

Death Valley Climb-out:

Bounded on the west by 11,049-foot Telescope Peak and on the east by 5,475-foot Dante's View, Badwater is the lowest point (-282 feet) in the Western Hemisphere. So, a friend of mine and I flew into Death Valley in the middle of August. It was 125F degrees in the shade. People exaggerate when describing heat, but this was truly other-worldly. We kicked around a bit and after a couple of hours and a hamburger, prepared to leave.

The needle of the temperature gauge in the 172M Cessna instrument panel still stood in the middle of the green, as I expected, so we certainly didn't need to warm up the engine much, I thought. We took off from the Furnace Creek airport (elevation 210 feet *below* sea level) and headed straight south, at a normal climb rate.

The engine seemed to be operating normally but the temperature gauge was climbing ominously towards the red zone. The copilot and I discussed this and figured that if we increased the airspeed (reduced the climb rate), enriched the fuel flow (to cool the engine)--we should be all right. And altitude promised cooler temperatures.

Of course, this took us away from the airport even faster and reduced our climb to altitude--we needed 7500 feet to clear the mountains that were looming in the windshield.

A couple minutes more and the temperature gauge needle was now solidly in the middle of the red arc. It was apparent that we were *not* going to clear the mountains, and we were *long past* any possible gliding point back to the airport.

I reached over and tapped the glass of the temperature gauge. The needle responded by jumping to the top of the red arc. The copilot and I gave a worried frown to each other and discussed the options. The airplane engine was probably close to seizure. When air-cooled aircraft engines seize, they go quickly. Climbing out of Death Valley is all uphill and hot and slow.

"Well," I said, "If the engine fails now...we can probably make it to the borate salt flats on the valley floor. So we're in just-as-good-a-shape here as we would be if we tried to get back to the Furnace Creek airport and the engine fails on the way." I spouted my convoluted logic that somehow seems comforting.

"So either way we're probably screwed---is that what you're telling me?" yelled my copilot.

"Ah...well...yeh...." I responded.

There was silence. We were both staring at the temperature gauge. The needle had passed the red zone and was in the unknowable territory above the danger zone. "Besides, we need just a couple thousand feet more altitude, then it's all downhill."

"No...." the copilot shouted, " *Then* it's 100 miles of trackless wilderness and mountains where no white man has ever set foot and where an engine failure means certain and miserable death from dehydration." We hadn't a drop of water...not even spit, in the airplane.

"Ah...well...yeh....," I responded. The temperature gauge needle had now disappeared completely. The temperature gauge was critical--but it looked as if the gauge had been built without a needle at all. Maybe the gauge was broken....," I speculated wildly for a panicky instant. Did the needle really swing off the right side of the gauge arc? Perhaps it just ventured off somewhere and the mechanic would find the little pointer in the floor mats? We flew on--I pushed the ear cup off my left ear to listen to the engine--waiting for the sound of grinding metal.

But clearing the mountain pass had now become possible and I lowered the nose of the Cessna to pick up airspeed. 110 knots now. Measuring the clearance between airplane and rocks like a pool player lining up a shot, I pointed the airplane ever so slightly downhill and watched the temperature gauge for some sign of hope. After a long minute the needle poked out from the edge of the gauge and slowly began to sink into the red. As slow as molasses, as slow as a sunset. The copilot and I were cheering it on.

But this was a hopeful sign. A few more minutes and the copilot and I nodded to each other that life was good.

ps--The aircraft engine rumbled on to live a full and happy life, going well past TBO. I keep hoping some wise pilot or A&P will tell me what I SHOULD have done in that circumstance. I felt stupid in the whole deal and never figured out any better course of action. I reported it to the mechanic but a week later I heard one of the flying club's 172 Cessnas had engine failure in flight (but made a good emergency landing). I held my breath until I learned it was the OTHER one.

Later,
Eric