

Study – Fly – Visualize © SFV

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SFV is the fastest and most cost-effective way of learned to fly. You get the added benefit of learning to fly to very high standards. It is not the easiest.

The idea is quite simple. Learn everything that you can about each flight before you fly. – **Study**. Then fly with your instructor. – **Fly**. Here's the most important part: Review the flight in your mind. Think about what you did wrong. Once you have analyzed your mistakes (there are always mistakes), visualize yourself doing it properly; you are back in the cockpit; you hear the roar, you feel the bumps, turbulence, and accelerations, you see the horizon and the instruments. In your mind you move the controls, flip the switches and twist the knobs just as you should have. Things start to work for you. – **Visualize**.

This final phase – Visualize – goes by many names: mental practice and muscle memory imprinting are the most common. This technique is used everywhere from professional baseball to ballet and platform diving. It works very well in flying.

Here is how I stumbled on it. I did not even know what happened until years later when I was trying to figure out what I was doing wrong as a new flight instructor. I had soloed in six hours and twenty-five minutes dual; my students were averaging 15.1 hours to solo. I was feeling pretty dumb.

Like most of us, I had very little disposable income as a high school or university student. But I could dream of flying. So I did. I read books, read stories, watched *The Blue Max*, and fantasized. Having no choice, I did what I should have done. I studied before I flew.

After I got my first professional job I had enough money to fly. I did quite well except taxiing. I couldn't taxi. Off onto the grass, my instructor barely suppressing his laughter. (If you have never taxied a tail dragger, your time is coming!)

Here was the problem. I hadn't studied taxiing – only flying! I knew, in principle, how to make a coordinated turn, control airspeed, how to trim, but I did know the concepts of taxiing a tail dragger. So, sitting in the back seat of a J3 Cub with Paul sitting in front talking over his shoulder I got my first lesson on taxiing. Here's an important lesson! ... two lessons! First, the cockpit is a lousy classroom – the worst! Second, if I had known, conceptually, how to taxi, it would have been much easier to convert theory to practice.

OK... we have gone through the first two steps: Study and Fly. Now to visualize. I was frustrated and confused. When I got home, I just couldn't let go of it. I kept reliving each embarrassing moment. I pictured myself helplessly charging into the grass and weeds only to cross the taxiway and head off into the weeds on the other side.

It must be human nature to ask oneself, “What did I do wrong? What should I have done?” That is exactly what you should do! By analyzing the flight, you first understand the problems. Only then can you figure out what you should have done. That is what I did until I knew what to change. I visualized everything in such detail that I could even smell the weeds.

Long story short: on the next lesson, Paul told me that he found it hard to believe that I was the same student. He said that I had taxiing down to an art form.

I had stumbled on Study – Fly – Visualize. It worked.

This is what the Air Force, Navy, (and probably the Army) do in their flight schools. They spend many more hours in classroom training than in cockpits. Students are expected to memorize emergency procedures and all of the essential data about the aircraft they fly. After flying, they have extensive debriefing. The military instructors use models extensively to help their students visualize.

The results are spectacular by every measure of effectiveness from hours needed to reach high levels of competence to the results of life and death aerial combat.

SFV works for you. No matter where you are in your flying career there is more to learn and more skills to polish. Here’s just one possible situation: Before you check out in your next airplane, get a copy of the manual. Memorize all the airspeeds, weights, etc. Get the keys. Sit in the cockpit by yourself and familiarize yourself with every instrument, radio and control. You can accomplish more in an hour in the cockpit on the ground by yourself than you can in an hour of flying in an unfamiliar airplane. You will find this time very well spent.