

Helo IFR

(I F o l l o w R o a d s)

I told my copilot I had vertigo and to stay on the instruments with me. His response was less than inspiring, “I...I... don’t know where we... are.”

By LCdr. Travis Peterson

As many a helo driver has heard, IFR means “I follow roads.”

While there is some truth to this meaning, when you’re in the middle of the ocean, on a black overcast night, 100 feet off the water, your instrument-flying ability will be tested. However, on a beautiful, clear day, during a VFR low-level trainer, you are not thinking about needing those instrument-flying skills—you always just can follow the roads, right?

and one full of all other types of vehicles. Needless to say, the newer pilot wanted to see it.

We hit the next checkpoint, a road intersection confirmed by GPS, then took a little detour along the road toward the junkyard. This point is where I had noticed the sky beginning to change color from blue to a yellowish-gray brown, and it had become slightly darker. I said it looked like a dust storm was coming in from the north. As we followed the road, little did we realize how fast the visibility was deteriorating.

In the next five minutes the visibility decreased to about three to five miles. The sky definitely became darker, too, but only as dark as a lightly overcast day. I knew we were approaching the junkyard. The GPS coordinates confirmed it was just ahead, but we couldn't see it. Had we been looking to the side, instead of ahead, straight down the road, we might have had a clue as to what really was happening.

The road was about to end, and much sooner than I had expected. What I had estimated to be about three to five miles visibility 20 minutes earlier quickly had deteriorated to about one-half mile in blowing sand.

I said, "We should have seen the junkyard by now; visibility rapidly is going down." If nothing else, I am master of the obvious.

When the road ended, I suddenly realized everything looked the same. I saw the ground, and I was just looking at the road. With all the blowing sand, though, the ground looked exactly like the sky: If any terrain features existed, they were invisible. Even the light level between the sky and ground looked the same.

Still not thinking IFR, 100 feet over land, in the middle of the day, I began a 180-degree turn to find the road and to regain my visual reference. I remember noting my heading and the reversal heading, then shifting my scan back outside to look for the road. Guess what? I never saw that road again.

Within 30 seconds, the radar-altitude alerter went off; it was set at 50 feet. I scanned the radalt and saw it rapidly descend through 40 feet. During the next minute or so—I'm guessing, because survival mode kicked in, and time compression went into overdrive—I went through numerous episodes of vertigo and denial.

Events happened so fast. My mind was racing, filled with thoughts about survival, the fact that the ground approaching rapidly, and that I needed power. I pulled collective about three quarters of the way up. However, I still was in denial about what was going on. Reversing radalt, I now was climbing. Thinking all was well, I shifted scan back outside; I needed to find the road.

I was inbound to Kuwait in the mighty HH-60H, on a beautiful July day in the Northern Arabian Gulf. Sure it was hot, but the weather was CAVU. I was taking one of the newer pilots for a low-level TERF trainer around the Kuwait desert. As we entered the training area, we descended to 100 feet, the normal altitude for these routes. I casually also noticed the sky to the north looked a little odd. We continued, hitting our checkpoints as scheduled. I mentioned the next checkpoint was near an "armor graveyard" of sorts, left over from the first Gulf War. All the shot-up and captured equipment had been dragged into three large junkyards (for lack of a better word), one full of armor, one of artillery,

The radalt went off again, so I shifted scan to see we were at 40 feet again and descending rapidly. I knew we needed more power because experience told me we should be climbing with the collective in that position, and the torque near max.

For the first time, I scanned the attitude indicator and RMI. I completely was lost and confused. I was back near my original heading. RMI continued rapidly left, with nose up, right wing down, zero airspeed, and descent with lots of power.

What I just wrote may make sense to you. But, when I was in the middle of the scenario, I had to decipher what the instruments were telling me, and the last hour of VFR seat-of-the-pants flying I had been doing didn't help. My body said we were in a lefthand turn. No one else in the aircraft had a clue. The two crewmen in the back were on the lookout for a road or junkyard. My copilot now was with me on the instruments, but as he had been navigating from the chart and visually, not at the controls, he was more confused than me.

I went back to the basics: Survival, more power, stop the rate of descent, level the wings, airspeed, I need some, altitude bottomed out at 20 feet.

If I still had been nose-high, I likely would have stuck the tail in the dirt. I nosed it over, and after what seemed like minutes, it began to register. The instruments looked better, and I was fully engaged. I was IFR, and the VFR training was over. Before long, I was at 50 feet, slowly climbing, accelerating and maintaining heading. Vertigo had set in bad, though, and I was beginning to fight myself. Trust the instruments, I kept telling myself, as I waited to hit the ground. The instruments told me that we were in good shape, but my head still was spinning.

I told my copilot I had vertigo and to stay on the instruments with me. His response was less than inspiring, "I...I... don't know where we... are."

As the gyro in my head began to cage, we were at 300 feet, 40 knots, accelerating and climbing. I asked my copilot if he was with me. He asked where we were going. Again, I scanned the instruments to see if I was messing up something else. I asked him to read off the instruments one by one and to tell me what he saw. He slowly caught back up with the aircraft and helped me confirm what I saw. The climb began to pick up as I

felt the aircraft go through translational lift. OK, things were beginning to make sense again; all was returning to normal, although painfully slow.

He then asked me what was wrong. I wasn't completely sure, so I asked him if he knew what had happened. He said the radalt went off; now he was "Master of the obvious."

I asked if anyone in the crew had seen the road again; everyone said no. We were at 1,000 feet, 130 knots, and direct to the ship. I finally had time to think, and the vertigo essentially was gone. Still, I had no visual reference to anything, but there was a noticeable difference in light level from high to low. After some deep breaths and a little time, I was able to more accurately analyze what had occurred.

I asked the copilot if he knew what just had happened, besides the radalt going off. He said, "During your turn, you either descended, or a dune rose up to set off the alerter."

I replied, "I probably descended."

I then asked if he had realized we had stopped turning right; stopped forward flight, with the nose going left with a right bank; descending tail first toward the ground; and most were likely flying backward. I could see his eyes get wider through his dark visor, and his mouth was hanging open. His look indicated he may not have known of our predicament.

I really am not quite sure what had happened. The only way I can explain what all the instruments were telling me was, when I first looked at them, my brain did not process everything. I knew we probably were going to hit the ground hard, and it would be my fault. It's easy to second-guess what I should have done and when, after the fact. I was younger and less experienced. However, I have seen the mentality that led me into this trap result in many more mishaps since then. We, as naval aviators, continue to press, even when things are not going our way. Call it the desire to get the X, get-there-itis, or just not having the intestinal fortitude to call it off when you know you should.

There are times when you need to bring the "A game" and get the job done, but on this day, and on many others, a need just doesn't exist. Wait until another day to get the X. I'm just glad we're still around to see those days. 

LCdr. Peterson was flying with HS-2 when this occurred; he is currently the VR-1 safety officer.