

CASCADE FLYER



Banner Photo: Gary Miller

CENTRAL OREGON • OREGON PILOTS ASSOCIATION NEWSLETTER

JANUARY 2003 Issue



IN THIS ISSUE

- [January Meeting](#)
- [Guest Speaker](#)
- [2003 First Fly-Out](#)
- [Dec Non-Fly-Out](#)
- [Hangar Flying](#)
- [From the Ramp](#)
- [Charitable Endeavor](#)
- [Check This Out](#)

JANUARY MEETING

This month's meeting will be on Thursday, January 16th, 6:00pm at the Bend Airport (S07) in the Flight Services building (The Flight Shop). ✈

GUEST SPEAKER

by Clay Trenz

Ron Hart will be joining us this week. Ron has been long inspired by the works of N.C. Wyeth and Maxfield Parrish, he studied at the Academy of Art College in San Francisco, specializing in illustration and design. Ron is a retired American Airline



"Spook One" is a fine example of Ron's talent to capture the spirit of aviation.

pilot and talented oil painter. After retiring from American Airlines for twenty-two years, he pursued his passion for painting full time. Now, he operates from his studio here in Bend. His paintings have various themes including aviation. Visit Ron's website; <http://www.hartart.com> to view his galleries of other fine works of art. ✈

2003 FIRST FLY-OUT !!

by Don Wilfong

Lets get the year started out right by having a large group for our first fly-out of the New Year. December weather kept us ground bound so our scheduled trip to Nampa, Idaho was called off. Let's try

DECEMBER "NON-FLYOUT"



by Don Wilfong

Sat. Dec. 21 between 09:00 and 09:30 we assembled at the flight shop to go have breakfast. It had been decided that flying either to Nampa, ID or to Chiloquin was off, due to the weather. However, Parker Johnstone flew down from Redmond, with his daughter Hanna, all ready to go on a fly-out. He elected not to join us for breakfast as he wanted to fly somewhere for a little Father/Daughter time.

Our select little group consisted of Bob & Nancy Lecklider, Mike & Ann Bond, Gary Miller, Ken Sandine, Mike Brownlie, Ed Endsley and Don & Norma Wilfong. Ann suggested we all go to the Brickstone Restaurant (at Red Lion North) as they were giving a percentage, of the money taken in today, to The Save the Horses Fund. Both the meal and the service were good and we had a really great time with hangar flying and visiting. I think collectively we solved most of the worlds problems.....now if we could just get the world to take our advice.

Mike Bond had an excellent idea and scheduled a tour of the Redmond Control Tower for us all.



After everyone made it through security, we were able to get a first hand tour inside the RDM tower.

Gary Miller, Ken Sandine and Mike Brownlie had already been in the tower so they didn't go with us. We arrived at the base of the tower and waited for someone to come down and let us in. (Most everybody hid around the corner of the building to avoid the cold wind. They let us in a room and checked everybody's picture ID, confirmed that no one had a knife or weapon of any kind and issued each of us a pass to wear before we were allowed to enter the

HANGAR FLYING



by Joel Premelaar

This weird weather we're having triggered what mind I have into freewheeling. Some of you oldies or antique car buffs might remember free wheeling, oh well; rambling on, I am getting jaded listening to the weather experts and environmentalists pontificating as to where the blame for it lies. Some time ago, I read that as the sun is consuming itself it grows larger and in the doing it will ultimately consume the planets. I haven't heard about any measurement taken of the sun lately. Mayhap that's contributing to the unusual rainy Whiskey Xray. Any astronomers, amateur or otherwise, out there? Rambling on some more, let's tune up our instruments and get into "flying in the rain" a la Gene Kelly. Many of the rain related items that follow are from sources such as the FAA, NASA and experience.

Divide the landing distance over a 50ft obstruction found in your Airplane Flight Manual/Pilot's Operating Handbook by 0.6 to determine the dry landing runway requirement (remember, these figures are established with a new and perfect plane flown by a test pilot). You may use your fingers and toes for the next step, which is to multiply the results of that complex math problem by 1.15 if the runway is wet. If you're still with me on this, your next step is to add a fudge factor to compensate for the condition of your tires and brakes.

The FAA's criterion sets a runway length of 4,000ft as a minimum for grooved or "porous friction course (PFC)" overlay treatment. Jeppesen's airport page notes the inclusion of such treatment, if it exists. Your wheels are not spinning upon landing so pick up your trusty calculator and determine the hydroplaning speed with the formula: $7.7\sqrt{\text{tire pressure}}$ ($\sqrt{\text{v}}$ = square root symbol on my computer and \sim is approximately equal to); e.g., $7.7\sqrt{30\text{psi}} \sim 7.7 \times 5.5 \sim 42$ MPH. Don't expect effective braking until you reach a ground speed less than 42 MPH. With wheels rotating; e.g., an aborted takeoff or late in a landing roll out, or going from dry to standing water runway conditions, the formula is $9.9\sqrt{\text{tire pressure}}$; e.g. $9.9\sqrt{30} \sim 54$ MPH. A crosswind landing on a

continued page 4 column A

continued page 2 column C

continued page 3 column C

January 2003



FROM THE RAMP

by Randy Potter

OXYGEN - PART I

At the November CO-OPA meeting Jack Kohler mentioned that he would like someone else to write some articles for the newsletter. Having edited (read: written mostly by myself) several newsletters for other organizations, one for six years, I know how he feels. I mentioned several subjects I would like to see articles on, expecting that he would probably ask me to do it. He did.

As I begin to put this into writing, the title has already undergone three name changes, and the concept has expanded far beyond my original vision. I thought to title this series something like Air Bend, and planned to give information on the various businesses that reside at the Bend Airport. So I checked the Yellow Pages to make sure I was not going to be giving some unknown entity free advertising by my title – or opportunity for a law suit – and realized that in addition to the half dozen businesses I was thinking of featuring at the Bend Airport, there were at least 20 more listed around Central Oregon that our members would like to know about, too. Do you realize that many Central Oregon companies, including several at Bend Muni, are nationally and internationally known and shopped aviation companies? We have FBOs and others providing services and training (two have college degree programs) and BFRs, various electronics and gauges specialties, avionics, engine rebuilding, electrical, speed brakes, oxygen systems, even a nationally known airplane junk yard!

It was Monday, and I was at The Flight Shop, putting in a new battery. Well, David Meyers was putting a new battery in my Cherokee and I was watching, to learn how some things open and close, how to run safety wire, and just generally picking his brain and making a nuisance of myself while he worked. I had just installed a new landing light (by myself) on Saturday, but before I got to use it I realized I was not going to fly to McMinnville after all, since my battery was dead. Since I did not have to go to The Valley I cancelled the flight for that day. I had already learned I could replace my landing light with a quartz light, which gives out more light and draws less juice, and my friend Dennis, who was going to fly to The Valley with me Saturday when the battery died, used to work at [Precise Flight](#) assembling their pulse light systems, and recommended I consider one, so I figured that was a good place to start.

I walked in and was greeted warmly, then introduced myself like this: “Hi, I am Randy Potter. I

have a Cherokee 140, and I am wondering what you can do for me.” I was introduced to Charles, who showed me their operation.

In the bay was a red and white Bonanza V35. I first noticed the vortex generators already on the wings, then engineering plans laying on one wing, rubber skin protectors, then fresh, unpainted metal bars in slots showing in the wings. They had just installed a set of speed brakes, which they are in the final stages of securing an STC for the Bonanza. (I thought the EXPERIMENTAL sign in the window of the V-tail was a nice touch.) Someone from the FAA is scheduled to show up soon to sign it off. Charles showed me some demo units, explaining how they work, and when and how they would be used to slow the plane’s speed and descent. Since I generally do not have a problem going slow I do not need them, but some of the rest of you might.

Then Charles showed me their oxygen systems, and while I like cool tools and toys, I agreed to listen as much out of politeness as personal interest. After all, I was really there to investigate the Pulselite, and oxygen was something that, to me, seemed to be the purview of my jet fighter owning jockey pilot friend in North Carolina, stewardesses demonstrating the yellow plastic pop-down masks in the pre-flight demonstrations, and people who “file” and fly high and fast in expensive planes. Boy did I have a lot to learn.

I learned some things I already “know”, but had not put them together, until this visit. I learned that if you or I have an O2 Saturation Level of 96% at Sea Level, it would only be 95% at 5,000’ (slightly over pattern altitude at Bend), 93% at 7,500 (practice altitude), 89% (which is below the 90% minimum we ought to have) at 10,000 (close to the altitude many of us use for cross country flights in the area, especially when going over the Cascades), and 87% at 12,500 – at standard density altitude, because these figures are related to density altitudes rather than absolute (MSL) altitudes.

No biggie, I thought, since I seldom fly my Cherokee 140 (or the occasional 172) at 12,500 – or do I? I told Charles how I was telling some friends that I left Corvallis three weeks earlier, 10 pm at night (so I might have already a little tired, you think?), quickly popped up to 12,5 and rode it all the way back over the mountains before I started to let down. Oops, was I over 12.5K for more than 30 minutes? (FAR 91.211) When my non-pilot wife heard the story she said “You can’t fly that high without oxygen. Do you have oxygen in your plane?” (Talk about “out of the

December Non-Fly-Out from page 1

elevator. This took us up to where we only had to climb three flights of stairs to reach the top. The security measures are much more strict since 9/11, but I guess it is important and worth the little bit of inconvenience.

Boy the view was great, from up there, and the tour was both interesting and informative. The two tower controllers (Tim & Jim) went out of their way to make our visit pleasant. We spent quite a bit of time in the tower and I believe we all learned a thing or two. We thank the Bonds for the great idea.

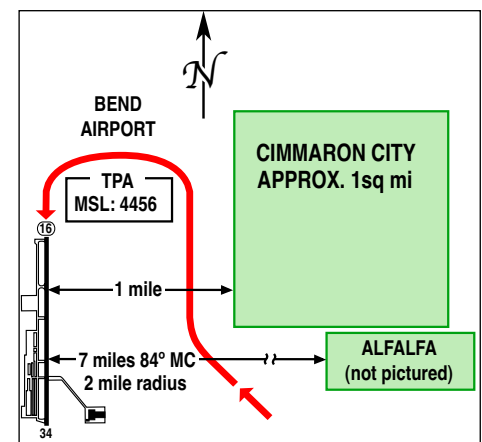
While we were there Mike Brownlie went flying and showed off the shiny turbo 206 he recently traded for. We all wondered if he went flying just so we could admire his new plane. I have to admit it is a really pretty plane.

We didn’t get to fly but we had a good turnout (10 people) and everyone seemed to really enjoy themselves. Maybe next month the weather will let us fly.

A thought for the day, by Abraham Lincoln: “Most folks are about as happy as they make up their minds to be.” Just think how lucky we all are!! I personally don’t know of anything that could make a person much happier than being able to combine flying and spending time with really great people like the members of CO-OPA.

I and Norma want to wish each and every one of you an even better year than 2002. May we all stay healthy and happy and be able to fly where ever and when ever we want. ✈

PLEASE REMEMBER TO FLY FRIENDLY



The areas in green are noise sensitive areas

continued page 4 column B

January 2003



OUR CHARITABLE ENDEAVOR

by Don Wilfong

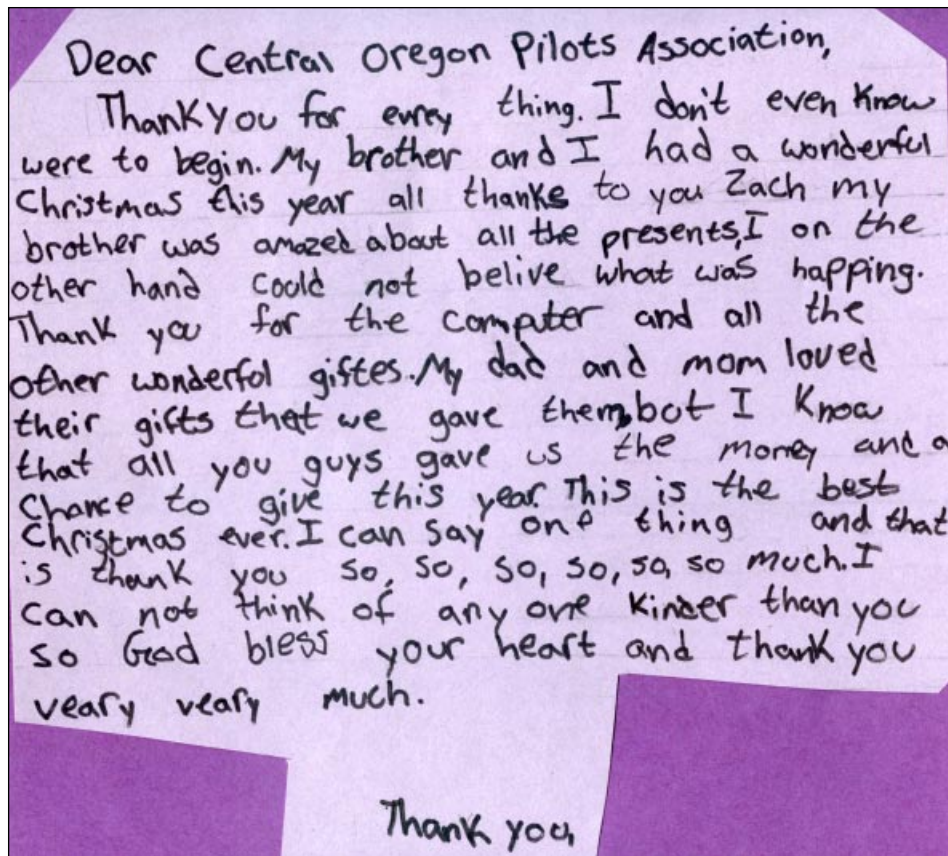
“WAS A RESOUNDING SUCCESS”

Our group raised \$275.00 in donations from the members. This was just the beginning.....thru Jack and Ruth Kohler an iMac computer was donated and Jack loaded it with all the latest things a young student should need. What is a computer with out a printer?? So Jack and Ruth donated a printer and all the cables etc.

There is still more.....Also thru Jack and Ruth, a person from outside our group who heard about our efforts, wrote a check for \$500. to see that the girl and her brother had proper clothing, shoes and etc. to wear and whatever else they might need.

It was thru teachers, Steven Wetherald, Jo Crisafi and Colleen Lynch, that we were made aware of the situation of this special young girl and her family. These teachers went shopping and gathered a quantity of gifts consisting of clothes, books, school stuff, other necessities and toys. They also took the two children shopping and let them buy gifts for their mother and father. The ability to give as well as to receive did loads of good for the children's self esteem.

For obvious reasons we have not identified, in this article, the recipients and have not shown any pictures of them. We will have some pictures available for our group to see at the potluck/meeting on Jan.



This gift was given, in the true spirit of giving, with the absolute condition that no one was to know who gave it... don't even ask... we will respect their wishes.

It makes a person feel warm and fuzzy all over and it is hard to keep a dry eye when you realize how many really nice people there are in this world who are willing to give of themselves to help others who might be less fortunate. Just look in the mirror to see one of these really nice people.

16 and will try to describe the help, hope and true joy that our groups efforts brought about.

A special "Thank You" to Jack & Ruth, Norma, Nancy, Gary, the three Teachers, the anonymous donor and to the others who were directly involved in making this happen. Also a great big "Thank You" to all the rest of our group for your thoughtfulness in helping with this. It went to a very good cause and not only did it make this young girl and her family very happy, it made the rest of us feel very good too. ✨

Hangar Flying from page 1

wet runway is extra hazardous because it may result in a \$\$\$ priced skid. Land on the center of the runway for the same reason that on wet roads you should drive on or close to the crown of the road to minimize the water level. Get all three wheels firmly on the ground. Lift flaps, deploy spoilers, do everything to get weight on all wheels. Nose wheel tire pressures on some aircraft are less than the mains so expect degraded nose wheel steering. Since the mains are more apt to have greater tire pressures, use differential braking for steering. (Hey, folks, the way I've couched this write-up I sound like a father lecturing his child. Sorry about that, but I guess it, s O. K. since I'm old enough to be the father of most of you. Just don't embarrass both of us by addressing me as Dad. Don't take it to heart; just take it.)

While in flight, raindrops striking airfoils form an "ejecta fog" of slashed-back droplets at the leading edges. Acceleration of these droplets in the boundary layer (BL) reduces the velocity of the airflow causing BL separation. This, in turn, results in an increase in drag and an early stall. Surely, you know how to compensate for that else you'd not be around to read this. Rain roughens airfoil surfaces resulting in loss of lift and an increase in drag. Rain impact craters and surface waves in the water film formed on the airfoil effectively roughen its surface; therefore, it has the same effect on lift and drag as frost. We all know what will happen should we attempt flight with frost on airfoils. In addition, waxed surfaces cause water to form beads that significantly roughens the airfoil's surface. Simulating the rain scenario I described above, wind tunnel tests showed an average of 17% loss of lift and a 71% increase in drag resulting in a premature stall, depending upon the airfoil's configuration. This phenomenon alters the airfoil's angle of attack/coefficient of lift (a/CL) relationship thereby rendering the stall warning system invalid. Thus, stall will occur at a lower angle of attack. Other factors that may produce the above-described effects include sand, hail damage, bubbled paint, etc. Laminar flow airfoils are especially vulnerable to the above mentioned conditions - - Mooney drivers take heed.

Life's full of traps! ✨

BTW, HAPPY NEW YEAR.



2003 First Fly-Out from page 1

it again, [Nampa Mun \(S67\)](#) has the [Warhawk Air Museum](#) on the field with parking right at the museum and food is close at hand so it should be an interesting and easy fly-out. Plan to meet Sat. Jan. 18 at the Flight Shop at 09:00 for a 09:30 departure. I hope to see you there.

If you have any comments or ideas please let me know. I would like to hear from all of you as to your ideas for places to fly and your preference on having fly-outs on Saturday or Sunday. Maybe we will mix it up, maybe we will sometimes have fly-outs on both Sat. and Sun. and maybe we will try fly-outs on more than one weekend in a month. How many people are interested in overnight trips? For example, Idaho has some great back country strips suitable for our type aircraft. Do you like camping or do you prefer better accommodations? It is your group so let me know your feelings and we will try and do the things that make the most people happy. I have "senior moments" and I don't always remember every good idea I am told so please e-mail or write me with your ideas and comments so I have a hard copy to work from.

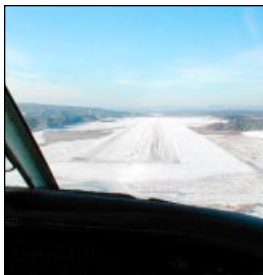
Some of the best fly-outs are spur of the moment events.....if you know you are going to fly-out somewhere and would like company you might consider a few phone calls or if time permits you might put it out on the e-mail to the group and give some of the others a chance to join in. Quite often that is all the encouragement some of us need as most are looking for any reason to take to the air. The list of CO-OPA members with their phone numbers and e-mail addresses is on the CO-OPA web site. Instructions to access the website are in this newsletter. Please also send me any corrections to information about yourselves so I may keep the membership roster up to date. ✈

CHECK THIS OUT

by Jack Kohler

This has been a very busy month for me and I would like to thank everyone that contributed to this month's newsletter. It was really a pleasure to have contributions, it made my job easier, my thanks to all of you.

I used a nice sunny, warm day picture for the Banner, so here's a seasonal picture you might enjoy, titled "Braking Action Poor". ✈

**From the Ramp from page 2**

mouth of babes") I am sure I was not over 12.5 for no more than 29 minutes, but the real question is not whether I busted a FAR, but whether I impaired by it? Was I safe? Hmm.

When oxygen level decreases, pulse level goes up as your body increases breathing rate to try to get more oxygen. I knew that. And you get poor coordination, lethargic, make poor decisions, get a little dizzy (some say I am always 'dizzy'), muscles tire more easily, maybe nausea, hot and/or cold flashes, visual impairment, and more. Have I ever returned from a flight over the Cascades with aching legs or other muscles? Headache? Found myself correcting my heading more than normal because I kept drifting off course? (Cherokees have rudder trim, but I do not have "the button".)

As soon as the sun goes down we don't see as well (remember the 'cones and rods' in biology class) – and oxygen starvation makes this worse. Charles pointed out that many of their new clients came to them because they noticed these night landing problems, and realized it was oxygen related.

Worse, because it comes on gradually most don't even see it (pun intended).

Charles gave me a brochure by Nonin for their FlightStat Pulse Oximeter, a spring-loaded device you clip onto your finger, which reads out your oxygen level and pulse. I told him I had gotten one of these brochures at the Oregon Air Fair in Albany in September, read it – and threw it out because it was about something I figured I did not need and would not get. I have changed my mind about that.

Further, after re-reading the October Flying magazine article, "The Hazard of Oz" by Peter Garrison, and an article about an oxygen related accident I recently read in the book They Called it Pilot Error, and materials given me by Charles, I have decided that perhaps even I, an "under 12.5 pilot" really ought to have oxygen in my little plane. Especially if I am going to continue flying over the Cascades, as I love to do, and to Oshkosh next summer, as I plan to do. After all, while not cheap, its not expensive, either. A four-place system costs about \$750 (complete system), and a two-place system \$650 – which I figure is less than the cost of the disappointment I would have from a low oxygen-related accident. And they are handling the Nonin FlightStat now (they gave one away as a drawing prize at Oregon Air Fair in September, but I did not win it), and are offering them in a deep discount when packaged with an oxygen system. (Plus, there are further

benefits to local buyers, which we can discuss at the next meeting.)

After returning home I opened Jeppesen's Private Pilot Manual, which recommends pilots to use supplemental oxygen any time they are over 10,000', and over 5,000' at night. So I called AOPA to talk to one of their pilot specialists: "We always recommend using oxygen anytime you are over 10,000, 5,000 at night" she said.

However, like many of you I still wanted more information, more facts, more guarantees, as it were, that all of these "facts" were really true, and that I really would benefit from an oxygen system. (Besides, if you remember the start of this article, I went in to look at the Pulselite, more on that in a future article.) So I set up an appointment to do some actual, hands-on, real-life flight tests with a Flight-Stat Pulse Oximeter, and an actual Nelson Oxygen System in flight, at altitude, in my own plane. And that, boys and girls, will be the subject of a future article. Stay tuned to 123.0. ✈

CHAPTER OFFICERS 2002

PRESIDENT: Nancy Lecklider
3054 NW Clubhouse Dr
Bend OR 97701
541 330-1853
nancybob@teleport.com

VICE PRESIDENT: Dean Cameron
20015 Chaney Rd.
Bend OR 97701
541 389-8285
dcameron@empnet.com

SECRETARY: Gary E. Miller
TREASURER: 109 NW Wilmington Ave.
Bend OR 97701
541 383-2435
gem@rellim.com

FLYOUT CHAIR: Don Wilfong
210 SE Cessna Drive
Bend OR 97702
541 389-1456
dwnw@bendnet.com

PROGRAM CHAIR: Clay Trenz
2314 Monterey Pines
Bend OR 97701
541 317-2899
claytrenz@aol.com

EDITOR: Jack Kohler
63070 Deschutes Mkt Rd
Bend OR 97701
541 389-1493
jkohler@mactechsys.com

Visit our web site at: co-opa.rellim.com for more info and link to the state OPA website.

For members only lists: User Name: S07
Password: 123.0

