

# CASCADE FLYER



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

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## ***President's Message:***

The Short Clinic in Madras was quite a success. Thanks to Nancy Lecklider for all the hard work she put in to organizing the event.

As part of the pre-flight briefing, we watched a few clips from an FAA safety video titled "Practical Density Altitude" narrated by Kurt Anderson from the Seattle office of the NTSB. The few clips we saw left me wanting more, so I managed to grab a copy of the video. The full program is quite impressive and thought provoking. The name of the video is not exactly appropriate as it is more about badly handled density altitude than about properly handled density altitude.

Kurt mentions many times in the Video that, since he is from the NTSB, he mostly has expertise with how not to fly an airplane. He warned the viewer to get instruction on the proper way to do things elsewhere.

Since no one saw more than a bit of the Video last month it seems like a good thing to watch in its entirety for this month's meeting. There are nine short clips and after each we will have a short discussion period. With all the experience in our membership we can surely solve the issues left open by the video.

There is also a bit of Holiday related business to handle. Don Wilfong has some proposals for us to decide on.

Another thank you goes to our guests last month from the newly reconstituted Leading Edge Aviation. It was good to meet Brad Fraley, Travis Warthen and Justin Harries. Let's wish them all good fortune in their new venture.

Be sure to keep December 16th open on your calendars. Into the breach we go once again with our annual Holiday Bash!

### **ED Note:**

This issue will appear to be a bit 'heavy' on safety ...but we can never have too much of that ...

## ***Calendar:***

17 November - Monthly Meeting  
19 November - Monthly Flyout

15 December - Monthly Meeting - XMAS Party  
16 December - Monthly Flyout

19 January - Monthly Meeting  
21 January - Monthly Flyout

16 February - Monthly Meeting  
18 February - Monthly Flyout

17 June 2006 - Bend Airport open house

## ***Web doings:***

Two very interesting video clips came in this month. Each provides a unique look at the interaction between airplanes and open water. You can download them directly from the home page.

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:***

Most of you saw the note from David Sailors last month. Next Summer seems awfully far away but it is time to make sure the slumbering giant of the next Aviation Day does not go on permanent hibernation. The plan this year is to have the airport open house on the weekend after the Balloons Over Bend. Now instead of having too much to do in one weekend we can have two great aviation filled weekends in a row. If you would like to help out please contact David Sailors. His contact info is 541-420-3910 or [dsailors@bendbroadband.com](mailto:dsailors@bendbroadband.com).

## ***Random Thoughts:***

The first weeks or two of August are filled with one great happening after another. One of them that has eluded me over the years is the McCall Fly-In. A lot of our members regularly attend and they all return with rave reviews. Just mention McCall at any gathering of Oregon pilots and a healthy conversation will ensue.

Soon we may not have to travel so far and stay overnight to attend such a fabled event. Keith Crimins of the Portland FSDO was telling us last month of plans for a similar event in Oregon next year. Even better, the plan is to host it at the Bend Airport.

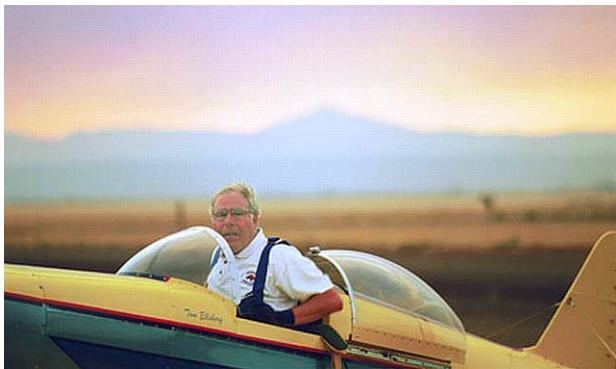
So far the FAA is playing this one close to the vest, but I have heard about this planned event from several sources. If Bend could get half the publicity and enthusiasm that McCall gets then Bend could earn a firm nationwide reputation as a great place to fly to. As the FAA follows through with their plans we should see what we can do to be a part. If the program is as good as I hear then maybe I might finally learn short field landings.

In other news, we are losing two of our own aviation legends this month. Keith Crimins, the FAA Safety Program Manager at the Portland FSDO retired just after helping us with last month's Short Field clinic.

Keith continually proved that you can be from the government and be here to help. Dave Evans, our own Mr. Airport, has flown the coop with his wife Ginni to live in Eugene. He plans to hanger his Maule at the Creswell Airport. Good luck to both of them and we still expect to see them from time to time.

Gary Miller

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**Tom Ellsberg at a smoky Madras Airport, Aug. '03.**  
(Photo credit, Ed Endsley)

## ***Madras Short Field Clinic, Oct 22:***

By Nancy Lecklider

Everything came together and we had our first, hopefully, annual "Short Field Clinic". The weather was beautiful, we had great attendance, the speakers were interesting and I think, everyone learned something new or had a little refresher course on some forgotten bit of knowledge.

The seminar part of the clinic covered everything from landings and takeoffs to density altitude:

Keith Crimin gave his last safety seminar before retiring as FAA Aviation Safety Program Manager.

Joel Premseelaar, our bottomless well of wonderful information, talked about landings and takeoffs.

Dale Evans dug into the years of experience he had flying in Alaska to share his knowledge of landings and takeoffs, short and otherwise.

We had twenty-two people attending the seminar, including several from Madras and the rest from our own group, with Dean and Wendy Cameron coming from The Dalles. That was a nice surprise.



There were ten aircraft and eleven pilots that participated in the actual flying part of the clinic. Randy Potter seemed to do the best but some of the others did well, too. It seemed to be the consensus of opinion that we should do this again and make it a regular event on our agenda.

Many, many thanks to those that helped; to Don Mobley for letting us play in his back yard, to Joel for, once again, keeping us enthralled with his wonderful knowledge of aviation, to Dale Evans whom we should have talk to us more often about his experiences and to Keith Crimin for being so willing to come all the way from the Valley for our event.

### **ED Note:**

Several of us concluded the experience with an excellent Mexican meal in downtown Madras ... thanks to Nancy & Bob for the transportation!



... 'nuf said ...



*Things to include in preflight...*

The following link applies to the next article:

1 NTSB Database query search;  
<http://www.nts.gov/ntsb/query.asp>

***Proposal for Fly Safe Clinic at Bend Airport, June 2-3, 2006:***

Dennis Douglas, founding member of local EAA Chapter 1345, has prepared a detailed proposal to the FAA, ODA, and S07 Airport management.

I have extracted some key features of the proposal:

“The National Transportation Safety Board (NTSB) Aviation Accident Database<sup>1</sup> shows that there were 279 general aviation aircraft accidents in Oregon between January 1, 2000 and November 2, 2005—an average of about 56 accidents per year. While most were relatively minor, seventeen percent of these accidents entailed one or more fatalities. An analysis of the ‘probably cause’ of these 279 accidents reveals a myriad of underlying factors but it is clear that a significant number were caused because the pilots of the aircraft were not fully aware of their personal limits or the limits of their aircraft.”

“...the primary objective of the Fly Safe Clinic proposed here will be to identify to pilots the principal causes of aircraft accidents and how pilots can reduce the chances of these accidents happening to them. The proposed Fly Safe Clinic will emphasize environmental and human factors that affect aircraft operations. The Clinic will also emphasize the mechanical and performance aspects of their craft, and aviation medicine issues that affect pilot performance. Both ground-based seminars as well as in-the-air instruction will be provided.”

“A third objective is to provide pilots and their spouses information about recreational opportunities in the Central Oregon area. While years ago pilots were content with flying to an airshow, for example, and spending two or three days looking at airplanes, the cost of fuel and changing demographics now suggest that a pilot wants to fly to a destination and do more than simply ‘look at airplanes’.”

Dennis further proposes WINGS, PACE, Flight Training, Aircraft and Airport Operations and Recreational segments to the program:

“The core of the Fly Safe Clinic will feature seminars and ground-based presentations together with free (to the pilot) in-the-air flight instruction programs in the pilot’s aircraft, and a voluntary, no-risk aircraft inspection program. Aircraft and airport operations segments are included in the proposed program to encourage the non-flying public to attend and better understand airports and airplanes. A recreational segment is included to encourage family attendance at the clinic.”

**“The organizations expected to support the Clinic include the Bend Chapter of the Experimental Aircraft Association (EAA 1345), the Central Oregon Pilots Association (COPA), and the City of Bend. “**

The proposal has been favorably received and I think we need to discuss ...

Mike Bond, Newsletter Editor

## ***CO-OPA HOLIDAY CHARITY PROGRAM***

It is that time of year again when we need to start planning for our charitable contributions.

In past years we have worked with some of the Teachers at Pilot Butte Middle School in helping out one or more students.

They have picked a couple of very deserving young people whose situations warrant our help. They ask that we again please consider funding this cause as we have in the past.

We have some money left over from last year but certainly could use some more to accomplish our goals. Norma and the Teachers do their very best to budget the spending to where it will do the most good.

Norma will be discussing this at our upcoming meeting (Thurs. Nov. 17) so please plan on doing what you can at that time to help the cause. If you are not at the meeting or if it better suits your needs you may make your donations to our Treasurer...David Sailors, P.O. Box 203, Bend, OR 97709...just make your check to CO-OPA and mark it for our Holiday Charity Fund.

You will be pleased to learn that the young lady we helped a couple of years ago is doing very well now. She is back living with her Mother (who has straightened her life out). She is now attending school regularly and is getting very good grades. I can't help but believe that the love and support we, as a group, gave her helped to bring this about.

Thank You all...Don & Norma Wilfong

## ***INTERNATIONAL FRIENDSHIP FLIGHT!!!***

Pilot Butte Middle School and High Desert Middle School participate in a Student Exchange Program where a group of Japanese Students and Adults from Fujioka, Japan come to Bend each year and a group of our Students and Adults (Teachers) go to Fujioka.

These visits usually last for approximately nine days. The students usually stay in the homes of their counter parts while visiting the other country.

This is a very successful program whereby all participants learn a lot about each other's culture and cement relationships and trust between the young people of both countries. The benefits of these relationships can be far reaching in government, business and social relations between the peoples of our two countries in the future.

The groups are treated to tours of Government facilities, local points of interest, historic sites and many other educational things in both countries.

The host families usually take them to many points of interest within driving distance of Bend. It is a very exciting, interesting and educational experience for all who participate.

A lot of work goes into these International visits both here and in Fujioka by everyone involved, including contributions from various Individuals, businesses and organizations. This year one of the organizers from Japan needed a vehicle while she was here (she had lived in the U.S. and was familiar with driving in our country). Bob Thomas Chevrolet generously provided a car for her use. This was certainly appreciated by her and by the organizers of the event...

THANK YOU, BOB THOMAS.



The High Desert Museum treated them to a free tour, the Bend Police Dept. and the Bend Fire Dept. both treated them to a tour including a trip up the tall fire ladder to approx. 100 ft. above the ground and the Mayor took them all to lunch at the Pine Tavern...THANKS TO ALL OF YOU and to the many others that I have failed to mention ... I know your efforts were appreciated. You can be sure our students and teachers are also treated very well on their visits to Japan.



Last year Norma and I had the opportunity to take two Japanese Teachers on a flight over Crater Lake. This was such a hit that our son, Steven Wetherald (he is a Teacher at Pilot Butte Middle School and one of the organizers of the Student Exchange), ask if the Central Oregon Chapter of O.P.A. might be willing to arrange a flight for the Students, Teachers and other adults from both Japan and from our area.

***FRIENDSHIP FLIGHT continued ...***

I sent out a plea for help and we had a number of volunteers that were willing to donate their time and their planes to help put this flight on. The volunteers were Duane Francis with his Cessna 205 (he is a friend and neighbor of ours on Pilot Butte Airport), Gary Miller with his Cessna Turbo 210, Michael Adler with his Cessna Cardinal RG (he has a child who will be on the tour to Japan), Bill Witt with his Cessna Skylane and I (Don Wilfong) with my Cessna Skylane. Ed Endsley was also there to take photos and help in any way he could. Several others would have liked to have volunteered, but their schedules would not permit it.



We scheduled our flight for early morning on Monday, October 10th and held our breaths that the weather would be good.

Well ... the gods smiled on us and the weather was beautiful. We gathered at the Flight Shop and amid the combination of English and Japanese conversation we got things sorted out as to who was going in which plane.

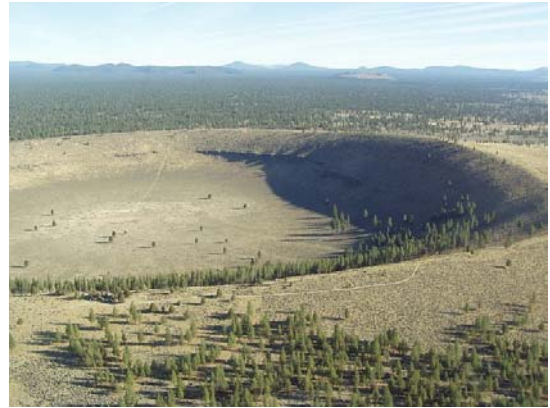
When the passengers were divided up all of the planes were full except for mine and I had one empty seat ... Ed Endsley was nowhere in sight so I proceeded to taxi out with the other four planes for take off.

As I headed for the end of runway 16 there was Ed standing on the edge of the taxiway looking forlorn, his sad look turned to a big smile when I pulled over and let him crawl in.



**Fort Rock**

Everyone chose their own route to Crater Lake, and some of us flew down over Fort Rock and Hole in the Ground before heading on to Crater Lake.



**Hole-in-the-ground**

The airwaves were full of chatter so we all knew where the other ones were. Ed was busy with my digital camera getting a bunch of good photos as we went along. We all circled over and around Crater Lake and then proceeded North along the Cascades to the Three Sisters and on to Smith Rocks before heading back to Bend. Gary Miller said one of the Japanese students was so relaxed that she went to sleep for a bit....

I believe that everyone really enjoyed and appreciated the flight. I think it will be long remembered by our passengers as the highlight of their trip and the pilots really enjoyed seeing the sights through the wide eyes of our passengers and experiencing the excitement of flight all over again. It is truly a win win situation when everyone gains from the experience.



I want to personally thank each and every one of you for generously participating in this very worthwhile event. THANK YOU ALL ... Your help and co-operation made my job easy....

Don Wilfong

## COOPA SAFETY CORNER

By Joel Premselaar

With several added and expanded items, the immortal prose that follows was orally presented to those who attended the “Short Field Landing and Take off” clinic on Saturday, 22 October. There is no doubt in my mind that each and every attendee of the clinic is less apt to exceed short field runway lengths than those of you who played hooky. Consider yourself chastised!

### SHORT FIELD LANDINGS AND TAKE OFFS

#### **Anecdote:**

**Two instructors took off in a T-6 (this is a way of saying that they were Air *Farce* pilots). Their mission was to extract a now repaired T-6 from a short field. Due to an engine failure, a *student* pilot landed it dead stick leaving the aircraft in a short field. After two landing attempts, the instructors reasoned that if a student pilot could dead stick into that field, they should be able to land in the field with power. After several aborted attempts, they skimmed over the fence surrounding the field and to their chagrin, plowed into the trees at the far end. At the accident investigation, the student was asked how he managed to dead stick the T-6 into that field while instructor pilots failed to duplicate the feat. His response was, “Oh Sir, I didn’t land in that field, I landed in the field adjacent to it and bounced in.”**

#### **Preface:**

What kind of pilot will deliberately plan a flight to land at a field that would entail a short field landing and takeoff? Answer: one who sets out to prove the “Darwin Theory.” Logically, this piece presumes that an off airport short field landing will of necessity precede the requirement to execute a short field takeoff.

The “necessity” is the need to choose between making an off airport power off-landing due to, for one of many reasons, fuel exhaustion vice (No, it’s not the kind of vice a reprobate would assume) a landing with fuel available to find and evaluate a field on which to make a power-on landing. The answer to that is obvious. Prohibitive IFR conditions, mechanical reasons, bad navigation, unexpected head winds, or whatever creates the need for that decision. After the cause for the landing is resolved, you’ll be faced with the need to conduct a short field takeoff.

You’ve heard it before, but I’ll state it again: “Practice makes perfect!” I’ll add to that with “No practice makes a perfect fool!!”

#### **Discussion:**

##### **Short field landings**

Once committed to an off airport landing, an analysis of a candidate field begins as follows:



#### ***Land how short?***

- The intended landing site, long enough to execute a short field take off, should be in proximity to public activities; e.g., farms, roads, etc. All things considered equal, land on a fenced field’s diagonal to maximize field length
- Wind determination is aided by observing cattle. If the wind is significant enough to be a factor, you’ll find that cattle will have put their tails into the wind (ask me why they do that)
- If a lake’s surface (wind caused) is turbulent, a relatively calm area will be present along the upwind shoreline
- Wind speed reductions and direction changes occur as you descend closer to the ground. If you’re interested in how much, ask me for a Boeing chart that quantifies it
- Ground structure and terrain features affect wind velocities and create turbulence
- On a hot and sunny day, transitioning from plowed fields that generate updrafts to green fields or bodies of water will disturb your approach to a landing
- On the final approach, the upwind side of a hill (think landing on runway 02 at Sisters {6K5} airport) may require action to counter the energy of an undesirable updraft) select a field that is free of obstacles on the approach end
- Drag the candidate field up-wind a few times at 1.3 V<sub>so</sub> and at an altitude that provides a reasonably slow angular rate with respect to the ground. If gusts or updrafts and downdrafts exist, add a fudge factor to 1.3 V<sub>so</sub> to preclude stalls or high sink rates
- Consider sun angle
- Look straight down through grass for rocks, chuck holes, and the presence of furrows. Land parallel to furrows
- Look for slopes and undulations. If a slope exists, evaluate the slope to wind relationship
- Wet grass will help slow the aircraft but be advised, braking will be poor to non-existing
- Select a go around point

## ***SAFETY CORNER continued ...***

- Choose a field with some structures nearby if the field is covered with snow. A snow covered field compromises depth perception and hides irregularities that may rise up and smite thee soundly
- Approach the landing with full flaps. Be aware that full flaps may compromise a go-around in that the last third of flaps produce a great amount of drag with little or no additional lift

Be guarded against the “Gibson Effect,” i.e., marks on the field appear to separate gradually, but as you draw closer the angular rate of separation appears to accelerate in an illusion that your sink rate has increased. It helps to look farther down the field

- Obstacles permitting use a trimmed **flat** power on approach to the landing. A flat power on approach reduces the possibility of the engine experiencing shock cooling or loading up, enhances carburetor heat, provides effective airflow to the empennage, and alleviates work load. Let ground effect alert you to your proximity to the surface and produce some flare. Concentrate on your target point. Do not strive for a smooth landing; your prime interest is to optimize field length. Consider this: carrier aircraft must demonstrate a damage free no-flare landing at 24 feet per second; this equates to 1,440 feet per minute. Other aircraft, including yours, must demonstrate a damage free landing at ten feet per second; this equates to 600 feet per minute. Now then, what’s more important for a short field approach, a smooth landing that may compromise available field length or a no-flare landing at somewhat less than 600 feet per minute? **However, do not even think about making a no-flare landing on a soft field!** If the field is soft, maintain taxi speed to the parking area.
- If a go-around is required, the **flat** power-on approach minimizes the: energy needed to arrest a sink rate, change in torque and “P” effect, amount of trim and attitude changes, rate of heating that may be detrimental to the engine, and manipulation of cowl flaps.

### **Short field takeoffs:**

- Flaps as recommended by the Pilot’s Operating Handbook
- If on pavement; e.g., a road, parade ground, etc., inflate tires to their maximum allowable pressure
- If on a muddy field, deflate the tires some to provide maximum footprint
- Takeoff to coincide with the coldest (highest barometric pressure) time of the day

- Adjust for density altitude and humidity to ensure that maximum power is available for take off. High humidity can cost as much as 12% of power
- Select a full fuel tank to prevent unporting the standpipe before employing the following technique. If feasible, execute a continuous rolling **left** turn curved path taxi and takeoff adding maximum power as takeoff alignment is obtained
- Use a curved path takeoff to increase field length, especially in a crosswind. This will minimize the drag of a chattering steerable nose wheel. Elevate the nose wheel as soon as feasible to reduce friction drag.
- This is particularly true for muddy field operations as is the following. For tail wheel types, lift the tail just high enough to clear the surface. Lifting the tail wheel too high may induce a nosing over. Lifting the nose wheel or keeping the tail wheel low will establish an attitude that will optimize lift; however, too nose high an attitude will create excessive induced aerodynamic drag thereby resulting in spastic sphincter exercises you’ll long remember!
- Takeoff will occur at minimum flying speed. Maintain a positive climb
- As you pass above significant ground effect (above one half of the wing span), establish  $V_x$  to clear obstacles. When obstacle clearance is ensured, establish  $V_y$ .
- When I take off from Sisters airport on runway 02, I remain in ground effect to build sufficient energy to execute a left turn down the flat valley rather than trying to out climb the down draft coming off the hill just off the end of 02.
- A final note. To out climb the downdraft of a steep hill requires sustained high power at  $V_x$ . If an engine is to fail, it will most likely occur just after takeoff. This leaves you facing a hill with a nose high attitude, with no power, with high induced drag, with the drag of a wind milling prop, and maybe contemplating a no-no turn - - recite after me: “Our Father who art in heaven...”

**‘nough said for now. I’m open for questions!**



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