

I know that runway is around here somewhere  
by Richard Carlson SSF Chairman

A few weeks ago, I was sitting in the back seat of our club's ASK 21 with a 15 year old student on his 21<sup>st</sup> or so lesson. At 1400 ft AGL, he stumbled into a thermal and proceeded to climb to cloud base 4000 ft higher. The winds were light, about 5 kts, and they drifted us right over our home airport.

My student began desperately searching for the runway looking left and right, and all around. This desperation was heightened by the fact that a few weeks earlier while flying at a mid-west site he and the instructor got lost and they landed out on his training flight. The student wanted to avoid another landout. Up until the time he entered the thermal he had continually kept track of the airport verbally telling me every minute or 2 where the airport was. While concentrating on staying in the thermal his situational awareness had slipped and he was now unsure of the location of the airport.

I could easily tell him where it was, but I wanted to help him figure this out on his own, how else could I be sure that he wouldn't make the same mistake while solo. It wasn't surprising that he couldn't see the airport, in my 39 years of instructing the hardest thing for students to do is to look straight down to see what's below them. That is also true of rated pilots unless they flew contests in the 1980's when you had to take pictures of turn-points, because nobody rolls up into a steep bank and looks straight down.

The challenge for me now is to turn this into a teachable moment.

To give you a mental picture of the area, here are a couple of points. The glider port is located in the mid-Atlantic region just to the east of a line of mountains (1000 ft peaks) running N/S. Looking east is flat plain heading to the Atlantic ocean. Looking west you cross 5-6 miles of these mountains and then a 30 mile valley before coming to the next N/S mountain range. There are 2 small towns near our glider port. Town A is about 4 miles to the southeast and Town B is about 2 miles to the northwest. If you draw a line between them it runs right over the glider port about 2 miles from Town B.

Another prominent landmark is the local ski hill, about 900 ft at the peak and just at the NW corner of the runway, passing the peak puts you on a left downwind for the runway. However, that ski hill looks very different when you are a mile overhead and you have never been that high in a glider before.

My first task is to pull the students attention away from his current task of looking for the runway. Instead I want him to focus on the big picture. I ask him to straighten out and fly straight. We happen to be headed north so I ask are there mountains or plains to the left (west)? He replies mountains. Now I ask what about to the right (east)? The answer is plains. OK now I ask is the airport in the mountains or plains? The answer is on the plain just at the base of the mountains, and next to the ski hill.

Great, now I ask what the name of the town is off to the right. That's Town A is the reply. That is correct, where is the airport in relation to Town A? It's NW of that town. So far so good. Next I ask, where is Town B? That's off to the left is the reply.

The next question is, if you draw a line between those two towns, where does the airport lie? Since we have discussed this before during our ground training the answer is, the airport is between them but closer to Town B.

At that point the penny drops and he says, “Hey the airport and ski hill are directly below us. Now I know where I am.”

By focusing on the big picture and asking what do you see, instead of what are you looking for, my student was able to orient himself and solve his situational awareness problem without me having to tell him where to look. These are the skills every pilot needs to develop and practice.

The next time you take your glider up for a flight, stop for a minute and look at the big picture. What are the prominent land marks around your field and how can you triangulate several of them? Pull up your favorite mapping program or Google Earth and do the same if you are going to be flying at some new location.

You may be surprised how hard it is to find something large like a runway when that is what you are focused on. In that situation, it is almost always better to look at the big picture and identify the things you are seeing that can help get you back home instead of narrowly focusing on trying to find that lone runway, lost somewhere, probably directly below you.