

Website: http://co-opa.rellim.com/

# President's Message:

This month we put some new faces to an old name. Leading Edge Avionics is now Leading Edge Aviation and has new ownership. Along with the name change comes new services and new visions. In addition to the old avionics service they are now able to provide general aircraft and helicopter maintenance as well as helicopter sales.

Brad Fraley is the new President, Travis Warthen the V.P. Avionics and Justin Harries is V.P. Helicopter sales. The team was previously at Hillsboro airport so some of our members may already have met them.

We had a chance to chat last week and they have a lot of exciting plans for their new baby. They will drop by for us this month so we can all chat with the new kids on the block.

Nancy Lecklider will also be briefing us about the short field clinic she has been setting up for this weekend at Madras. The clinic is a partnership between the FAA, the 99s and the CO-OPA. All participants will receive credit for the Wings program. See Nancy's email for more details. We could use a few more CFIs so if you know of any that would like to be a part of the program, please have them get in touch with Nancy: (541) 330-1853 or mailto:leckone@bendcable.com.

Last month we did quite well without a speaker. Thanks to all the pilots that had a story to tell. We all learned a little about swimming in Lake Washington the hard way. I just read a psychology study on pilots and accident rates. Those pilots that were open and honest about their bad incidents were much less likely to be involved in serious accidents that those that played it closer to vest. So we must have prevented a lot of future accidents at our last meeting.

Next month we are sure to have another great speaker, if you know who it should be then please drop me hint. Then in December be ready for our annual Holiday Bash! October 2005, Vol. 05, Issue 10

#### Calendar:

<ul> <li>20 October - Monthly Meeting</li> <li>22 October - Monthly Flyout - Short Field Clinic 10am briefing in Madras.</li> </ul>
17 November - Monthly Meeting 19 November - Monthly Flyout
15 December - Monthly Meeting - XMAS Party 16 December - Monthly Flyout
<ul><li>19 January - Monthly Meeting</li><li>21 January - Monthly Flyout</li></ul>
17 June 2006 - Bend Airport open house

# Web doings:

I discovered that KTVZ-Z21 has their latest weather graphics online. A link there is now on our web site: <u>http://www.ktvz.com/wxr.html</u>

As always, the CO-OPA website contains recent newsletters and other goodies.

#### http://co-opa.rellim.com/

To access the members only areas the username is "S07" and the password is "123.0".

# My Inbox:

Christian Boris, one of the Z21 weathermen, gave me a call last week. The need for some sort of weather radar in Central Oregon is as obvious to Z21 as it is to any pilot passing through our area. Christian has located a supplier of a small weather radar and is working on funding and site location issues. Installation cost would be about \$150k to \$250k for a small system and they are looking for ways to share the cost with other organizations.

That is a little out of the CO-OPA budget. Sad that, as one of the few places in the lower 48 not to have weather radar, that NOAA can't make this happen. If any of you have any ideas, then please share them with Gary Miller or Christian at: (541) 383-2121 or <u>cboris@ktvz.com</u>

### Random Thoughts:

My thanks go out to Don Wilfong and Barry Howarth. Both have recently put good effort in to sharing the magic of flight with others. Too soon we become jaded to the magic of flight and sharing it with others is a great way to recapture that initial joy we had in flight.

On Columbus Day this month Don organized a group of local pilots to fly a group of Japanese exchange students over Crater Lake. I am sure Don will have an article thanking the individual pilots so I would like to take this opportunity instead to thank Don for putting this together.

Flying over Crater Lake on a perfect Fall day is always a pleasant event. Still no matter how hard we try, the first time will always be the best time. Over time even such a magical journey loses it's awe when it is repeated too frequently. I can assure you now that sharing someone else's first time is almost a good as your first time.



Crater Lake

These kids traveled 8 time zones to a land where they could barely communicate basic needs, trusting the kindness of strangers to see a bit of our world most of their countrymen will never know. They had seen and learned about an enormous variety of strange places, peoples and customs previous week.

By now they were in psychic overload, the senses dulled by the crush of recent events. Crater Lake from 10,000 feet was still able to fill our planes with excitement and joy. The cabins nearly burst with the energy. On the radio as we pilots coordinated our tour routes it was clear that this had a magical effect on the pilots as well.

We have given them a gift to last a lifetime, and I for one was walking on air for the rest of day. Well done, Don.



Broken Top

Barry Howarth, from The Flight Shop, has also been working on a plan to share the magic of flight. It seems that a while back Barry had given a dying woman one of her last wishes: to see the Cascades from the air.

Not only did Barry help the dying woman and her husband find peace in her last days, but he also gained more than he gave in helping them.

It might have been a one-time event until Barry recently bumped in to the folks at Central Oregon Hospice and they hatched a plan together.

Barry has made the offer to the Hospice to see if there are similar needs to be met among their clients. Nothing is set yet but Barry is making the effort to reach out and see if the local pilot community can help. This could be a great way to turn just another quick trip around the local Bend area in to a something much more rewarding.

As things develop the CO-OPA will try to help as much as we can. More on this later as plans hatch. Thanks again Barry for working to see how we as pilots can uniquely help our community and work off some bad karma at the same time.

Gary Miller



Dave Dressler's Cardinal RG sporting a new paint scheme .. the missing wings and empennage are another story ...

### September Flyout to Hood River

We had planned a short flight down to Crescent Lake State Airport (5S2) with about a block walk to a small café for breakfast. It is a good airport and we have enjoyed the food.... but.... n e-mail from Curt Turner (he and his wife Jackie fly the Piper Apache) suggested we go to Hood River (4S2) as they were having a Fly-in and a Pancake Breakfast... so...with that being a much better plan than just flying to breakfast, we immediately decided to go to Hood River. It was a very good choice. Thanks Curt, for suggesting it.

We (the Wilfongs) flew out to Bend from Pilot Butte International (80R5) and met everyone at the Flight Shop, had coffee, collected our wits, decided who was going with who and headed for Hood River. Gary Miller took Ed Endsley in Gary's Turbo Centurion, Rob Nash and his wife went in their 150, Curt & Jackie Turner took their Apache and Don & Norma Wilfong

took Arnie and Carol Vetterick in the Wilfong's Skylane. (Arnie's Bonanza was in for the Annual so he said "it was okay to ride in a Cessna"). The air was smooth the sky was blue and the flight was really great. The 150 departed a little before the rest of us and we never quite caught up with him on the way to Hood River.



We all converged on the breakfast and after eating our fill (the breakfast was good and there was plenty of it) we wandered around and looked at all there was to see. There were planes on display (even a plane with chrome wheels), classic cars on display and who would have ever thought that there would be a large hangar full of Antique Planes, WWII military vehicles and a whole lot more at Hood River??



They provided transportation to and from this large hanger on the North side of the field...one mode of travel was a police paddy wagon (didn't think I would ever ride in one of those) and the other was a wagon with straw bales to sit on pulled by a tractor. It was a beautiful day and the open-air ride back, on the straw bales, was fun too. This show was no where near as big as the one Madras puts on but it was still a lot of fun, the people were friendly, the food was good, the displays were interesting and if they have it again we will plan on being there.



The paddy wagon

After we had all looked at everything we wanted to see and with the wind starting to come up pretty good we all mounted our faithful steeds and headed back home. As we (in the Skylane) passed the 150 it felt good to know that there was at least one of the other three planes that we were faster than. Both the Centurion and the Apache tuck up their landing gear and the Skylane can't quite keep up. But all three of us burned a whole lot more fuel than the 150 and I bet they enjoyed the trip just as much as the rest of us and they had more time to look at the scenery. Isn't that what we fly for anyway????

The Wilfongs, with the Vettericks on board, landed at Pilot Butte International where we pulled up some lawn chairs, basked in the beautiful weather for a while and had some refreshments before Don drove them back to S07 to pick up their car... All in all it was a really good fly-out....sorry some of you missed it.

Don Wilfong

# Madras FBO

I see a nice new FBO building being constructed at Madras City-County (S33).

Don Mobley hopes to occupy by Jan 2006 ... it may even include a snack shop ....

Ed.

## My Friend Adam's First Light Flight

Two years ago I took my nineteen-year-old friend, Adam, on his first light airplane ride. He was home from the U.S. Marine Corp. basic training for a brief visit with his family and friends before being deployed to Iraq to carry an automatic weapon in an unarmored Humvee and escort supply convoys deep into Baghdad and Fallujah.

I offered this aerial trip into the High Cascades as a token of friendship and memory of his home here in Central Oregon. I like Adam a lot. He's a gentle, artistic spirit. I think he joined the Marines to make his way and didn't know what was in store. Certainly a damned hard way to come of age. A very cruel trick.

On a crystal clear Central Oregon morning we climbed out of the Bend airport and headed toward Bachelor. Adam was thrilled with the unusual aerial view of his familiar hometown as we turned this way and that to see the sights. He was glued to the window and kept the intercom busy with his observations. As we approached Bachelor and the Cascades filled the windscreen, Adam became quiet and seemed to sit back and just observe. We banked around the snow peaks with the lakes below and soared through the high country wonderland. He would look at me and smile. We shared the knowledge of how special it was to be there and to see this rare point of view. We felt very lucky.



I reluctantly broke the spell when it was time to return to Bend. Coming back out over town didn't seem quite the same. The activities below seemed a long way away. Looking over our shoulder at the mountains was beautiful but melancholy. The view beckoned to our spirit to return soon.

My landing at Bend was the usual hop, skip, and a jump. Isn't it great when new passengers don't know the difference? After we tied the aircraft down we stood there looking back at the mountains where we had just been and were silent for a while. It just seemed natural to give each other a hug and say thanks. Maybe next time we can do Crater Lake.

Adam has just been back home this August for a short time after returning from active duty in Iraq.

We didn't get a chance to fly this time but we got to celebrate his birthday. Now he's on his way back to the mud, dust, bullets, and bombs for another tour in Iraq.

Be safe Adam.

Your friend, Ed.

## OCTOBER FLY-OUT FUN!!!

Our October Fly-out, planned for our regular fly-out date Sat. Oct. 22, will be a "Short Field Clinic" at the Madras Airport (S33) being headed up by Nancy Lecklider.

Pilot Briefing at 10:00 a.m. Bring your airplane and test your skill.

There will be a couple of CFI's available for advice and possibly some dual instruction. We are asking the F.A.A. to approve the Pilot Briefing and the day's events for part of the Wings program .

There is no charge for this event but we will accept donations, to help cover the expenses..

This event is sponsored by Central Oregon Chapter of the Oregon Pilots Association and The Central Oregon Chapter of the 99s.

Part of the plan is to have COOPA put on a lunch (probably hot dogs etc.) with volunteer help. Nancy is going to need some volunteers to help with the lunch and also several to help put the event on. .... If you think you can help in any capacity please call her at 330-1853 to let her know and to find out what needs to be done. It is important that you contact her as soon as possible so she can plan on you being there and can designate different tasks as needed.

Don Wilfong



For those who missed the August Madras Airshow, you also missed Dwight manning the 'temporary tower' .... Note the officially labeled Madras Airport chair ....



Maybe this is the offender Dwight was looking for ...Don Mobley in 'student mode' ... (Photo credit: Ed)

## COOPA SAFETY CORNER

#### By Joel Premselaar

At our last meeting, in deference to several new attendees, we had a round of self-introductions. Attendees identified him/herself and then related personal aviation story(ies) experiences. As I heard some tail puckering tales, the light went on in what's left of my dim mind triggering a potpourri of safety related anecdotes. Once home, I started a list of safety concerns that grew beyond the allotted space for this issue.

My head was full of possible causes for the "ditching in Lake Washington" episode.

What would cause the Cessna's engine to fail? Mechanical failure not withstanding, as pilots we have control over many fuel related threats. Since the aircraft of interest was a Cessna, my thoughts went to a Cessna 182 that was fueled at a Washington airport I'll leave nameless. The fuel selector was in the "both" position during fueling. The right tank was topped. The person fueling the aircraft was called to the phone. Several minutes later he filled the left tank. Well into the flight, the pilot noted that both tank fuel indicators were jiggling at empty. He survived the forced landing. Lesson learned: - the fuel cross-fed during the interruption of the fueling because the fuel selector was in the "both" position. The pilot reasoned that since both tanks were filled he assumed that the gauges were in error because he knew the range that full tanks would give him. It is well known that fuel gauges are unreliable. Incidentally, did you know that the basis for certification of a fuel gauge is that it indicates "empty" when the tank is empty, period!

It is worthy to note that fuel systems do suffer vapor lock in the fuel line between the tank and the engine's induction system.

Keep in mind that even though aviation fuel is specifically blended for very low vapor pressures, 7.0 psi maximum on Reid's vapor pressure chart, vapor locks can and do happen. Here is but one scenario. You're in a low airspeed sustained climb (engine is getting hot). Your oil was at the minimum allowable as cited in the pilot's operating handbook (POH) /Airplane Flight Manual (AFM). Oil is a great heat sink. In hot weather, its level should be as high as the POH /AFM allows. Experience may dictate a less than the maximum level. In some aircraft, oil tanks filled to the published maximum will result in some being pumped overboard, especially in hot weather. Cowl flaps? Huh? Oh yeah, aren't they just a poor man's speed brakes? You continue to climb and soon pass through a temperature inversion; how nice, visibility improved (engine gets even hotter). at low-density altitudes (engine You're now compartment is blistering). You lean to optimize fuel-toair ratio and do so excessively (all engine temperature indicators go off the scale).

It suddenly gets very quiet and though the cockpit temperature is about 68°F, you are sweating profusely! VAPOR LOCK!!! Oh, H E DOUBLE TOOTHPICKS. Never mind the vapor lock. Your engine just experienced a melt down! Take heart. With time available and the "know how" for your specific type of induction system, a vapor lock can be cleared.

Another point. You are descending from high altitude. You're occupied looking for reported traffic or you're IFR and concentrating on instruments. There is a burp or two then silence. Now under stress you speak (shout) aloud for the world to hear. "Oh shucks!" In this circumstance, shucks is just a euphemism. "It's the mixture control, you idiot! Oh well, I'll enrich the mixture. Hey! Nothing happened." You fuel injection types. Have you ever tried to restart a fuel-injected engine in flight? It takes a bit of time to start, doesn't it? If this happens at low altitude, count upon having a sudden and much too intimate relationship with Mother Earth.

A noteworthy aside; the FAA stipulates that gravity fed fuel systems must be capable of the providing a minimum fuel flow rate of 150% of the engine's needs at full power (standard day at sea level). Fuel pump systems (think low wing aircraft) must provide 125% fuel flow of the engine's needs under the same conditions. Now then, are ya gonna upgrade your machine by replacing a 230 H.P. engine with a 320 H. P. one replete with new fuel lines and (in low wingers) pumps? I will admit that I haven't researched whether STCs are required to address these requirements.

Switching fuel tanks: - this is fraught with a series of OOPS. I always switch leaving enough fuel in the tank to reach a landing site. Here are a couple reasons for that. The fuel tank selector may malfunction or, as in the case cited by me, the handle may break off in your hand.

#### SAFETY CORNER continued ...

The reason that fuel tanks have standpipes is to keep the sludge that lies on the tank's bottom from flowing into the fuel system. The existence of standpipes is the story behind usable vs. unusable fuel. When the tank is low, it doesn't take much turbulence to Tsunami (coined verb) sludge into the standpipe. There were a few cases where there was but one standpipe aft in the tank and when the fuel was low and the aircraft descended nose low, the standpipe was uncovered and fuel starvation occurred. In the early days, this was prevalent with tail wheel type aircraft. Now then, with fuel in the selected tank in a low state, would you sideslip to a landing or induce negative "Gs" thereby unporting the standpipes and/or sloshing the sludge?

You've heard me and one other urge you to protect fuel vents from mud daubers. The COPA old timers have heard this from me ad nauseam, so 'nuf said about this.

Many of us have had a backfire when starting an engine. The manuals for several aircraft state that in the event of a backfire, do not attempt to start the engine or allow it to run without conducting a complete inspection of the entire induction system. Serious damage can result from a backfire. If you fly a P&W R-985 take special note of this.

Fuel systems vary drastically by aircraft type. Excess fuel provided to the carburetor or fuel injector system is routed back to a specific fuel tank. One common denominator seems to be that the fuel return is usually to the left main tank. If that tank is full and you do not select it first to provide space for the returning fuel, I can assure you that you'll be dumping fuel overboard.

When you were a student pilot you were told to be thoroughly knowledgeable about the aircraft you're flying. Now then, I assume that you are in a position to play the "Center of Gravity (c.g.) Game" with your fuel. Here are some tricks I use in my Bonanza. My auxiliary tanks are outboard and aft of the mains. If I want speed and or long range, I'll use the mains first to favor an aft c.g. resulting in less drag; a caveat - this compromises pitch stability and requires a delicate touch when employing a now sensitive pitch controller. When expecting turbulence or IFR conditions, I use the aux tanks first to favor a forward c.g.; this results in a more stable platform and a less sensitive pitch controller. Fuel in my aux tanks allows more "Gs" since they are outboard thereby opposing wing-bending forces; e.g., aircraft with tip tanks, especially with fuel in them, can tolerate more "Gs" than those of the same type without tip tanks. All that said, I hope that it is imperative that you play the c.g. game safely within the weight and balance envelop from takeoff through landing.

Finally, since the title of this article is "Safety Corner," I hope I scared you enough with its contents to keep you scared enough so that you may fly safely with out fear. Does that make sense to you? Good, because it flat out confuses me!

And, to wrap it up, some memorable in-flight photos; courtesy of Ed Endsley ...



Don Wilfong in his 757



757 on 'Don' Patrol



Ed and Bill Witt