

What is it about soaring that really motivates you? Distance? Records? Contests? Exploring scenic new soaring realms is what fires me up. My most satisfying and memorable flights are not necessarily the longest ones, but those rich in both cloud and ground scenery. This was one of those flights.
An out and return (O\&R) flight to Crater Lake from Williams first came to mind early this year. I had decided to base out of Williams and focus on what could be done along the Coast Range, especially during the peak spring season. Thoughts of wave flights up and down the range, or a Bay Area tour like Rex did in the NE wind off of the Sutter Buttes, got me thinking about longer distances. Williams has a very supportive racing culture for emphasizing cross country, while other sites like Hollister have distance flights for cross country skill building. Why not test the distance limits out of Williams? Routes south are limited by the few days that you can cross the Delta and return. Routes north looked better, but l'd need mild and late overdevelopment in the Trinity Alps area for lift late in the day so as to get within glide of Williams. Given that, how far north could you go? I figured with a 10,000 to 11,000ft. base, a start time of 10:30am, lift ending around 7pm, sunset at 8 pm and a task time of $8-9$ hours, I could do about 500 sm for an average speed of 60mph. That's almost exactly the distance from Snow Mt. to Crater Lake and return!

## Strategy Sidebar:

After a dozen long O\&R flights, I've decided that l'd much rather fall a few miles short of the goal but make it back home rather than the other way around. Some may say I'm not pushing myself hard enough, but that's what I choose. Thus the most critical part of an O\&R flight is the turnaround time. Miscalculating the turnaround time by even 15 minutes, especially with a headwind on the return leg, and your chances of getting home drop off quickly. As opposed to a triangle or zig-zag flight of the same distance, an O\&R flight puts you the furthest away from your start point and is, from a retrieve standpoint, the highest risk task. If you make your turn in less time than you planned for, that's great. If, however, you are behind schedule and still want to make it back home, then it is critical that you determine and stick with your turnaround time.

Now I had to wait for the right weather. Watching the long range maps, I had a suspect day about a week beforehand, but confirmation only came when the forecast stabilized a few days before May 8. To prepare for an early launch on May 8, I arrived the day before to assemble, and to allow myself some time to think and refine the plan. The forecast showed overdevelopment (OD) stretching from the Trinity Alps towards Crater Lake. Compared to the summertime desert, the high temperatures were mild and the humidity was high, thus I didn't expect fearsome, lightning spewing, towering anvil type storms. Rather I believed the OD would be just enough to get the heat engine effect going to provide lift near cloudbase late in the day without blowing up and collapsing. With a SW wind on the return leg it would be critical to stay on the west side of the OD. That way the wind blowing up the slope and the sun would both be in my favor.


GFS forecast map for May 8 . Note the rapidly strengthening wind $N$ of the CA/OR border.

The only negative in the forecast was the rapidly increasing wind north of the border. And this would cause problems for me. $\qquad$ where? At the furthest point away from home of course!

## THE JOURNEY BEGINS

The morning of May 8, dawns clear and cool. It's Tuesday, so Williams gliderport is closed for business. The only other activity on the ramp is Peter Kelly briefing Darryl Ramm on his new 26E. I'm late getting myself ready, and by 9:45am, the clouds are already pumping north of Snow Mt. By the time I'm buckling myself in, Rex admonishes me that I'm late! Hey, tell me something I don't know $8^{\wedge}$ )

Launch is at 10:40 a.m., and I start my task under a small cu on the east side of Snow at 11:15am at $6,800 \mathrm{ft}$.

"On tow" approaching Indian Valley looking NW with the course north already well marked. 11:00am.

A couple quick climbs and I'm heading north under nice clouds with bases between 10,000 and $11,000 \mathrm{ft}$. By noon I pass west of Yolla Bolla with a beautiful cloudstreet heading north as far as I can see:


N bound with Yolla Bolla on the right and T15 the next peak. 12:08pm
Hayfork is reached by $12: 40 \mathrm{pm}$ with a climb to $10,500 \mathrm{ft}$ :


The town of Hayfork (runway in town left of center). In the far distance is fog from the Pacific. 12:40pm.

I'm feeling really good about this flight, the late start notwithstanding. The clouds aren't looking like they'll overdevelop... yet. A light tailwind doesn't hurt either. On a ridge north of the Hayfork, the choice is: Go on the west side of the Trinity Alps or the east side? Both sides have streets heading north, but the clouds on the east side look better and closer, so I head that way:


Heading for the east side of the Trinity Alps looking N. Weaverville is on the far right and Mt. Shasta in the distance. 12:47pm.

In the Trinity Alps, I marvel at the deep Sierra-like scenery, but unlike the Sierra, there's good lift!


The climbs are not quite as high or as strong as earlier; perhaps the snow is slowing the lift down a bit? Progress is still good, and I soon approach the south end of Scott Valley.
Cloudbase is around 10,000ft but looks better ahead.


N bound entering Scott Valley looking N. 1:16pm

Just south of Yreka I top out over 12,000ft. The next major decision is whether I should follow the bigger, nearer clouds up the east side of the Cascades or go with the smaller, further clouds on the west side? I choose the east route.


I should have gone up the west side of the Cascades (the extreme left edge of the picture above), to stay on the windward side of the Cascades. Then I could have done the majestic flyover and looked down into Mt. Mazama. But this was not to be. In due course I'm within 5 miles of the lake but it's in the blue. Not only do I have a 15 knot SW wind breaking up thermals, but l'm on the lee side and sink to a new low (2,300ft AGL). Why does this always happen at the furthest point away from home?


The Lake looking NW. Aren't those great looking clouds...over there?! 3:21pm
My turnaround time was 3 pm , and it's now 15 minutes past that. I abort the flyover idea and switch to "get home" mode. After a feeble climb I push the nose over aiming for the west side of the Cascades and of course get lots of sink. Crossing the ridgeline there is little ridge lift, so I drive for the best cloud a bit south of me. I'm down to almost 1,000ft AGL but hit the lift and take it all the way up to over $12,000 \mathrm{ft}$. Whew!


## WINDSOCK

Passing Mt. McLaughlin looking S. Mt. Shasta is far in the background with rain in the distance. 3:51pm
The clouds continue to work (why are the best looking clouds the farthest away?) but I can feel the day is at its peak. Another climb picked off a ridge near Ashland airport, then my best climb of the day at the border to $12,000 \mathrm{ft}$. The only other gliders are a couple flying out of Montague. I've kept them up to date on my location in case I need it.
Now I think I can get to the big clouds at the Trinitys. And don't forget, stay on the west side!
The headwind has thankfully dropped off to under 10 knots but it's blue between me and the big glob of clouds. South of Scott Valley I wind up having to go through a pass so now I'm committed to the west side of the Trinitys with my landout airport about 35 miles away towards the Pacific.


At the $S$ end of Scott Valley looking $S$ heading toward the big glob of clouds. The pass is slightly to the right of center. 5:05pm
I'm a bit low here and need to ridge soar Russian Peak ( $8,192 \mathrm{ft}$ ). Not gaining much, I move a couple miles west fishing for a climb under the more clearly defined edge of the cloudshelf. "Don't rush this one", I tell myself, as missing the climb here means I'm done. Sticking to under the west edge of the cloud I slowly climb to cloudbase and now can set off under the cloudshelf hoping for sustained lift for many miles.


Cruising under the wide Trinity Alps cloud looking E. 5:46pm
And it works! At last, without circling, I cover the next 50 sm in 30 minutes with indicated speeds of 50-75 knots. I'm cold (air is 23F) but the scenery is just fantastic, I just wish this part didn't go by so fast. The satellite image shows the line of overdevelopment (image saved by Pete Alexander):



Looking south, 10 sm east of Hayfork after a good climb. 6:23pm Next goal: T15
The cloudshelf ends at Hayfork, but the cu ahead look good. I might just make it... Climb and glide, climb and glide. My last climb is in the bowl SE of Yolla Bolla, but above is another cloudshelf stretching to Alder Springs. Whoohoo! Again cruising straight ahead I cover 25sm in 22 minutes.


End of the (lift) line looking S. St. John and Snow are in front about 16 miles. 7:12pm.

Now with $9,400 \mathrm{ft}$ I'm comfortable to make it to Goat Mt. then to Williams ( 58 sm total). I slide over Snow Mt. with a couple hundred feet to spare and continue to my start at Goat. Getting closer to Goat, I think, this doesn't look like my start.......hey wait a minute......I started at Snow, not Goat you idiot! Relieved, I turn to Williams with a 36:1 glide. It's 7:30pm. I don't want to blow it now as there could be sustained sink on the way home. I call Williams to let them know l'm on final glide. There's only mild sink, so at 5 miles out


5 miles out looking E. Williams dead ahead. 7:57pm
I push over to 100 knots and pass over the field at 300 feet. As I come to a stop, Nick is videoing my rollout while Rex hands me a beer with congratulations. Wow, I made it! I'm cold soaked but feel great.
Achieved distance was 488sm. Next time I hope to fly to the other side of Crater Lake and return, so we can count 500+ miles.

In my 33 years of soaring this flight ranks as one of my top five. Not because of great distance or making a record (it was neither) but because it was over very scenic territory, it worked my cloud reading skills, and most importantly, my expectations matched up with the task and weather. I'd like to do it again, this time with other gliders. Hey Jack, can I borrow the Duo X for the next try?

## ADDENDUM:

Weather Maps for May 8


Relative Humidity and Overdevelopment. Note the tongue of moisture and OD on the route.


Warm enough.

BL TOP (TI=0) Height [x1000ftmsL] 21Z(14pdt) TUE 08 May 2007 shrfoste133sz RUC


Dr. Jack's forecast supported the heights achieved.

Cumulus Potent[al [x1001ft] 21Z(14pdt) TUE 08 May 2007 shrfesta 1339 RUC

$<$|  | -9 | -8 | -7 | -6 | -5 | -4 | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



Cumulus potential was definitely fulfilled.
About the Author: Kempton Izuno is a "glider only" pilot flying since 1974. His current interest is to explore and understand the Western US soaring possibilities for longer flights over little flown areas. Past achievements include his Gold badge at age seventeen in a 1-26, Hilton Cup winner in a Libelle, a 1,000+ mile flight in the Sierra wave, and over a dozen 1000km flights. He currently flies an ASH-26E in California and Nevada.

