



Story Upside Down At Night

With all of your flight training, there will be times when you get the notion that your instructor is mean or doesn't know what they are talking about—perhaps not in such a bold way, but it will happen. This brings me to a story I have of a night cross-country with a student.

The flight itself is a pretty simple one and is safe for night flights. The flight goes from Mesa Falcon Field to Wickenburg, Arizona. I have personally put this flight in my syllabus for many reasons. I have gotten into many arguments with instructors who worked for me about this flight. Several of them refused to do the flight and instead ended up taking the student down to Tucson. As far as I am concerned, this defeats the purpose of the night cross-country. Following a big lit-up highway in between two bright major cities does not expose you to the real situations that can happen on a night cross-country.

Don't let your instructor take you to an easy-to-find destination that is lit up like New York City. Go somewhere that is pretty difficult to find, at least for you, not your instructor. Yes, you want to make sure the instructor knows where he is going to land in the event of an engine failure, but you need to be on a flight that can get you into a little bit of trouble if you aren't paying attention.

Back to my story.

I will call the student John. You know that I am totally against using all these high-tech things for private pilot training and even instrument ratings. Remember what job number one of the pilot is? Yes, fly the airplane! I have also already stated that it will take you about 500 hours before you have this second sense stuck in your inner memory. Even then, a difficult situation will be a battle between many parts of your brain at the same time.

John called me in the afternoon about his night flight. We verified the time, and at the end of the call, John stated that he had just gotten his new Garmin 95 latest-and-greatest GPS device and asked if he could bring it along. You probably know me pretty well by now and know exactly what my answer was: "No!"

John showed up at the airport with his cross-country planned and flight plan filed, and ready to go. Before we walked out of the office, out came that shiny new Garmin box. "Fred, you need to check this out . . . this is the new Garmin 95, top-of-the-line, latest-and-greatest . . ." This was back in 1996. Garmin was a no-name back then and was just getting into the market.

"Please, please, please can we take it with us?" After all the begging, I finally gave in. Deep in my mind somewhere, I had a little smile, and a voice just said, "Okay."

Before John even started his pre-flight, he set up his new Garmin 95 on the control column. I knew right then that we were in for a good time! I told John that he couldn't turn it on until we got out of Phoenix airspace, which is right where it starts to get nice and dark. He said, "Okay, no problem."

We took off and headed west as planned. John was right on the money with all of his checkpoints and times. Flight plan opened at the right time. He was getting an A+ at this stage of the ball game. We got about five miles west of Deer Valley airport, where it starts to get nice and dark. (Again, don't do a night cross-country when there is a full moon! It is nice to see the big bright moon from 4,500 above the ground, but it makes your night cross-country easier. If you are doing your first night flight as a licensed pilot with your girlfriend/boyfriend, go for it—that is the safe thing to do.)

John looked at me with those puppy eyes and asked, "Can I turn it on?" At this point, I just looked at him and said, "Yes." The little voice in my head spoke to me again, "Now it is time for the real lesson to begin."

John turned on the new greatest gift to mankind. The screen came on, and he said, "Look, Fred, isn't this great? It tells you everything!" The little voice in my head said, "Yeah. Right. It tells you everything except what your #1 job in an airplane is."

John kept playing with his new toy. I learned way back in 1989 that there are times when the flight instructor's job is to shut up and let the student go. This was definitely one of those times.

At first, John had it under control. He was following his line on the screen and was okay, but I knew that sooner or later, it was going to distract him from his number one job . . . Yes, fly the airplane!

A little while passed, and John decided to start playing with the screen options. I knew now that the big lesson had begun, so I just sat there. Slowly, his altitude started to go up and down—not very much at first, but I knew it was just going to get worse.

I looked at John, and his head was down looking right at the GPS. By the way, the time frame of this entire lesson was probably less than a minute.

John continued to look down and said, "Hm, I can't find the screen I am looking for." I just sat there. Slowly, he started a right turn, only a few degrees bank, heading right into the mountains. The plane began to slowly lose altitude as the right turn started to get steeper. There was no horizon at all, so John had no clue of what was going on. Luckily, he was one of the students that took my aerobatic option before solo, so he was familiar with extreme unusual attitude. But not at night.

Slowly but surely, the plane had entered the dreaded graveyard spiral at cruise power setting. I waited and waited, hoping that the sound of the wind howling across the airplane would give him a clue, but nope—he had been trained for this many times, but he didn't pick it up.

The plane kept going into a steeper bank. If it had been daytime, I would have let him get upside down, but not at night. Finally, it was time to open my mouth. "Anything wrong?"

John looked up, and the string of four-letter words began to flow. He got the plane under control. Power back wings level and nose level. However, he was still heading on the quickest path to meet God, right into the mountains a few miles north of the very dimly lit highway I plan as my emergency landing spot.

I said to him, "What can you see in front of you?" "He replied with, "Nothing." I said, "So that means . . . ?" I got the reply, "I am flying right into the ground." That answer was pretty much correct; with his new heading, he was flying straight into the hills. Since we lost about 1,500 feet, our altitude was perfect for the big smack.

I raised my voice slightly and said, "If you can't see anything, you are in trouble. Find some light, start climbing, and head in that direction."

John got the plane under control, turned the GPS off, and we had an uneventful flight to Wickenburg and then back home to Falcon Field.

When we got back on the ground, John said, "I think I am going to learn to fly before I worry about that GPS." He also requested some night unusual attitude training. I also highly recommend this.

So again, the little lesson is fly the airplane! John got distracted from that job by his little GPS. If you insist on using this stuff, make sure you know how to use it, and don't try to learn it in the plane, especially at night!

As far as disorientation goes, it can happen very quickly, and when it does, it is not going to be pretty. It has happened to me in actual instrument conditions. I had all my ratings, and it still took a few minutes before the blood pressure went down.

Just remember this little unusual attitude check, which you should be able to repeat at the bar when you are about to fall on the floor:

Airspeed High, Or, "I Hear the Wind Howling Outside the Plane"

1: Power Back

2: Wings Level

3: Nose of the Airplane Level

4: Once You Have the Plane under Control, then bring the power back in, and get back to your altitude and heading

Airspeed Low:

1: Nose Forward

2: Wings Level

3: Once you have the nose at descent attitude, then add power. Why? If you do not remember, go back to the "To Spin or Not To Spin, That is the Question" chapter.

If you are out on a dark night, you are going to be fighting that attitude indicator. Get some training on night unusual attitudes. Then come back a few weeks later and do it again until you automatically react, especially after some time has gone by.

Make sure you go somewhere that is not easy, and make sure it is on a dark night.

Hope to See you in the Sky

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