

CASCADE FLYER



Banner Photo: Jack Kohler

CENTRAL OREGON • OREGON PILOTS ASSOCIATION NEWSLETTER

DECEMBER 2002 Issue

IN THIS ISSUE

- [December Meeting](#)
- [December Fly-Out](#)
- [November Fly-Out](#)
- [Hangar Flying](#)
- [LOP Operation](#)
- [From the Backseat](#)
- [City of Bend Update](#)
- [YCCO Update](#)
- [Check This Out](#)

DECEMBER MEETING

This month's meeting will be on Thursday, November 19th, 6:00pm at the Bend Airport (S07) in the Flight Services building (The Flight Shop).



After our pot luck dinner we will have the 3rd Annual Gift Exchange "Chinese Auction Style". This is not intended to be a stressful event. The last two years were a lot of fun and this year should be even better. Anyone that brings a wrapped gift will get a gift. Both husband and wife should bring gifts. Since the partner may be non-flying then gifts only slightly aviation related are encouraged as well. It should be something that you already have but don't need anymore. Therefore, it doesn't have to be in perfect condition, just something which may have some value to someone else. Wrap the present to your own personal style (brown bag, plastic bag, garbage bag, fancy paper). Everyone (men, women, children, young, and old) should bring a present to receive one. You don't know what treasure you may receive unless you come and join in the fun.

Also in the holiday spirit of giving, Nancy Lecklider will be presenting the club with an opportunity for CO-OPA members to make a donation for a very worthy young seventh grade student in need of financial support including medical expenses. ✈

DECEMBER FLY-OUT

by Don Wilfong

Wow has this year gone fast or what ?? Let's plan to meet at the Flight Shop at 08:30, Sat. Dec. 21 for a 09:00 departure to Nampa, Idaho (NAMP MUN "S67") not to be confused with Caldwell Industrial.

continued page 6 column A

NOVEMBER FLY-OUT



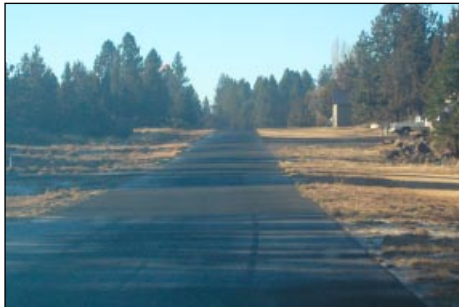
by Don Wilfong

FLY-OUT TO LAKEVIEW !! Sat. morning Nov. 23rd. was beautiful, cool and sunshiny without a cloud in our sky. There was light fog in the area of Bend airport and heavy fog over Redmond with everything else, we could see,



You'll have to look close, but three planes of our party are taxiing for take-off in the early fog at Bend airport.

being wide open. I guess Klamath Falls also had fog. (Glad we decided to go to Lakeview). We invited Jack Kohler to ride with us and he wanted to experience the Pilot Butte Airport first hand, so he showed up at the Wilfong's at 08:45 and we flew out to Bend to meet the rest of the adventurous folks for the 09:30 departure.



Yes, those are trees at the far end and yes, that's a wind sock on the left. Welcome to Pilot Butte airport.

There was a total of 8 airplanes and 17 people who went on the fly-out and Mike Brownlie would have been there too except for the fog in Redmond. President Nancy Lecklider and her husband Bob flew their 182, Sec/Treas. Gary Miller with his ever faithful co-pilot "Kimmy the dog" flew his Centurian and had Ed Endsley as a guest, Jim Bowers flew his TR182, Randy Potter flew his Cherokee 140, Mike and Ann Bond flew their Cardinal RG, Steve Wright and his guest Rick Christen (both from the Pilot Butte Airport) flew Steve's 175, Parker Johnstone

continued page 3 column C

HANGAR FLYING



by Joel Premelaar

Ever since the Airbus accident in New York, vertical tail sections have preyed on my mind, such as it is. Let's have a look at rudders and vertical stabilizers.

At one time or another, many flight instructors will bait a student with the question, "Why does an airplane have a rudder?" When the student answers, "Well, its used to turn the airplane, isn't it." Of course, the student relates this to taxiing the aircraft. By the way, do YOU know what turns an aircraft in flight? Every so often, I'd get a starting student who, at the onset of training, when taxiing and on takeoff, would push the left rudder pedal forward for a right turn. Why not? After all, rudder controls are installed opposite to convention. Whether you're turning a car, a sleigh, RVs, etc., to execute a right turn, you move the control aft on the right side - - not so with an airplane, right? In a deep and somber voice, our guru drops the following pearls of wisdom upon the hapless student. "The only purpose for the existence of a rudder is to counter adverse yaw and perform side slips." Salaam. (See Hangar Flying dated June 2000 re adverse yaw; if you don't have or remember it, see me for a copy). Well, our pontificating instructor is correct. It's true that the rudder will do those things but they are not the only reasons for its existence. A rudder will also enable you to negate skids/yaw which, I'll grant you, is a slip in a way. In the early years of jet fighter/attack aircraft, we discovered that a nylon string attached on the centerline in front of the windscreen told "numb butt pilots" that the ball was centered. We used to have a ball mounted right on the gun sight, but with head-up displays and the telltale string, there was no need for the ball. This meant that we could dispense ordnance accurately insofar as yaw was concerned.

Pilots flying multi-engine aircraft (not those configured like the Cessna 337 Skymaster) used rudder against an engine out situation until some bright character found that aerodynamically, engine out symmetrical flight could be obtained by using the telltale string and a wing lowered into the good

continued page 4 column C



LOP OPERATION

by Ed Rosiak

Ed considers himself a "Caligionian". That is, he lives in Cupertino California and Sunriver Oregon. Ed enjoys everything about Oregon, but not necessarily the winters. Ed maintains a hangar at the Bend Airport where he keeps his Lancair ES when he is living here in Sunriver. By the way, Ed tells us that you don't have to build a retractable Lancair to go fast. He typically sees 220 TAS at 13K at 63% in his fixed gear ES when traveling back and forth.

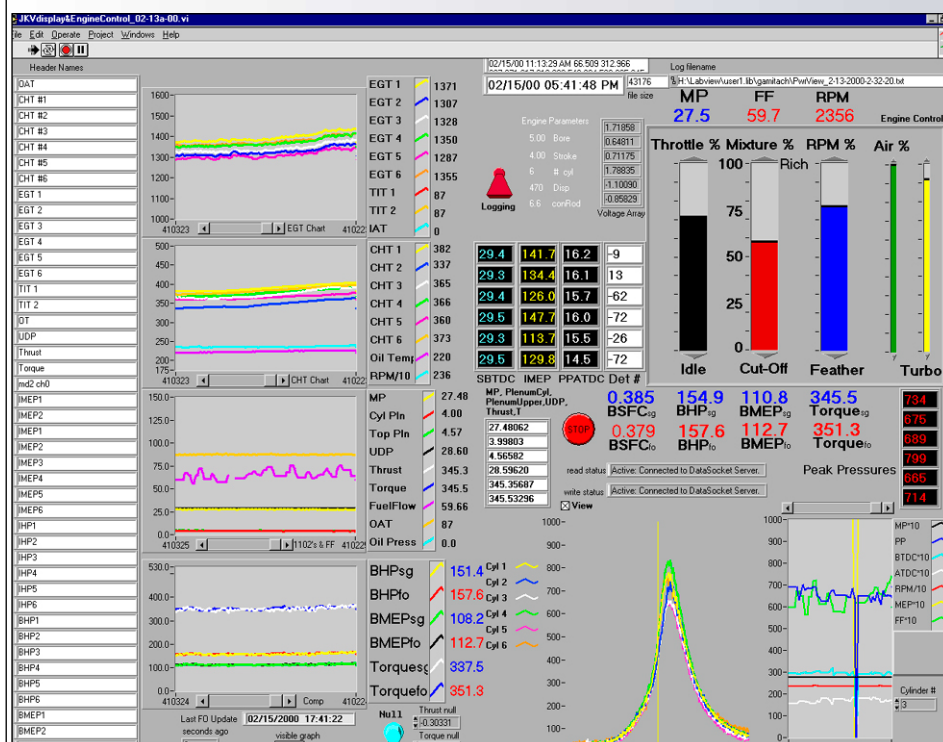
When the opportunity to attend the Advanced Pilot Seminars aircraft engine operation weekend seminar arose, I took it. Located at the General Aviation Modifications, Inc. (GAMI) facility, in Ada, Oklahoma, (87 miles south/southeast of Oklahoma City), the seminar started on Friday night. Advanced Pilot Seminars is the cooperative effort of three very knowledgeable, interesting, and experienced men. Walter Atkinson an A&P, CFII-Multi, who works on war birds, flies his own Beech 18, all of which when he isn't busy being a Dentist; John Deakin, is a retired JAL Captain and CAF pilot with mega hours has written numerous articles for AVWEB; George Braly is a principle and chief scientist for GAMI. All three men have CFII Multi, and A&P ratings. Not only are these guys knowledgeable, they are friends, and their constant interaction made the class a lot of fun as we tried to comprehend the fire hose level of data over the weekend.

Let me state up front that this article is focused on turbo-charged engines, and applies to fuel injected engines. Carbureted engines are not addressed due to their inherent poor fuel distribution, which is of course, why engine manufacturers went to fuel injection. As it turns out, the next logical step, making fuel injection more effective, was lost on the engine manufacturers. This is where GAMI comes in, manufacturing balanced fuel injectors for most Lycoming and Continental engines. Custom built for your aircraft engine, each set is based upon engine monitor reports you supply to GAMI.

A little background information on GAMI is in order. The business case for GAMI resulted out of the rediscovery that aircraft engines could be operated more effectively at lean of peak (LOP). In the process, GAMI discovered that a balanced fuel flow was required to achieve smooth LOP engine operation. This is because LOP operation amplifies the effects of unbalanced fuel flow in the form of a rough running engine.

I have been considering LOP operation for some

MONITORING THE ENGINE



The above graphic could best be described as one of several comprehensive realtime measurement layouts that, in this case, provides combustion pressures and other "key" parameters. Throttle, mixture and RPM percentages can be individually adjusted to determine a full range of data regarding the peak psi and performance of each cylinder. Cylinder pressures are sampled at 50,000 samples per second allowing to determine "when" the peak pressures occur, measured in degrees after top dead center, (this relates to power efficiency) and the "value" of the peak pressure (psi) which is the structural load. Trend lines are developed over time displaying the changes in CHT, EGT, BHP, Torque, Manifold Pressure and more as well as providing the current digital values. Timing can also be changed by adjusting the spark advance cylinder by cylinder and monitoring the digital values (eg: SBTDC). Detonation is readily detectable and the severity determined by analysis of the combustion pressures (in accordance with FAA methods). With the excellent control of the ignition timing they have developed, they can effectively control the combustion pressures so as to be able to run these engines on unleaded (lower octane) Avgas and yet not suffer loss of power. The amount of information this program provides allows you to see and understand how the engine responds and is certainly not relegated to LOP operation. One can see and compare ROP, peak, LOP, you name it, to cover the entire operating spectrum.

Click on the following link to view [additional comprehensive graphic layouts](#). There's lots more to this system and it's capabilities, GAMI welcomes you to visit them and learn more for yourself.

time now for multiple reasons. First, I want to make it to 'time between overhaul' (TBO), which seems more difficult these days; secondly, the possibility of saving fuel operating the big TSIO-550E in my Lancair ES. Further, I wanted to learn how to operate my engine based on scientific data versus the "best guesstimate", or the anecdotal information handed down over the years.

Today, LOP engine operation remains misunderstood, and controversial. To understand it better, I have read much of what John Deakin has written

for AVWEB (located at <http://www.avweb.com/articles/pelperch/pistonlinks.html>). He often referenced the LOP operation of the radial engines used in early air transport days. LOP was standard operating procedure for these engines. The flight engineer used something called a "Torquemeter", which measured engine/prop gearbox pressures, to set a specific horsepower with the mixture. GAMI found they were able to substitute exhaust gas temperature (EGT) for the Torquemeter, using the specialized help of engine monitoring from products available such as JPI, EI, GEM.

continued page 4 column A



FROM THE BACK SEAT

by Roger Wilco

Thoughts on Comm(on) Sense

Oftentimes, a window into the overall skill level of a pilot is revealed in the way they communicate on the radio. Pilot's souls are bared with each and every call. Verbosity is the aviator's enemy. Clear and concise communication is the goal. Sloppy radio skills usually are indicative of sloppy airmanship.

Let's take a look at some of the comm(on) blunders made in non-towered environments, sometimes referred to as uncontrolled fields (I prefer "non-towered" as non-pilots think that as a group we're pretty much "uncontrolled" or sometimes "out-of-control" as it is).

Suppose I'm en route to Bend from K-Falls. At least 10 miles south of the field, I begin to monitor 123.0. The key here is that I'm listening, not switching frequencies and keying the mike within milliseconds.

My hope is that someone departing, in the pattern, or approaching the field, will transmit meaningful information without my having to ask. What might I hear? "Bend traffic, BigJet 6 tango sierra 10 Northwest, traffic in the area please advise."

Argh! Listen before broadcasting! Hopefully, someone will step up to the plate, but alas, you get... "Bend traffic, Bugmasher 1234 alpha, taking the active." Great. All I've learned is that a Bugmasher is on the runway. I don't know if they're using 16 or 34. I don't know if they're conducting a high-speed-taxi test, staying in the pattern for touch and gos, or departing the pattern, possibly heading directly my way! Only slightly better, would be "Bend traffic, Bugmasher 1234 alpha, taking the active, departing 34." At least I know that runway 34 is in use. "Taking the active?" I'd assume that you weren't taking an inactive runway. And where are they taking it anyway? "Taking the active" is CTAF (common traffic advisory frequency) at its worst. At best, I now have to ask, "Bugmasher departing Bend, MachBuster, 10 south for landing, state intentions." The reply is usually one of bafflement. "Uh, we're going to the East, and uh, so uh, we'll be turning right." All of this could have been prevented with, "Bend traffic, Bugmasher, departing 34 to the east (or, for touch-and-gos, or...)"



*When someone makes the call
"Bend Traffic, Experimental
456 golf alpha, left downwind
34 for landing", am I looking
for an RV-4, VariEze, a Pitts, a
Kitfox...*

The Aeronautical Information Manual (AIM) in section 4-1-9 gives some suggested guidelines in how we pilots should conduct ourselves on the radio in non-towered environments. Disappointingly, effective communication technique is probably the least detailed or helpful section of the AIM.

There are no requirements to use all or any part of your N-number at a non-towered field (for that matter, you're not required to use the radio at all). Unless your eyes are far better than Chuck Yeager's, who can read someone's N number from a mile away anyway? Sometimes a concise description of what you're flying is much more informative than stating a lengthy N number with every call. During my T-6 checkout, my instructor would announce, "Bermuda Dunes traffic, big green Texan departing 32, left downwind to the south."

One look and you knew what airplane was making the call. Had he said "North American 777 tango uniform", would you be looking for a B-25, a P-51, or what? The AIM makes mention of using your N-number during a call up and that's fine, but I look at how the busiest airport in the world (at least for a week) handles traffic. Oshkosh controllers use color and physical description to identify aircraft. "Yellow high-wing extend your downwind leg..."

When someone makes the call "Bend Traffic, Experimental 456 golf alpha, left downwind 34 for landing", am I looking for an RV-4, VariEze, a Pitts, a Kitfox, or what? Comm(on) sense should be the guide here. Certainly, hearing that a white Skyhawk and a red Skywagon are in the pattern help me much more than looking for two Cessnas who's N-numbers I'll never see and never remember. At least I'll be able to tell the difference between these two once I see the color and where the "third" wheel is located. Does someone announcing that "Beech 54156 foxtrot is downwind" help you much, or is it more informative to know you're looking for a King Air, or a V-tail Bonanza? Which would you remember, someone's N-number or a physical description of their aircraft?

Approaching the field, state your intentions, "Bend Traffic, blue MachBuster, 10 south for landing." Avoid extraneous words like "inbound." If you're landing, you're inbound. "Bend traffic, yellow

continued page 5 column B

December 2002

November Fly-Out from page 1

with his wife Sharon and their two children Hannah and PJ flew their Bonanza and Don & Norma Wilfong with their guest Jack Kohler flew their Skylane.



The gang enjoying brunch at Indian Village Restaurant and Gift Shop.

The flight to Lakeview was pleasant with a constant chatter from everyone reporting their position. (Isn't GPS wonderful). It took two van loads with Lakeview Taxi to get us all to the Indian Village Café. The cafe has a lot of interesting artifacts on the walls, a gift shop, and the food was really good.

Bob Lecklider has a cousin who lives in Lakeview and he and his wife came down and joined Bob and Nancy for the meal. Bob's cousin is a saddle maker and does other leather work too. He invited us out to take a look at his work but transportation was a problem and some of the people wanted to get headed back.....maybe next time.

Lakeview is a pleasant little town with a lot of the buildings having been built about 100 years ago. I believe it is the town with the highest elevation in Oregon. I think it would be interesting to spend



Everyone was able to tiedown together on the ramp.

some time in Lakeview and the outlying areas. We have talked about renting a place for a month and really checking the area out sometime.

After we had finished eating we called the taxi and they loaded up half the people and headed for the airport while the rest of us wandered around town for a while, shopped a little, visited with the locals and waited for the taxi to come back for the second

continued page 5 column A



LOP Operation from page 1

In their research, GAMI is using specialized equipment to measure the properties of aircraft engines. For example, they have developed a transducer that measures the pressures inside the cylinder. To tie it all together, they have written a custom software application, which collects and displays the various proprietary measurements produced. You can see this for yourself by going to www.enginesteststand.com. It is an amazing achievement, and removes the guesswork from engine monitoring. It is also being used in the development of GAMI's latest project, PRISM. Which, according to GAMI, is better than Continental's FADEC system. I believe them after getting a preview.

Several times during the weekend, we monitored the operation of a test stand mounted turbo Lycoming in real time. This particular engine, used on Navajo's, is known to be one of the more difficult to achieve TBO. As we watched the software displays, we could actually see the individual cylinder pressures, along with CHT's, and EGT's, as manifold pressure, mixture, or prop settings were manipulated to produce different power settings. Observing this incredible tool is as convincing as anything I have seen. (Read the sidebar "Monitoring the Engine.")

We also learned that many high performance aircraft pilot operation handbooks (POH) are in error regarding engine operation. For example, many of us who have operated high performance aircraft have been taught to reduce the MP, Prop, and Mixture as per the POH for cruise climb. GAMI's data shows that leaning the mixture at these higher power settings can place the engine in an unfavorable area because of the higher temperatures created by leaning less than 125' rich of peak (ROP). This can result in higher cylinder pressures, leading to higher temps, and so on in a snowball effect to minor detonation. APS suggests full rich and power for the entire climb, (except those engines which have a full power time limitation). Further, when in ROP operations, GAMI and APS suggests using at least 125' ROP at or above 65%. I now understand why a full rich mixture is required in climb on my TSIO-550E.

A review of engine basics is in order. Engine timing dictates that spark plugs fire before top dead center (TDC). This is because the event is happening so fast that by the time the mixture ignites completely, the piston is already descending in the power stroke. What isn't clear is why cylinder temps run hotter or cooler. Despite what we have all been told over

the years, a rich mixture does not cool the engine. A rich mixture slows combustion, which results in cooler cylinders. To aid our understanding, we have to think about it at the molecular level. Excess fuel molecules in a rich mixture insulate each other and as a result cannot ignite as rapidly. A rich mixture slows the flame front; therefore, the cylinder runs cooler. Think raw fuel versus fuel vapor. On the other hand, when in LOP operation, there are more oxygen molecules than fuel molecules. The oxygen molecules insulate the fuel molecules, resulting in a slower fuel burn, and cooler running cylinders. Full rich, or a minimum of 125' ROP operation, and LOP operation both result cooler cylinder temps (see the GAMI website for LOP temps which depend on power used).

If you believe there is precision involved with engine events, it's just not so. APS taught us to think of our cylinders as individual engines, attached to a common crankshaft. Even with balanced fuel flow (it's much worse without it) the cylinders will still run a bit differently due to physics, and other factors. We can, however, get things very close with a balanced fuel flow, and by operating our engines in a specific manner ROP or LOP.

For instance, we viewed a videotaped flight of a turbo normalized GAMI injector Bonanza, where the camera focused entirely on a JPI engine monitor. The procedure was a full power climb to 9,500 feet, then level off (leave 30" MP (John Deakin's go fast mode)), pick up a little speed, set RPM to 2500, and then set to LOP with a 3-4 second mixture pull from full rich. The EGT's and TIT all ran temps similar to ROP operation; the CHT's were cooler.

Another interesting point during the flight was that after the mixture was set to LOP it was left alone. Even in descent, and on landing, the engine was operated at LOP. All of the temps were normal; the CHT's were cool. In the descent, the throttle was pulled back without concern for shock cooling, and the JPI engine monitor showed no evidence of any either. Even when very low MP was used to expedite the descent (the JPI unit has a shock cooling alarm). According to APS, if your CHT's are cool in normal operation, you don't have to worry about cooling them in descent. After witnessing the data first hand, I am no longer as concerned about shock cooling.

We haven't discussed climbing normally aspirated fuel injected engines here, but the key is to use the EGT temp of the hottest cylinder as a guide. For example: If you're hottest cylinder EGT is normally

continued page 6 column B

Hangar Flying from page 1

engine.

At low airspeeds where induced drag is of greater significance than parasitic drag, an asymmetric lateral load (read fuel for one) requires a large aileron input to lift the heavy wing thereby generating induced drag yaw. Applying rudder to center the ball produced even more drag and, if continued over time, \$\$s will be snatched from your wallet. Am I giving you too much credit by assuming that you know what to do about this?

Many aircraft through The Great War (WW-I) era had a rudder but no vertical stabilizer. For quite some time, vertical stabilizers were angled off the longitudinal axis to compensate for prop wash swirl. The offset angle was set for normal cruise. An anecdote - you could always recognize an F6F Hellcat pilot. He was the one whose right pants leg fit tighter than his left one. Rudder trim for takeoffs, Vx climbs, and carrier approaches in the Hellcat was far from adequate. Later, engines were skewed azimuthally to counter the same problem that offset vertical stabilizers were designed to do. Some multi engine aircraft without counter rotating props had skewed engines.

Overuse of a rudder can be disastrous. Excessive yaw can produce damaging side loads to vertical stabilizers, jet engine pods, stores, wing stations carrying stores, etc. Instant yaw is created when wing mounted 20mm cannon on one side fired while the opposite wing's didn't. Also, an instant roll/yaw/pitch will result when a store is ejected from one wing. An extreme rate of yaw such as in inertial coupling may stall the vertical tail if it doesn't break off first. In supersonic flight, inertia coupling will destroy the aircraft. To paraphrase the statement made in the adverse yaw article; a lot of authority over yaw is required for supersonic aircraft capable of high roll rates, hence the large or twin vertical tail sections they sport.

Back to the subject of sideslips, picture this: you're in steep slip and in an aircraft that delivers more lift from the fuselage than is lost from the blanked out portion of the high wing. You've established a high sink rate and intend to roll out of the slip close to the ground. Coming out of the slip, you lose more lift from the fuselage than you recover from that blanked out portion of the high wing. Your sink rate increases and you do WHAT? You pump in up elevator??? Whoops, a stall and now you don't even have enough time to recite the first sentence of the Lord's Prayer.

continued page 5 column A



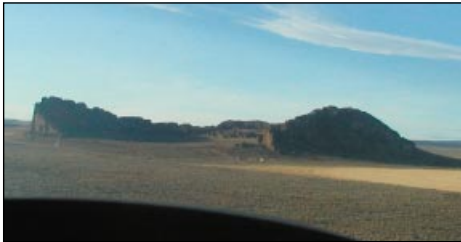
November Fly-Out from page 3

load. Some planes were off the ground and headed home before the rest of us got back to the airport so most of us kind of went our own way on the way home.



Hangin' out after breakfast in beautiful downtown Lakeview

We flew quite low most of the way home and took in the sights which included big herds of Antelope, a coyote, lots of cattle, Summer Lake, Anna Reservoir, Fort Rock, Hole in The Ground, and much more. Jack had never flown that low, except to take off and land, so it was a new experience for him. Jack kinda went crazy, with his camera, and took some 180 photos while on this trip. I can hardly wait to see the photos in this newsletter.



Here's Fort Rock as we approached from the East

Jack wasn't quite sure how we even find Pilot Butte Airport much less land there. He seemed to do okay though and decided it wasn't so bad after all. It is fun to take someone along that is really excited about flying and to be able to see things through their eyes. I think some of us who have flown for a long time kinda forget to really appreciate the wonders that flying brings to us all.

This was one of the largest groups for our fly-outs and we had a lot of fun. We hope you will be able to join us next time. ✈

Hangar Talk from page 4

As you step back to admire an aircraft you've just flown, you think, "Gee whiz, look at all the things on that airplane just to make it fly. It's the epitome of mankind's accomplishments! Well, I have news for you; ignorance or mismanagement of a good many of those things that make it fly can cause it to stop flying abruptly! Are ALL of your insurance premiums paid up or do you fly a Cirrus? ✈

From the Back Seat from page 3

WrightFlyer, 3 Northwest on the 45 for left downwind 34." On initial call-up and on the downwind, let everyone else in the pattern know what you plan to do. Will it be a stop-and-go, touch-and-go, or will you be landing? If you say you're landing to a full stop, the comm police will come get you. By definition, landing means that you're not intending to continue once you make contact with terra firma

With what frequency should you be on the frequency? I have heard one plane, and I mean the only plane in the pattern, calling departure, crosswind, downwind, base, and final legs, with every touch and go for over an hour. Somewhere a CFI should be forced to watch continuous Anna Nicole Smith reruns until they realize that more is not necessarily better! Fortunately, it's usually quiet at Sunriver, Prineville, and Madras. Considering they all share 122.8 that's a good thing. Take a trip over the hills to Portland some nice weekend and listen to 122.8 or 123.0. Sometimes it's not possible to get on frequency because of the calls coming from up and down the valley from a half dozen airports. Once again, comm(on) sense should prevail. How often you announce your position in the pattern should be dictated by traffic concerns. If it's a quiet day at the aerodrome, then announcing only your turn to downwind should be enough. If it's a busy day on the CTAF, with more than one field sharing a frequency, use the field's name not only at the beginning of your radio call, but also at the end. That way, if you've been stepped on, you might still get someone's attention with the part of the transmission that they do hear. "Scappose traffic, blue and green Navion 3 miles east for landing, Scappose."

Most mid-air occur on nice VFR days, near or at non-towered airports. If you're unsure of the location of another plane somewhere in the pattern, then communicate! If you know there's another plane in your vicinity, give altitude, landmarks, whatever it takes to maintain separation. Always remember that there may be a J-3 Cub, Stearman, or other such fine plane close by, sans electrical systems, and therefore without radios. Never assume that everyone in the pattern or near the field has announced their position and intentions. There are those pilots who have the attitude that if it's not required to use the comm, they won't, and will charge into a crowded pattern on a Saturday afternoon in their well-equipped aircraft, without ever exercising their push-to-talk button. Of course, with enough chatter on the frequency, they may not get the opportunity to utilize their stack of expensive avionics.

Effective communication and a little planing can be extremely helpful to all those in the pattern. If I'm doing smash-and-gos with a student in a Cessna 150, and hear that a Cessna 340 is behind us for landing, well it might just be the perfect time to test the student's skill at a go-around, thereby expeditiously clearing the runway environment for the following twin. Using that very moment to do a stop-and-go would be just plane(sic) rude.

With every radio call, challenge yourself to convey the necessary information in the fewest words possible. Your reward will come when you leave the comfort of your home field and enter the world of ATC (air traffic control). At some point in time, when ATC is overworked, and is turning down every Tom, Dick, and Piper with a request, your sterling initial call-up, will set you apart from the rest. You're cleared direct to your intended destination while the others are given vectors from hell. ATC can trust you because you sound like a professional, and you most likely fly like one. Listen, think, and then talk -- as concisely as possible.

DO:

- 1) *Monitor (listen) on the CTAF as early as practical before arrival to the field so that you can begin to form a picture of what runway is in use, and how you'll enter the traffic pattern (per the AIM).*
- 2) *Announce your position and intentions on your initial call up and on downwind.*
- 3) *Give a brief physical description of your aircraft instead of your N-number if you're feeling plucky.*
- 4) *The time to be proactive on the CTAF is if you think there will be a possible traffic conflict. Otherwise, enjoy the sounds of your Lycoming, Continental, or whatever is propelling you through the air. Make a call on downwind, just because.*
- 5) *Help out a fellow pilot. If someone advises their position away from the field for landing, it might just be the perfect time to call, "Bend traffic, Red Bugmasber left downwind 34 for touch-and-go." They then can avoid asking, "Any traffic in the area please advise..." You both win!*
- 6) *Be concise! Challenge yourself to make your radio calls as succinct as possible!*

DON'T:

- 1) *Switch to CTAF and immediately start talking.*
- 2) *Announce every single time the airplane changes direction on the ground or in the air...*
- 3) *Announce your position in reference to the instrument approach that you're conducting to the field. Non-instrument rated pilots (the majority) will have no idea what you're talking*

continued page 6 column C



CITY OF BEND UPDATES

The City of Bend has executed a small contract with Aerie Innovations (Amy Prutzman) to provide inputs and assistance to the City Public Works Department in accelerating the purchase and installation of a new airport surface weather observing system. Ms. Prutzman will be working closely with Andy Lindsey to secure additional grant funding and implement a strategy to accelerate the purchase of the equipment. Her work includes developing an action plan and assisting the City in contacting State and Federal agencies to support the rapid implementation of this system to provide users of the airport with this important weather information to improve the safe operations at the airport. An update on the progress of this initiative will be made in time for the next newsletter and CO-OPA meeting.

In the meantime, the City is continuing its efforts to retain a full-time airport manager. Representatives from the City's Human Resources Department indicate that the initial candidate screening process is complete and plans are to contact a list of individuals for interviews in late December/early January. In parallel, the City is also exploring a contracting-out option and is currently in the process of completing an assessment of this alternative. The City has made a decision that the airport manager will report to the City Manager, rather than to the Director of Public Works.

The City of Bend has partnered with ProSite Server and Sun Air to provide real-time weather data and video camera views of current airport conditions via the internet. This system shows three current views (north, south, and west - mountain view) as well as current weather data. The cameras were provided by the City of Bend and ProSiteServer and the weather station and internet access provided by Sun Air.

Go to www.viewports.com to check out the new system. ✈

December Fly-Out from page 1

The Warhawk Air Museum is on the field with parking just outside the Museum. The cost is \$4.00 for adults and \$3.00 for those of us 65 and older. The "Mega-bites Cafe" is just a short walk and if we don't want to walk the museum manager said they will provide transportation.

We had a great fly-out last month....7 planes and 17 people....let's try to match or beat it this month.

The weather alternate will be Chiloquin.....they always have good food at Melita's which is just across the highway from the newly paved parking area. Don Wilfong dwnw@bendnet.com ✈

YCCO UPDATE

by Amy Prutzman

Season's Greetings to CO-OPA from the Youth Choir of Central Oregon (YCCO)! The Voices Take Wing Program is continuing, with recent talks with the program planning coordinator for the Balloons Over Bend event and ongoing discussions with the City about opportunities for YCCO to support airport beautification efforts. The choristers are standing by to support CO-OPA and others in the aviation community with our energy and entertainment. At this date, we are ready to plan in earnest to support CO-OPA with its Airport Appreciation Day concurrent with the Balloons Over Bend Event. We'll be available to host a pancake breakfast and provide "singing waiters/waitresses" for this on the date of your choice-Saturday, June 7th or Sunday, June 8th. We invite you to join us on February 1 for our winter concert. For ticket information, contact Sue Goodman at 385-0470 or check out the YCCO web site at www.ycco.org. Wishing you all safe and happy holiday. ✈

LOP Operation from page 4

1300' at takeoff, as altitude is gained, and leaning is required, lean to maintain the 1300' takeoff EGT value. Of course you have to continually monitor and lean as you ascend.

The Advance Pilot Seminar was well worth my time and the cost. I learned an incredible amount of information, which I started to use immediately. I suggest that you visit the sites listed to see for yourself. You may just find yourself in Ada Oklahoma.

If you are interested in finding out more specifics, go to GAMA's web site at www.gami.com and read some of George's articles too. You will find much more information regarding the temperatures to use for ROP or LOP. You can learn more about APS at www.advancedpilot.com ✈.

CHECK THIS OUT



by Jack Kohler

Here's an interesting picture. This picture was taken at the Lakeview airport during our November fly-out. I'm not really sure how to interpret this, each end of the wind sock seems to be in disagreement. I'm sure this must be a rare moment. ✈

*From the Backseat from page 5*

about. If you're shooting the VOR-A approach to Bend, inbound from Deschutes, say something that everyone will understand like, "Bend traffic, brown-tailed PropBender, 10 NW, making a low approach to the field, followed by a right turn back to the Northwest."

- 4) Repeat your entire N-number with every call. Who's going to remember it and who cares?
- 5) Use phrases like, "taxing to the active", "taking the active", or "traffic please advise", "upwind departure", "landing to a full stop", or any other such phrase that conveys no useful information, is repetitive, or is just plane(sic) embarrassing to hear on CTAF. ✈

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
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

PLEASE REMEMBER TO FLY FRIENDLY

