handle it then you should cancel your flight. As that old aviation proverb says "It's better to be on the ground wishing you were in the air, than in the air (in icing conditions) wishing you were on the ground."

Now let's discuss some things we can do in order to get out of the ice, lest we find ourselves in it. First, if you enter icing do not panic. As with everything in aviation cooler heads prevail and panicking in emergency situations will only make matters worse. Second, fly the airplane. Airspeed is your friend. If you get so much ice that the aircraft cannot sustain level flight then you should set your best glide speed and ride it down with the maximum amount of power



you have available. Third, find a way out. If you are in a thin layer with a standard atmosphere it will probably be better to descend if you have the altitude and terrain clearance available in order to find warmer air. If you are in an atmosphere that is inverted, meaning the cold air is near the surface and the warmer air is higher up in the atmosphere, then you will probably have to climb higher in order to get out of icing conditions. If the ice is severe enough, you may not have enough performance to get out of the ice, and then you will be stuck with it until you can land somewhere. If you fly into a cloud that has ice in one of our Ponderosa airplanes, you should execute a level standard rate 180 degree turn and exit the ice. Our airplanes have no business flying in icing conditions because they have no way to get rid of it. Our aircraft do not have appropriate anti-icing equipment and are not certified by the FAA to fly in "known icing". (cont. on page 7)



## Ice: Just Enough to Chill Your Drinks 2...cont.

So what happens when you encounter freezing rain or SLD (supercooled large droplets)? Well, I can tell you that both SLD and freezing rain collect faster than anything I have ever seen. I experienced this after less than a minute in severe SLD in our King Air C-90. My captain and I were forced to nose the aircraft over in order to maintain flying speed, which resulted in an 800 foot per minute descent at full power with two engines pumping out 550 brake horsepower each. Luckily there was warmer air beneath the aircraft, which allowed us to arrest our descent and clear the terrain by about 1,500 feet. In a matter of minutes we descended from 13,000 feet to 8,000 feet MSL. However, we kept our cool, worked through the problem, and found out a way out.

As we come to the end of the two part series about aircraft icing, there are a few important notes I want to point out. First and foremost, the airplanes in Ponderosa's fleet have no business flying in the icy clouds that we have in the Treasure Valley. Next, with proper planning you should never find yourself in a situation in which you are surprised by ice or instrument conditions. Lastly, if you do enter icing conditions it is not the end of the world. With a cool head and proper airmanship you should be able to find a solution. Fly safe out there kids.



The photos included in this article are courtesy of professional pilots who unintentionally picked up ice on a flight where ice was not forecasted. The airplane is certified for "known icing", but no ice is good ice and very scary indeed. Needless to say, the pilots of this flight used their best skills and a little luck to land the plane at a nearby airport.

## Manager's Message...cont.

Since we don't know how long this exceptionally cold, icy winter will last, here's some important things to consider: Please remember to put the blankets back on the airplanes after your flight. If you park your plane in it's stall after your flight, make sure you plug it in. They both help keep the engines warm for the next pilot. Watch out for ice berms on the ramp area when taxiing. They can be difficult to see from the cockpit and the low wings and props are very susceptible to getting bumped. Also, please understand that SP Aircraft will be happy to bring our aircraft in to thaw, but because of the conditions this year their Part 135 Charter operations take priority and their planes can't be left out. Please call Sharki, Tanner or me the day prior to find out if your airplane can come indoors to thaw. We will do our best.

Because it has been a crazy winter, many of our members have not gotten to fly, but the staff remain just as busy as we spend more time tending to aircraft by shoveling and plowing snow to set them free for the opportunity that the sun comes out. Thank you for your patience and help this winter, especially with fueling. Some days it's below freezing so we try and fuel several planes at once, and we appreciate the assistance. We are also taking this time to get housekeeping done, do updates and make plans for spring flying and the fun activities we are preparing for.

## From the Board of Directors



Ponderosa Aero Club, Inc.  
4888 W Aeronca Street  
Boise, ID 83705  
KBOI - Gowen Field  
208-344-5401  
www.PonderosaAero.org

### PAC Membership;

Per 1/19/17 PAC board meeting, the following was discussed:

- a) current dues paying membership = **124**
- b) upcoming events:
  - 01/18/17 - safety tutorial: FAA/FSDO overview (cancelled due to weather, to be rescheduled in March)
  - 02/18/17 - PAC winter party
  - 04/18/17 - annual party and board election
  - future ideas: Foreflight tutorial, night currency, tower tour, fly-in
- c) financials: fine tuning reporting and accuracy
- d) CFI's: currently 10 instructors (in various capacities)
- e) aircraft: for updates, see Brett's article on Page 2

In closing, the new general manager, Brett, has been doing a great job. If you any issues or concerns please contact him at Ponderosa.

We would like to include your aviation story, experience and photos in our next newsletter. Contact Sharki at 714-609-4233 or [acesharki@gmail.com](mailto:acesharki@gmail.com)

Be Smart, Fly Safe and  
Have Fun!

## Answers to Pilot's License to Learn Q&A

1. On a given flight a pilot can be at an altitude of 12,500 to 13,999 for a total of 30 minutes, but then must descend or use supplemental oxygen for the remainder of that flight at those altitudes. The only way to reset the clock is to land. From 14,000 and above the pilot must use supplemental oxygen continuously. From 15,000 and above the passengers must be provided oxygen. It's up to them to use it.
2. Part 121 - Regulations for scheduled air carriers, like Southwest, Delta, Virgin, United, FedEx, etc.  
Part 135 - On demand charter, like what SP Aircraft does, taking passengers to smaller airports and into the back-country, or transporting cargo, on their time.  
Part 125 - Like Part 135, but with bigger airplanes, those which seat 20 or more passengers and weigh more than 6000 lbs. If SP Aircraft were to charter using a Boeing 737, then that plane would operate under Part 125, rather than Part 135.  
An ATP is required for all Part 121 operations, and some Part 125 and Part 135 operations.
3. A sterile cockpit does not mean that the cockpit was sanitized after the previous pilot, it means that the pilot should not engage in the performance of non-essential duties or activities while the aircraft is involved in taxi, takeoff, landing, and all other flight operations conducted below 10,000 feet MSL, except cruise flight.

