

# Wave Flying at Cal City

By Dave Raspet

**Bill Laningham and I had a nice day 15 Feb flying weak thermals under a high cloud cover that made us huddle in the sunny spots. Bill flew 3:20 and I got a tad less. Saturday was similar and I flew 2:35.**

**Sunday we had strong surface winds from the Southwest and predictions for winds to 57 mph at 24000. Good winds, but they were 230-260 degrees and the perpendicular to the Cal City ridge is about 310 degrees. We had cloudbase around 8000 and at about 12:00 the front came thru. The clouds gave no sign of wave. No cap clouds and no rotor clouds. Marty Eiler left at about 1230 and when he didn't return we all got busy. Since it was Sunday and the MOA was inactive we could use the wave window without a transponder. All we had to do was maintain com with Joshua. Mike Regan in the Douglas Grob 102 and Mark Navarre in OD went out ahead of me. I towed out at 3:00. I was nervous about towing the Ventus thru rotor since its low drag and C.G. hook combine to make it squirrely on tow. We got thru the rotor fine and Chuck Stein, the tow pilot, left me off in good lift at 7300 ft indicated. I did my 360 degree turn to mark**



**release for the recorder and pointed the Ventus into the wind. By 10000 ft the rate of climb was averaging 9.1 knots. The wind was not strong enough to maintain position by flying into the wind so I did**

**figure 8s to try**



**and hold position. At 18000 the lift petered out and I had 1-2 knots down. At that point I followed the lesson Marty teaches and headed back into the wind. Lift improved and I had 5.4 knot average 370 ft from where Chuck left me off. At 19000 I flew with OD for a while. At**

**about 20000 I got very anxious, not a normal hypoxia symptom for me but I turned up the Oxygen anyway. I climbed well to about 23000 indicated and got another spat of anxiety. I though I was 500 ft short of Diamond altitude, but since I felt strange I started down immediately. The last altimeter reading I saw was 23400. I still had 3 knots of lift. As I got back down to 13000 I found my oxygen line had pulled out of the mask. I don't know when it came out since I had to raise the mask to talk to Joshua, it could have come out anytime.**

**That night when I read out the logger it showed release at 7595 and peak altitude at 24177. A gain of 16582 against a requirement of 16404—178 ft to spare. With the calibration and a correction for indicated altitude at landing the margin was 214 ft.**

**My logger shows that even though I thought I was holding position I drifted 3.41 nm downwind and 1.25 nm upwind of the release point. Best climb rate was about 6000 ft upwind of the release point and peak altitude was about 4000 ft downwind of release point. The tow pilot had put me right in the heart of the lift. Total time to climb from release to peak altitude was 38 min 10 sec. Total flight time was less than 1:20.**

#### **Lessons Learned**

- 1) Get a blue card! The experience in the Air Force altitude chamber was invaluable. I knew to look for the symptoms I had experienced in the chamber and to be suspicious of any other unusual feelings or conditions of my body.**
- 2) Do a PRICE check every 10 minutes above 18000. If you don't know what a PRICE check is see 1) above.**
- 3) Work very hard at holding position in the wave. Look at the ground and mentally compensate for the change in viewing angle as you climb. Next time I fly wave I'll use a GPS moving map display to mark the release point as a way point and set the route planner to navigate back to the release point. Obviously, if I find a spot that is better I'll mark that as a way point and navigate to that new way point.**
- 4) Do an altitude notch too. OD worked up from 5500 so I could have started my climb at least 1500 ft lower. Marty recommends opening the spoiler and dropping 3-500 ft, closing the spoilers and checking the lift. Keep repeating this technique until the rate of climb drops some then start the climb.**
- 5) Spend lots of time at Cal City. The wave flight on 17 Feb was the 7<sup>th</sup> day I had flown at Cal City this year. As I wrote at first the day did not look good-the clouds weren't right and the predicted**

wind direction wasn't close to optimum- but the wave was working well.

- 6) Cindy says that the wave works early or it works late in the day. I got off at 3:00 so I got the late shift. The next day I towed out at 10:00 toward a beautiful lennie but it dissipated quickly and the lift topped out at 18200. Just before sunset another pilot, on the late shift got to 23000.