

THE LAST RESORT

By Lt. Stephen Simmons

As an avid hunter and outdoorsman, I have my fair share of outdoors “there I was” stories. As a naval aviator and primary instructor pilot in the JPATS T-6A Texan II, I have a similar list of stories and it is getting longer. Here’s the one that tops the list.

The day started as any other day in the 8th Flying Training Squadron at Vance Air Force Base, Okla. We had an early morning show, the long and intense formal brief, then the individual crew briefs and everyone stepping to fly. My sortie would be only the fourth for a Marine Corps second lieutenant and would be the standard type profile: outlying field for bounces, military-operating area (MOA) for contact maneuvers, return home for more bounces and the debrief. Because it only was the fourth ride of the program for the student, you could say quite a bit of learning and instructing was taking place. After the big event (for the student) of correctly just getting all the equipment turned on, we worked through ground ops and got airborne. We soon had arrived at Dogface, our outlying field, for about 20 minutes of pattern work. During our first straight-in approach and touch-and-go, I experienced my most hair-raising and seat-cushion-sucking time in an aircraft.

On the takeoff leg of the touch-and-go, task saturation had taken its toll on the young, student naval aviator (SNA), and cleaning up the aircraft configuration slipped from his list of things to do. Giving him as much time and benefit of the doubt I could, I let the situation progress in hopes his light bulb would illuminate, and we could clean up as we normally do in the pattern.

Well, his light bulb never came on, and I had to reach into my instructor bag o’ tricks and take the controls to avoid overspeeding the gear and flaps, some-

thing I’d done probably two dozen times before. As I brought my hand to the power-control lever (PCL) and retarded it to the idle stop—no idle stop existed!

I was about 150 feet AGL, 140 knots, dirty, and with an engine that was winding down. I inadvertently just had shut down the engine, and now it was decision time.

I had three options available to me but no time to consider the pros and cons of each. The climate-controlled air and cushioned seats in the skipper’s office of my HAC board would have been nice to have, but this was game day, and my actions would determine if I would cause a Class A mishap.

My first option was to apply the boldface emergency procedure (EP) titled “Engine failure immediately after takeoff, sufficient runway remaining ahead.” To accomplish this procedure, I had to determine if I had enough asphalt in front of my aircraft to lose my altitude, touch down, and get stopped before the end of the runway. I bunted the nose forward, and all I saw was the overrun of the departure end and a river—not an option.

Option two was to apply the boldface EP entitled “Immediate airstart.” To accomplish this procedure, I had to reach down and hit the auto/restart switch and wait. With time compression taking its toll, the engine sounded like it was going to relight. I now was very happy my engine was coming back online, so happy that I pushed up the power to try and get away from the ground. This action wasn’t the best thing to do as the engine then sputtered, indicating possibly a compressor stall. Simply put, I had demanded too much out of the engine by pushing up the PCL too fast, too far. I now was considering option three, which I will get to shortly. I momentarily brought back the PCL and heard



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the engine spool back up to what sounded like a normal engine start. I advanced the PCL once again and had good, useable power—what a relief!

Option three that I had available but did not use was the 0/0-capable Martin Baker ejection seats. Getting out obviously was the last resort and one I didn't want to use. But, I was merely seconds from this decision and pulling on the little yellow-and-black-striped handle. Had I resorted to this option, there definitely would have been a Class A aircraft loss and the potential for post-ejection injuries.

To end the sortie, I declared an emergency with the runway supervisory unit (RSU) to gain my pattern priority and fully stopped the aircraft. I was not sure exactly what had gone wrong with the plane, but I knew continued flight was not a good idea.

A weeklong safety and maintenance investigation followed. The cause was determined to be a complete mechanical failure. An aluminum clamp that connects to a rocker cam and acts as the idle stop had failed. So, when the PCL was reduced to idle, the cam was in the

down position, which allowed the PCL to be brought all the way to the “cut off” position. The manufacturer had identified this potential failure of the part, and the Air Force was swapping out parts during their phase-maintenance cycles. Since this incident, all Vance-assigned T-6s have had stronger steel clamps retrofitted for more reliable service.

As I reflect on the lessons learned, two stand out the most. One is that you just never know when you're going to need your “A game” to handle an EP. I have taken the controls on numerous occasions to prevent overspeed situations; this action almost was second nature to me. Second, I will take a new appreciation to the quarterly, required EP simulators. One week before this incident, I had attended an EP sim, where the instructor and I had set up numerous catastrophic-engine-failure scenarios in difficult flight regimes, just to see the different options. I now take the simulator EP training more seriously and not as just a check in the box—so should you. 🛩️

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