Chapter Twenty-four

A Hard Landing Made Easy

As I neared the final weeks and days of my time in Puerto Rico, my mental list of things to do became more and more focused on details. The big picture seemed to be as much on track as it could be. But there were some details that itched for scratching. One of these details was a young pilot, Paul.

Paul was a prop pilot assigned to fly our ancient P2s and the smaller S2s. Most of his cockpit time was as copilot. He had been in the squadron only a few months and was going through a training regime to qualify him to perform as pilot in command of these two types of aircraft. For most Navy aircraft squadrons, pilots reported for duty fully trained in the appropriate type of airplane. This instruction took place in squadrons that were specifically assigned that mission, Replacement Air Groups or RAGs. The pipeline was, first the RAG and then the operational squadron. In this way, pilots would arrive ready to hit the ground running, or rather, to hit the air flying. But there was no RAG for the P2 or the S2. This was because the P2 and the S2 were no longer part of the inventory of normal squadrons. There was not much sense to have a whole training infrastructure to train pilots for just one squadron. It made much more sense to let the squadron do the training and qualification while pilots were on the job.

Paul was receiving on-the-job training to qualify as a pilot of the P2 aircraft. Our P2s were big, lumbering old girls whose faded paint jobs attested to thousands of hours of faithful service. Throttle handles and control wheels were rubbed shiny by the hands of hundreds of pilots from a bygone era. For me, these planes were like old girlfriends who ignited much nostalgia, but little passion. For Paul, they were more like a new love for an exotic beauty. As is often the case, however, with exotic beauties, particularly the experienced ones, Paul found the object of his new love extremely hard to handle. He could not land the thing.

Part of his problem was his lack of experience. Part of it was the fact that the P2 had a particular idiosyncrasy that made it significantly more difficult to land than other planes.

As the plane slowed to landing speed and approached the surface of a runway, it became unusually nose heavy. (It would take an aeronautical engineer to explain the reason for this, and I am not one of those.) As the plane is about to touch down, the pilot must arrest his descent by raising the nose of his plane to set her down on the main wheels before allowing the nose wheel to gently follow. The front-end-heavy P2 resisted this last-second raising of the nose.

To compensate for this problem, Lockheed designers had built in an extra control surface in the tail of the plane that the pilot could use to increase the camber —the curve—of the surface that controls the up and-down attitude of the aircraft. There was a small button on his control wheel that a pilot could use to get that extra control in the final phase of landing. It was called a “varicam.”

What was required approaching touchdown was a well-coordinated manipulation of the control wheel, the power, and the varicam. It was more or less like coordinating the gas pedal and clutch in a manual shift automobile. If the varicam was not used at all, or not used in a manner that blended well with the other controls, the power and the control wheel, the nose of the P2 would strike the runway before the main wheels. This would cause the plane to rock back swiftly onto the main two sets of landing wheels. The force of the main wheels hitting the ground would

pitch the aircraft forward, causing the nose wheel to violently strike the runway. The force of this blow would set the plane, all the time hurling down the run- way at around 100 miles an hour, back on its main wheels. This process, known as a "porpoise" for obvious reasons, would continue until the capacity of the nose gear to withstand the force of its impact with the runway was exceeded. The nose wheel would then collapse, with unfortunate consequences for all. Since this whole process would be out of the control of the pilot once the porpoise got started, the only solution was to apply full power to the engines, take the plane off and start all over again. Our pilots who were training Paul to land the P2 reported to me that he was having a great deal of trouble getting the hang of all this.

I decided that before I left the squadron, I was going to teach Paul to land the P2. During the waning days of my command tour I had Paul and myself scheduled for a training flight. On most training flights you would take off, go somewhere, do something, and then maybe return to the field and practice some landings. But on this flight we never left the field's landing pattern. I settled myself into the right seat in the cockpit, the copilot's seat, the seat from which I would instruct. Paul strapped himself in on the left and took off. We turned downwind and asked the tower for clearance to do a touch and go landing. By completing a landing and then taking off again (touching and going) we would avoid wasting time having to taxi around for another go at it.

Paul maneuvered the plane around in the landing pattern quite well. He approached the end of the runway in fine shape. I made up my mind to keep my mouth shut. I wanted to give him every chance to do the thing without my coaching. I wanted to see how he would do without my directions. As he drifted over the end of the runway, he reduced power a bit. He coordinated the reduction of power with pulling back on the control wheel. Fine! But as the aircraft slowed, the nose fell through, as it would inevitably do without the help of some well coordinated varicam application. The thing about a porpoise is this. It only takes two cycles of the uncontrolled bouncing to do you in. So after the first bounce I took control of the plane, added full power and we leaped into the air.

"OK, Paul," I said over the intercom. "You take the plane and try that again. I will talk you through it."

Once again Paul flew the plane downwind and smoothly into the final phase of the landing pattern. This time I did a bit of coaching.

"Ease some power. That's it. Now ease the nose up with the control wheel. A little more power off. Now some varicam... a little less power... a little more varicam."

And before he really knew what was happening, Paul had set the P2 down on its main wheels, with the nose wheels proudly raised a foot off the concrete.

"Now shut the throttles and EASE the nose down onto the runway... good. Now just let her roll for a bit. Now add full power and take off."

Once airborne and with the clearance of the tower, we turned downwind to parallel the runway and get set up for another touch and go. I thought about my first instructor in flight training, Frank Hule, The Screamer. I was determined not to scream at Paul. We completed fourteen landings in a row. After the first five or so Paul could set the thing down without much advice from me. By number fourteen he could do it without any advice at all from me. It was just a matter of figuring out the damned varicam. Before landing number fifteen, I informed the control tower that this would be a full stop landing and the end of our practice.

As Paul turned to commence the landing pattern, he looked over at me. He looked like a dog who gazes to ask with his eyes, "Am I doing OK?"

I remained silent. My arms were folded across my chest. I reached for a paper cup half full of cold black coffee. I raised the mike attached to my hard hat from my lips back to the top of the hat, where it would be useless. I sipped the bitter cof- fee. As we rolled out upon the completion of his final landing, I placed the cup back in its holder and flashed the universal pilot's signal for everything positive: good, well done, fine, great, marvelous, holy cow... a clenched fist and a thumb pointing skyward... a rousing THUMBS UP!!!

As Paul taxied the ancient P2 back to our hangar, I slipped the mike back to its position in front of my lip.

"You know, Paul," I said, "you will never have a problem with that again."

His facial expression, as well as his body language—slumping against his shoulder straps—showed me the picture of myself practicing that emergency engine- out procedure with Frank Hule many years ago back in Pensacola. The Screamer had stopped screaming to tell me that my flying right then and there was perfect. That was a thrill. But it was not equal to the thrill I felt from being able to tell Paul that he could now do something that few other pilots could do... land that cranky old bitch!

My pilot's log book indicates that the flight with Paul was on June 18, 1975. The entry immediately after that indicates "No Further Flights This Command."

Although I would serve on active duty for another eight years, that was my last flying job... my last flight. And it was a good one.