

BY THE SEAT OF MY PANTS

How often have you needed to "fly by the seat of your pants"?

I found myself living the cliché when I was applying for a flying license to carry passengers in single-engine planes. In 1949, flying was my passion during "the hols" from the girls' boarding school I attended in Johannesburg.

My parents, brother and I lived in Kitwe, a small town built to run a large copper mine in Northern Rhodesia (Zambia). The Kitwe branch of the Flying Club of Northern Rhodesia boasted a stable of several light aircraft including a couple of Piper Cubs and Piper Cruisers, maintained by former Royal Air Force pilots and mechanics.

At the age of sixteen I got the notion that I wanted to learn to fly, which meant convincing my father, Consulting Metallurgist for the copper mine, to pay for the lessons. To stop my nagging, he agreed to let a flying instructor decide. When I passed the introductory flight, Daddy gave in gracefully, perhaps seeing the advantage of his daughter's having another interest besides boys. Later he confessed he'd expected my five-foot-two frame would be too short to reach the controls and he could escape guilt free. Nice try, for indeed I was too short to reach the rudder pedals, but the instructor assured us that since the airplane seats were not adjustable, it was common for pilots to use a cushion. Mummy sewed me a beautifully upholstered foam cushion with a shoulder strap so it would be easy to handle.

The airfield, which doubled as a polo field, had only one runway. Sometimes the wind would change abruptly, so if you got ready to take off from one end, you'd have to taxi all the way to the other end to be facing into the wind. When I'd completed close to eight hours of instruction, Lewis, my instructor and a former Spitfire pilot, took me up for a routine practice of "circuits and bumps" in the Piper Cub. It must have seemed deadly boring after a Spitfire, but he had a poker face and I couldn't tell what he was thinking as we landed and rolled to a stop.

"Good, you're ready to solo," he said. "Off you go." I protested I didn't feel nearly ready to take the plane up alone. Lewis simply got out, latched the Cub's door firmly behind him and didn't look back.

Meekly I taxied back to the takeoff point, lined up, and applied full throttle. The plane sprang into the air faster than I expected, and as I gained altitude and turned into the airfield circuit pattern, my brain switched to automatic pilot. Following the usual procedure I found myself landing before I had time to process that I'd flown the plane all by myself.

I thought of how proud Daddy and Mummy would be that I'd soloed, and how jealous my younger brother would be because he only had model airplanes. (Decades later the suspicion surfaced, Freudian style, that my sudden ambition to fly had less-than-noble roots in trying to

upstage my brother, who had received an expensive model plane for Christmas that eclipsed whatever I got.)

My first solo landing left me—and (of more concern to the instructors) the plane—all in one piece, and I lived to brag that I'd received my pilot's license before my driver's license. I became so obsessed with planes that it was a wonder I graduated from high school and was able to enter the University of Cape Town for a B.A. in Fine Art. My official Ministry of Civil Aviation Personal Flying Log Book witnessed that in three years I had accumulated thirty-three hours of dual instruction and thirty hours of solo flying, enough to apply for a Private Pilot's license to carry passengers. I wondered which brave soul would be my first victim.

My flying hours were minuscule compared to air force and commercial pilots, even though I flew as much as possible on weekends and occasionally ferried planes when other clubs wanted to borrow them. When I wasn't piloting, I hung around the airport hitching rides in any aircraft to any round-trip destination they'd let me, and helped the mechanics paint call letters on wings. VP stood for Rhodesia; my first solo was in Piper Cub VP-RBG.

January 20th, 1952, was less memorable for being my nineteenth birthday than for taking the cross-country navigation test. I had already finished the practical and theoretical exams, and the third and final part was to plot the compass headings for flying a triangular course through two points and back to base.

My navigation instructor, Percy, had been a Squadron Leader in the Royal Air Force and cultivated a very fine handlebar mustache. While I attempted to work out my directions, factoring in magnetic variation, wind velocity and drift, Percy paced the floor, unable to resist peeking over my shoulder from time to time and muttering hints.

At last, apparently deciding that giving me a bit of illegal help was better than losing a valuable Piper Cruiser in the jungle, he handed me a card with the correct headings and a stern reminder that my flight should take no more and no less than forty-five minutes.

Dutifully I stuck the card into the side pocket of my red corduroy slacks, and before going out to the plane I took a precautionary visit to the restroom. At the Kitwe flying club the facility was a state-of-the-art, one-hole outhouse, and anything consigned to its depths was gone forever. Naturally, that's what happened to the Squadron Leader's card—it slipped right out of my pants pocket before I could say, "Oh, shit!"

After all Percy's trouble, I didn't dare confess I'd lost his critical instructions even before I left the ground. My teenage wisdom told me everything would be fine because I knew how to read a compass and was not too bad at reading maps. Like most light planes in Africa at the time, the Piper Cruiser had no radio to turn to in case of emergencies.

The Copperbelt's summer rainy season, November to January, featured brilliant sunshine interrupted by a torrential downpour you could tell the time by, lasting from 2:30 to 4:30 p.m. along with violent lightning. If I made it back in the required 45 minutes I should easily beat the storm, for at the moment only a few picturesque cumulus clouds dotted the blue sky.

A Piper Cruiser, VP-RAT, was fueled up for my cross-country assignment. After completing my pre-flight inspection and checking the wind sock to see which end of the field to take off from, I lined up the Cruiser at the windward end. Giving the engine full throttle I surged

forward, and as the wheels lifted smoothly off the ground I glanced at the instrument panel to check my heading.

That was when I noticed masking tape pasted over the compass with the warning, *OUT OF ORDER—USE AUXILIARY COMPASS*.

In disbelief I looked around and saw the other compass mounted on the floor. I vaguely recalled it was a military compass that needed to be set manually, but the details were lost in a place more inaccessible than the outhouse. There was no way I could fool with the enigmatic instrument and keep the plane straight and level at the same time.

A cautious fair-weather pilot, such as I was supposed to be, would have scrubbed the mission and returned to base—but the greater danger of facing a sputtering Squadron Leader stung me like a horse whip and kept me galloping full speed ahead.

The jungle below was a sea of dense, tall trees that concealed helpful landmarks like roads and railway lines, and the only hills in the flat terrain were small, identical anthills. Luckily the three checkpoints I needed to reach in the triangular course were easy to spot even without a map. The first was an island in the Luapula, a river that flowed at right angles to my flight path; the second point was the three-hundred-foot smokestack at the Bwana Mkubwa mine near Ndola, so obvious it seemed like cheating; and the third was its identical twin back home at Kitwe.

It seemed like a piece of cake—until the cream-puff clouds I'd been admiring began to turn an ugly bruised purple right before my eyes. My terror of tropical storms made me steer around the clouds instead of plowing through them, and since math was never my strong point, before long I had no idea how far I'd drifted off my original direction. If the cumulus islands decided to become a continent, I might even lose sight of my smoke-belching guideposts.

Intent on dodging clouds, I had failed to keep track of the ground. When I finally thought to look below the plane, I blinked and looked again. Not only had I reached a wide river like a giant python which had to be the Luapula—I was exactly over an island! Whether it was the right one mattered not—I was in no mood to look a gift island in the mouth.

With renewed faith in miracles, I banked the Cruiser and pointed it toward the blessedly visible beacon of the Bwana Mkubwa smokestack. Passing over the Ndola flying club as required, I imagined a spotter was reporting to Percy by phone that Piper Cruiser VP-RAT had not crashed and was heading north-northwest toward Kitwe. I landed at 2:25 p.m., five minutes before the first raindrops.

The Squadron Leader looked relieved that I'd brought back his airplane in one piece. He gave me a paternal pat on the shoulder. "Excellent, young lady, you finished exactly on schedule." When no one was looking he winked and added quietly, "We needn't mention it was due to my calculations."

I smiled faintly and backed away. "Excuse me, Percy, but I'm overdue for a pit stop." My urgency was real in more ways than one, for if he requested his card back to destroy incriminating evidence, I could say it fell down the toilet hole *after* the flight instead of before.

A month later when I received my passenger license, I dared to think back to my compass problems on the cross-country test. It seemed strange that I'd been given a plane with a broken

compass. Had the *OUT OF ORDER* sign been part of the test, to see if I could work the manual compass? Was it a practical joke by the mechanics, known for their wicked sense of humor? Or, more likely, was I a complete idiot for not noticing the situation until it was too late? If anyone knew, they weren't telling.

My first passenger was someone who was terrified of heights—my mother. I can't imagine the fear she endured to show her confidence in me, but her anxiety to be back on the ground came out when she said, "That was a lovely smooth landing, dear!"

"Thanks, Mummy, but we haven't landed yet." Happily, I touched down without any embarrassing bounces to disillusion her.

Although it can't be found in any aviation records, I believe my infamous cross-country caper earned me a license to fly by the seat of my pants.

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