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The whole purpose of flying is to have fun going places. The fun is amplified when somebody is with you. In the eyes of your non-pilot passengers, you are captain of the skies — the dopey son-in-law morphing into a broad-shouldered, square-chinned, life-entrusting pilot-in-command. It's a proud moment of intense accomplishment.

So now you're a pilot, and you can fly where and when you want. But here is a trap which can snag the unwary when you agree to fly and your passenger expects a schedule.

A case in point: my first hard-IFR flight with a passenger, my wife. My mostly-sainted bride was unconvinced about this whole Wright Brothers thing until we had a thrilling ride in bright clear skies from Connecticut to Hilton Head. It was great.

But the return trip was not. Unlike a scheduled airliner, we waited all morning for the grey skies to lift. As a newly-minted IFR pilot I didn't expect everything to work perfectly so I had decided I wouldn't depart into IMC unless I could fly the pattern visually. She fussed and fumed, but I insisted, no, we can't go yet. It was stressful, for both of us.

After a vending-machine lunch, the ceilings had drifted above circle-to-land minimums. We fired up the Cessna 182 and blasted into smooth but gloomy skies. Over Virginia — this was before NEXRAD and such — we ran into a squall line. For thirty minutes the rain pounded the Cessna like Ringo on a snare drum. The plane flew perfectly. The ride remained smooth. ATC was calm. I was elated. But Annie was terrified, unprepared to stare at the glossy interior of a cloud while rain pummeled the plexiglas.

When we popped into VMC over New York, Annie turned to me, angry. “Between you being thrilled and me being scared to death,” she said, “we gotta work on this!”

It’s useful to ponder another real-life instance where, for once, the idiot behind the yoke isn’t me. In this case it is my good friend and super-pilot Vince Edwards. Vince’s story is a perfect example of a PIC who forgot to say “no, not today.”

Copper-Hunting in Peru

20 years ago, Vince was building hours hoping to get into the major leagues. He had about a thousand hours of bush flying in Canada but his multi-engine IFR check ride had been just seven months before.

The setting was in Cuzco, Peru, the gateway to the Andes. “The airport is at 11,000 feet elevation,” Vince recalls. “It’s so high, you put on your oxygen mask while you’re still on the ground.” On a hot summer day, density altitudes reach over 20,000 feet.

The single runway looks like a four-lane highway blasted through the middle of a suburb. It’s 11,000 feet long and is surrounded by high mountains which loom over the town. Amazingly for a commercial airport, the runway is one-way. “You land flying towards the mountains, and depart with the

mountains at your back. Go-arounds are a real challenge,” Vince explained. “You can do them, but you got to be at the top of your game.”

Vince was working for a Canadian company doing a magnetometer survey looking for copper. In a bit of ominous foreshadowing, Vince only got the job after another company crashed their plane doing the exact same work.



The Navajo was an ideal platform for the survey mission, powerful and well-equipped. Vince's co-pilot was Franco, shown here, who was very inexperienced at the time.

The flying was very precise. “We flew a grid over the contours of the hills, flying a GPS line, right up the slopes to hit the peak of the ridgeline exactly 100 meters AGL,” he told me. “Then you’d either dive

down the other side at 100 meters, or do a tear-drop turn and go back the other way.”

The airplane was a Navajo very well-equipped for the job. It had turbocharged engines, a Panther conversion kit, winglets and vortex generators, and lots of other goodies. It also had a long probe out the back of the airplane loaded with a very sensitive magnetometer, and cameras that photographed straight down.

“There were four of us working on the project,” Vince related. “There was me and Franco, my co-pilot. There was a maintenance mechanic who kept us



This photo was taken enroute to a survey area which was surrounded by the Andes Mountains, with peaks as high as 21,000 feet. The patches on the ground are farms, with people living and working at an altitude of 16,000.

flying, and the survey engineer who programmed the computer and downloaded the data after each flight.”

Vince said Franco grew to be a good pilot, but at this point he was more of a passenger than a helper. “He only had about 300 hours of total flight time and worked the radios in Spanish.”

Vince tried to give Franco more experience but it was hard. “Once Franco started to switch from the outer fuel tanks to the inner fuel tanks — a six step process on the Navajo — and he got the valve stuck half-way. We lost an engine. The whole plane slid sideways, at 16,000 feet with mountain peaks all around us.”

Vince was very aware of the dangers inherent in this flying. “I was very disciplined. I refused to fly unless there were bright, clear skies. They called me

‘One-Cloud Vincy-Boy’ because I never flew if the mountains were even slightly obstructed. It could be sunny in Cuzco but we’d find clouds in the survey area. I’d just turn around. I was working very hard to not become a statistic. I could always do the job another day.”

Hard Work

The flying was very difficult, for a number of reasons. They both wore oxygen masks so the only way he could communicate with Franco was with hand-signals. “Three fingers followed by one finger meant 31 inches of manifold pressure,” Vince explained. “This caused all sorts of problems. I signaled him to set the mixture for landing, and he shoved them up so fast the engines choked from all the fuel.”

Another problem was their general health. “You never feel good living at 11,000 feet,” he said. “We always felt crappy, like you have a beer in you, a bit of a buzz. You’re living with the draggy, heavy feeling of oxygen deprivation.”

The third element was the fragile nature of third-world aviation. The controllers mostly spoke in Spanish, with Franco translating, so Vince lacked



The back of the Navajo was relatively cavernous, holding the GPS-based survey computer and the magnetometer system which protruded behind the tail of the airplane similar to the Navy's P3 subhunters. (The magnetometer was so valuable to engineer took it home every evening and slept with it under his pillow.) This spacious cabin was nearly the undoing of Vince and Franco as they flew their final mission.

situational awareness. Pre-GPS navigation relied on weak Peruvian VORs, spaced 100 nm apart, blocked by mountains, improperly engineered, and usually not well-maintained.



Cuzco offers an 11,000 foot runway plunked into the middle of a sprawling Peruvian city. The smog is bad but the density altitudes are worse. The mountains behind the runway dictate all operations are one-way.

Then there was the job itself: the client always was asking when the survey would be completed. It also was a dangerous part of the world — lots of drug war lords, guards and machine guns. The crew took a different route to the airport every day so they wouldn't get kidnapped. "It wasn't pleasant," Vince said. "I wanted to get home."

Time to Go Home

Eventually, they successfully finished the survey. "The computer operator already had gone back to Canada and the aircraft engineer was in Lima waiting for us," Vince said. "The GPS survey computer was packed up. It was just

Franco and me and the airplane and we're ready to relocate back to Lima, about three hours." It was just about that point when One-Cloudy Vincy almost became the statistic he had tried so hard to avoid.

Everything was rushed and compressed. This was a longer flight and the weather in Lima wasn't good, so they ordered extra fuel. Then the company thought they would save some money by putting extra tools and supplies into the airplane. "All this heavy crap is being thrown in the back," Vince remembers thinking. "But if it doesn't fill the cabin you can't be overweight, right?"

"I'm trying to figure out the weight and balance, and I'm completely out of my element. I'm using charts I've never looked at before," Vince recalls. But they wanted to get home, they knew the airplane was in tip-top shape, and the flight was only three hours. How bad could it be?

Really bad. Things were not right even while they were on the runway. "The take-off roll was over a minute," he said. "I was trying to climb and I couldn't get 200 fpm." The plane had never handled like this before.

Slowly they climbed out of the valley, only to plunge into the clouds. "My IFR skills were really rusty and the weather was really squally. We were in and out of the murk, not sure of our position, flying in narrow valleys, surrounded by mountains. I couldn't make it to the minimum altitudes," he said. "I began doing left-hand 360° turns to stay in the valley. I was just spinning over Cuzco, trying to climb, with the turns getting tighter and tighter."

They're low and slow, and with a high angle of attack, in hard IMC. Suddenly she stalled. The left wing went down and the overloaded plane lost 700 feet in the blink of an eye.

Vince's training kicked in. "I pushed the nose down, hard, and jumped on the rudder. I may have even over-boosted the engines, just to get a little more out of it," he said. "Thank heavens for the Panther kit; the plane recovered

perfectly.” Franco, working the radios, hadn’t noticed anything. But they still were in the mountains in IMC, with an uncertain position. Vince steadied the plane, sucked up his courage, and started to climb again. “I’m thinking, OK, we’re flying but we’re not in a good place,” Vince said.

The clouds cleared, briefly. He could see the peaks and recognized where



The terrain was so high that aircrews used oxygen even on the runways. Most of the flying was on bright, cloud-free days but in this photo the sunset is illuminating both Vince and the mountains, which are visible over the glare shield. They clearly are higher than Vince is flying at that moment. It's not a friendly place for piston-powered airplanes.

he was. He continued the climb, pulse racing and breathing hard. After about 20 minutes, they made it to the minimum on-route altitude. “We start off towards Lima, and jump back into IMC,” Vince recalls. “But we’re in a valley on the airway so I figure it’s all OK.”

Vince was tracking away from a VOR. About 1/3rd of the way to the next beacon, the signal from the tired VOR faded away. “The needle just toppled over. I looked at that red bar on the VOR and froze. I couldn’t believe what I was seeing,” Vince said. “I kept saying to myself, fly your heading, don’t change your heading, just lock your elbows. Something has got to change.”

It was a long ten minutes while Vince did his best to follow the course, truly flying blind. Then he popped into VMC, which was a huge relief because “the mountain peaks were well above us.” In another ten minutes the next VOR needle hesitantly came back to life. Vince was only one dot off-course, which was pretty good considering the circumstances. Eventually they descended back into the grey pollution over Lima, flew the ILS, and the job was done.

Say “No” While Saying “Yes”

Today Vince commands a Boeing across the Pacific. “As a 777 pilot, you’re flying a \$300 million machine. Hundreds of people are trusting you to do things right,” he said. “You’re in that seat because you’re the one person on that plane who has proven you can say ‘no’ when it needs to be said.”

Vince knows the responsibility for the near-disaster at Cuzco was his. That mission required everything to go just right — always a perilous plan. He should have returned to Cuzco, rejected the load, rejected the flight, or even rejected the take-off. “I simply should have said, ‘No,’” he told me, truly the voice of experience.



The weather in the Andes can be unpredictable and deadly. Here snow-capped mountains are perched in front of a massive cloud wall as a front was moving in. Not the ideal spot for stalling the airplane in IMC conditions.

Which brings us back to my simple suggestion. When somebody asks to go for a ride some place, feel free to answer enthusiastically and affirmatively if

the mission is within your limits. But preface your answer with a smile and the words “weather permitting.” They’re your get-out-of-jail free card. Play it any time you need it. Here’s how it works:

- Your mom asks if you can fly birthday presents to your niece three hours away, but they absolutely need to be there on Sunday for the surprise party. “Sure,” you say, “I’d be pleased to fly them, weather permitting.”
- Sales trip to visit a big client? “No problem, boss, weather permitting. We can always switch to Delta if the weather doesn’t oblige.”
- Golfing with your buddies at Myrtle Beach? “Sure! I can carry three guys, weather permitting. If the weather’s bad, we’ll take two cars.”

There’s some very subtle psychology at play here. First, you’re saying “yes” which makes you a hero. You’re proving that the small fortune you bonked on pilot training was an investment, not frippery.

Secondly, you’re hinting there may be a “no” in the future. You’re setting the expectation that the controlling factor is the weather, and nobody controls the weather.

Additionally, you know flying secrets your passengers do not. As PIC, you’re planning the entire route, hundreds of miles away. You’ve got Foreflight, WeatherSpork, NEXRAD, and a dozen other tools. Your passengers may be in balmy Wichita but you’ve discovered thunderstorms in Chicago, so the mission’s a no-go. You decide, in advance, in sunshine, and on the ground.

Lastly, you’re giving everybody a chance to select their Plan B. “Spring weather can be dicey, Mom,” you tell her. “If you really need those boxes, maybe we should call FedEx.” Whether she does or not, it’s her choice.

The best flying I ever have done was when I was brave enough to cancel a flight, endure the whining, and stay on the ground. Hope is not a plan. Of all the people on the plane, you're the only one with the skills, training, and the responsibility to make the right decision in real-time. Every mission should be flown only when you are absolutely certain it will be successful. It's your job is to be the grown-up in the room, the one who has the courage to say, "no, not today."

Flying is great, weather permitting.

About the Author

Dr. Mike Jones is an entrepreneur who uses his business expertise to help G.A. airports across the country improve their governance and operations. Mike Jones is a freelance writer who lives in Pinehurst, NC and flies a Cessna T210. While he's flown over the Rockies four times and has taken his Cessna to its certificated max of 27,000 feet, he has no desire to push his luck flying into an airport like Cuzco. He's always accessible at PilotMike2012@gmail.com.

