CHAPTER EIGHTEEN

THE JACKSON HOLE ADVENTURE

ALBERT B. KENDELL

In the mid-sixties, I was a captain flying a Convair 580 for Frontier Airlines on a trip from Jackson, Wyoming, to Salt Lake City, Utah. Flying in and out of Jackson Hole is beautiful, interesting, and potentially challenging because of where it sits. The airport is at 6,444 feet above sea level, nestled in a valley surrounded by mountains, with the 14,000-foot Tetons just to the west.

In training, pilots are taught all about flying in and out of high-altitude airports where you must deal with "density altitude" issues, meaning that an airplane performs more poorly at high altitude than it would at sea level because the air is thinner.

But the major area of training is always emergency procedures: what to do when you have an engine fire, an electric failure, or some other "abnormal" occurrence. The one dreaded emergency most pilots never want to experience is not just having an engine fire, but to have an engine fire or lose an engine at the most critical time of all: on takeoff.

Takeoff is when you have your hands full even when things are normal, but to experience this emergency is, well, the reason that more than 70 percent of all aircraft-related fatalities occur when one has engine failure on takeoff. On takeoff your plane is usually full of people, baggage, and fuel. It is heavy. It is trying to get enough airspeed to break the friction and gravitational pull and allow aerodynamics to take over and cause lift. You have many things to do on takeoff in a short period of time. All of the training is great, but going through the real thing is a different story.

One of the important lessons we are taught in training is that if you have to shut down an engine, once the engine is shut down, you never—repeat, never—make a turn toward the bad or "dead" engine. This is because of aerodynamics. The remaining good engine will "overpower" the dead engine side, and as you turn toward the dead engine you will find that the airplane will keep rolling well past where you want it to. The good engine's power will roll the plane completely upside down and keep rolling it because there is no compensating force to stop the roll. In such a case, a crash is practically inevitable.

On this early spring day, the weather was beautiful right over the airport area and to the south down the valley, but to the west of the airport, the Tetons were completely obscured by heavy snow showers. Further to the north, the Black Tail Butte area was also completely obscured by snow showers. Fortunately on this day my copilot was another member of the Church, Gary Winn, who is a very experienced and efficient pilot.

In those days, Jackson Hole didn't have a terminal; they only had a very small building where the passengers would gather. We prepared the flight plan and did the preflight inspections, and soon thereafter the passengers were called to board the flight. We had approximately forty passengers on the plane, and with the fuel required to arrive in Salt Lake City the plane weighed approximately 42,500 pounds.

We started the engines and taxied out to take off to the south. The wind was out of the south at a brisk 18 knots, or about 24 mph. We taxied and went through all the pretakeoff checklists. Everything was checked and scanned and we were ready for another uneventful takeoff.

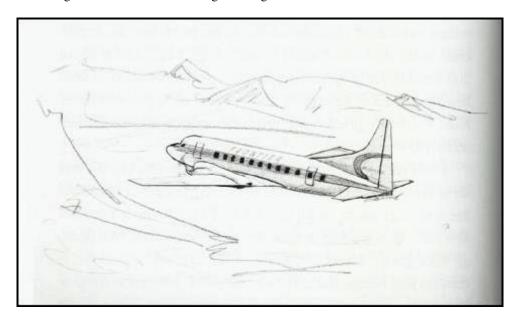
We had been advised that there was no traffic in the airport area so we taxied onto the runway, lined up with the center line, and I applied full takeoff power, released the brakes, checked the instruments, and began accelerating down the runway for what was soon to be a veiy eventful takeoff.

At about 105 knots Gary called out "V1," which is the speed at which if we had a problem we could pull back the power, apply brakes, and still stop the plane. Almost immediately after Vl, Gary called "V2." This is the speed at which you are committed to take off regardless of what happens. You must proceed. Well, we rotated, and I called for "gear up," and at about 200 feet off the ground we heard the sound that makes your heart jump out of your chest and one you hope you will never hear: The left engine fire warning light came on and the fire bell started to ring.

I looked out the window at the left engine to see if there were any visible signs of smoke or fire. We double-checked the fire warning system, and it said we had a fire in the left engine. The manual instructs you to shut the engine down at that point, so

Gary grasped hold of the left "E Handle" and asked me to confirm that he had the left one in his hand, which was the procedure we practiced in our training to assure that in the frantic pace of warning lights and bells going off, the pilot doesn't accidentally shut down the good engine. I was flying the plane and concentrating on gaining some altitude, but I glanced down and confirmed he had the correct engine lever, and he pulled it. I was preparing myself for how the airplane was going to react and fly with only one engine. The engine shut down immediately and the prop feathered.

We always wondered if the plane could and would be able to fly well on one engine and now we were going to find out firsthand. We completed the engine fire checklist and ascertained that everything was as it should be. In the meantime, we were flying down the valley at about 109 knots at only 200 feet above the ground. We had our hands full, and I'm sure the local cows and farmers were wondering what the airliner was doing "strafing" the local fields.



While all this was going on, the agents back on the ground heard the engine shut down and saw our precariously low altitude as we lumbered down the valley. They called another Frontier 580 that was taxiing out toward the end of the runway to depart for Denver, and told them to return to the ramp. They had only a few passengers, and the agents told them that they were going to trade airplanes to take all the passengers—"if he makes it back."

As we were headed down the valley at 200 feet the airspeed would not increase and the altitude did not increase. We couldn't turn to the right because the area was completely obscured by snow showers and mountains, and we couldn't turn to the left because the terrain was higher than we were, so I contemplated going down the Snake River and wondered if there were any power lines that we could possibly hit.

Just as I contemplated the decreasing options and said a little prayer in my heart, we suddenly gained about 300 feet, and as I looked out the left window toward the town of Jackson Hole we gained another 200 feet, so I decided to turn toward the town. . . but that meant turning into the "dead engine." I had no other choice. We were surrounded by mountains, but by turning toward Jackson Hole I could possibly make it through the small valley where the town lies and follow that little valley back to the airport.

All I could think of was my multi-engine instructor, many years earlier, specifically stating to "never turn into a dead engine." I thought of the possibility of rolling the aircraft. And I prayed fervently that my decision to discard my training would be the right one.

It was working! We kept the plane under control and made our way back up the small valley and saw the airport. I considered landing straight-in to the north, but that would have given me an 18-knot tailwind, which is way above the maximum allowable tailwind for landing. With the plane being so heavy, we might have been able to put the plane down, but wouldn't have been able to stop it before the end of the runway.

In order to land to the south and into the wind, we would proceed north parallel to the runway—and then we would be forced to make another left turn into the dreaded "dead engine." Well, it had worked for us once; we would have to do it again. The north end of the airport including Black Tail Butte was obscured by snow showers, but we were able to complete all the checklists and make a very steep, left-turning descent over the top of Black Tail Butte toward the runway. . . into the "dead engine."

The other aircraft was waiting for us and we disembarked the passengers, put on the airfreight, signed the paperwork, and took off for Salt Lake City in the second plane. Our one-engine plane was to remain there at Jackson Hole so it could be inspected and fixed. We arrived in Salt Lake City only ten minutes behind schedule.

The agents did a terrific job, Gary Winn did a terrific job, everyone did a terrific job . . . except me: I turned into a dead engine.

PILOTS BIOGRAPHY Albert B. Kendell

Service: flew for both the Army Air Corps and the United States Navy before flying for Frontier Airlines (soloed with only two hours of formal instruction); retired from Frontier Airlines with over 30,000 flight hours.

Hometown: Uintah, Utah, a small farming community at the mouth of Weber Canyon.

Family: married 56 years to Marilyn Summerill Kendell; two sons, Mark and Scott, and one daughter, Jackie Kendell Keyes; thirteen grandchildren; nine great- grandchildren.

Church calling: secretary of high priests group



Albert Kendell with a DC-3.