



## Diversion due to X-Winds/ Wind Shear

May 2010

A couple of months ago during a lesson, one of my clients wanted her daughter to experience flying in the front seat. We departed from Palo Alto about 4:15 pm to go fly around the Livermore area. Winds at PAO were normal, 270@12-15. Nothing unusual about the flight - it was fairly calm and good visibility.

By the time we returned and were approaching PAO at 5:30 pm, the winds had picked up to **230@15gusting 23**. Not only were the winds well beyond demonstrated as per the Pilot's Operating Handbook, they were shifting 90 degrees with an 8 knot gust factor, causing wind shear. (Wind shear = sudden change in wind direction and velocity). On final approach my altitude was varying + - 200', and my airspeed by + - 15 knots. Needless to say the airplane was crabbing rather sideways.

I did two go-arounds, then I thought, "this really isn't working, maybe San Carlos". I encountered the same conditions at San Carlos and did two more go-arounds. By this time my client and daughter were looking a little green and had enough. So I began asking ATC about all the airports around the Bay Area. Livermore - same, Hayward - same. Then the controller suggested San Jose - straight down the runway at 10 knots...found one-woohoo...a wonderful relief and not too far away. After landing we went into the FBO - Atlantic Aviation and checked the forecast. Winds were forecasted to stay the same for the next 3 hours. So we were off to Caltrain and back to Palo Alto.



The GET-THERE-ITIS, and "I have to land this airplane" certainly crossed my mind. And since I land in strong cross winds every day in the Bay Area - I did think "I can probably do this". But knowing the consequences of bending an airplane or worst case scenario - injuries to passengers, convinced me to make the safe decision. I know some of my clients think as a flight instructor, that I can always land the airplane. The weather is sometimes even beyond the "Flight Instructor's" comfort zone, but the safe choice is always available.

If you are uncomfortable with x-winds, I would be happy to work with you.

*Sue Ballew*

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