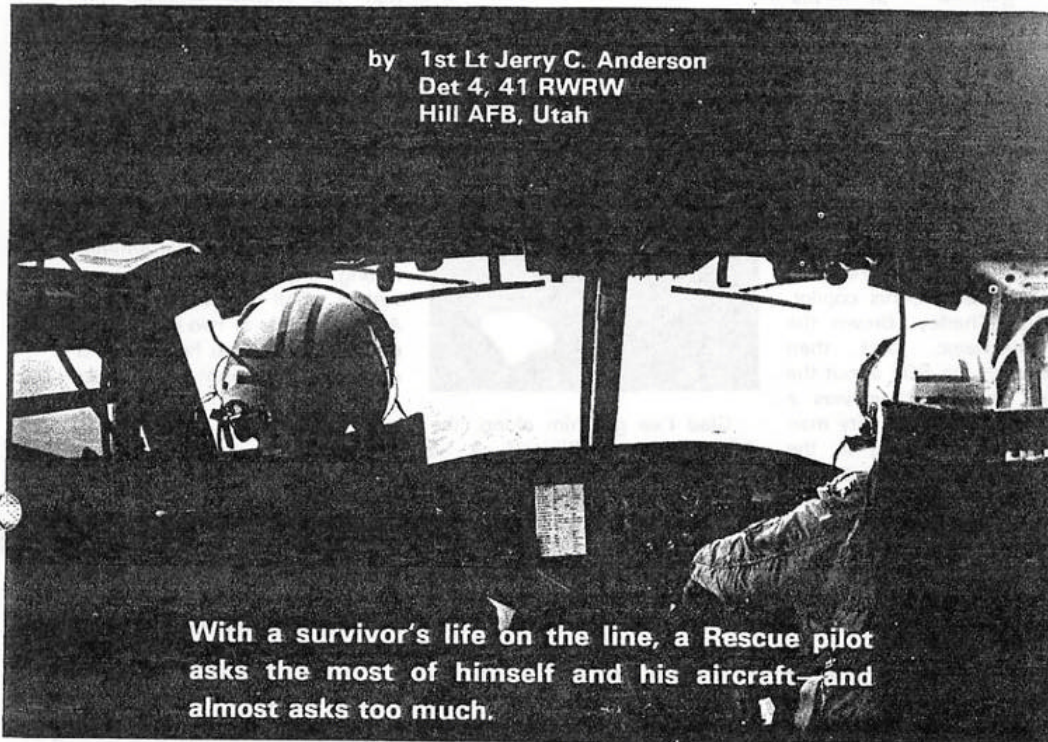


Honorable Mention, 1977 MAC Flying Safety Writing Contest

# Thin Margin for Error

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**With a survivor's life on the line, a Rescue pilot asks the most of himself and his aircraft—and almost asks too much.**

Becky had bacon sizzling on the stove and the aroma beckoned him as he listened to the early morning sounds. It's still early, Rod thought as he looked at the clock, not really time to get up yet; he closed his eyes again. The ringing phone was a foreign sound and it shook Rod fully awake. He lifted the receiver and answered crisply, "Cap'n Beeman here."

"Captain Beeman, this is Sergeant Standitch at command post. We've got a scramble for

you." Rod's heart pounded with excitement as the sergeant gave him the details of the mission.

Moments later Rod bounded out of the bedroom, zipping up his green bag. He grabbed a piece of jellied toast, a slurp of coffee, and headed for the door. "Got a *scramble*," he shouted in reply to Becky's questioning expression.

Telephone poles zipped by as he raced along the state highway, impatiently covering the ten miles to the base. His

mind whirled as he started to organize the details of the mission. His chopper's performance would figure heavily in this mission since the survivor was on a cliff 7,800 feet up in Utah's Uinta Mountains. But he wasn't too worried. His unit had just received the new "N" models, and the twin-engine Hueys could handle the high density altitudes.

He reflected on his last six months with the rescue detachment. He'd spent many nights

on alert waiting for a real rescue mission. Finally his day had arrived!

He glanced at his watch—7:45. Hm, not bad. Only 15 minutes since he'd been called. But still he pressed the accelerator on his Vette a little more—the DO had an unwritten policy that all scrambles would be airborne within an hour.

Rod arrived at the detachment at 0755; the rest of the crew were already there. He briefed Lt "Mac" McCracken, his copilot, and MSgt "Charley" Brown, the flight mechanic, and then checked with the SOF about the survivor. Their rescuee was a 24-year-old Salt Lake City man who had been hiking in the mountains. He'd tumbled 150 feet down a mountainside and was saved from an additional 500-foot drop by a rocky overhang beside a waterfall. The sheriff's party had gotten word of the survivor's location from a hiking companion. The ground party couldn't get to him so they'd called Rescue for help.

The flight mechanic was busy readying the Huey for deployment. He was checking the hoist cable for signs of fraying as Rod approached.

"How is it, Charley?" Rod asked.

"Looking good, sir," the Sergeant nodded. "I've checked all the life support gear on board and the hoist is ready to go." Charley was the detachment flight examiner flight mechanic and highly respected—an "old head" who really knew his stuff.



Glad I've got him along, the AC thought to himself as he walked to the front of the chopper to check the forms. The 781 was fairly clean, just a few run-of-the-mill writeups.

Rod was soon on top of the helicopter checking the rotor assembly. His mind raced forward to the upcoming rescue. Sure hope McCracken did the TOLD right, he thought. He checked the hydraulic reservoir sight gauges; they were good. No time to worry about Mac's work now; we'll get a good check en route, he assured himself.

As the pilots were strapping in, the flight surgeon and med tech arrived and climbed aboard. Rod called for the before-starting checklist; the Huey soon roared to life, and they were off by 0825. "Not bad, 55 minutes after the call," Mac commented.

Their first stop was to be at

Oakley to pick up a deputy sheriff who had pinpointed the survivor's location. The right-seater had his copilot refigure the TOLD; they'd be heavy going in, about 10,000 pounds. The landing was smooth, the TOLD had checked out and Rod's confidence increased.

"Turn right here, son," the white-haired deputy said with a drawl that reminded Rod of his days at Randolph. They entered a long, high-walled box canyon with a small lake at its mouth. After a minute or two the deputy drawled, "He's up here 'bout a mile, on the right wall. Just below that creek." A moment later he surmised, "He oughta be right here somewhere."

Rod saw the reservoir and creek, and turned to fly back over the spot their ersatz navigator had pointed out. Rod concentrated on terrain clearance and the tall pines on the slope; the other crewmembers scanned the trees below.

"Flare at four o'clock," Charley called.

Rod rolled the chopper into a 60-degree bank, bringing it sharply around to his right.

"There he is!" exclaimed McCracken, looking through the Huey's chin bubble.

"I've got him now," the AC announced as he maneuvered the copter into an orbit over the survivor.

"Mac, refigure the TOLD for 8,900 MSL," Rod directed, as he continued to look the pickup site over. "Boy, those guys didn't even guess close on the



pressure altitude," he moaned to himself.

Rod flew another tight turn over the cliff as MacCracken calculated the TOLD. "Got it," Mac said. "Ninety-four percent available, 89 percent required to hover out of ground effect."

Rod clenched his teeth. It was going to be tight—such a thin power margin. Then he called, "Hoist operator's check."

"Completed," was the crisp reply from the back. It's good to have an old head along, but what a tight place to get into, Rod thought.

The flight mechanic asked, "Cleared to open doors?"

The captain brought the Huey to a 150-foot hover over the injured hiker and replied, "Roger."

The front half of the helicopter protruded into a grotto of stately pines that ascended the steep slope. The Huey was hovering below the treetops and would have to be backed out. The copilot was monitoring the engine and transmission instruments while Rod controlled the chopper.

"You're using 93 percent!" MacCracken blurted.

Rod winced. He *knew* that he should have left the deputy sheriff and all the extra gear back down the valley. But there just hadn't been time, he rationalized; the guy had been on the hillside over 24 hours already, and he needed medical help.

Charley reported, "Medic's going down."

"Pulling 94 percent!" groaned MacCracken.

They were descending; Rod couldn't believe it. He tightened his grip on the cyclic, in spite of himself. There was no place to go with the medic suspended precariously on the hoist like a spider on a web. The trees loomed higher. Fear began to overpower Rod; he pulled the collective and rotor rpm began to droop. "You're losing rpm!" the left seater yelled.

Mac could see the hiker almost eye to eye now through the chin bubble. He glanced to his left at the pines, checking their proximity to the tail rotor. "Don't let the tail swing left!" he warned, knowing it was a futile remark—the tail was within a foot of a small pine.

Then he looked back at the instruments, afraid to look outside any longer. "Number one's 840, 860, 890 degrees. Torque is 104!" he shouted.

Suddenly they stabilized, inches from disaster; the helicopter stopped descending and the rotor rpm stabilized.

"What the hell?" Rod gasped.

"The medic's on the ground," Charley reported, as if in answer.

"Must have been a down-draft," Rod remarked calmly. "I hadn't figured on that." He glanced at Charley; a little color was returning to the flight mechanic's cheeks. The crew heaved a sign of relief in unison.

"I just kept the medic going down at full speed. You should have seen the look on his face," Charley said, beginning to smile.

Rod carefully backed the Huey

out of the trees and headed down the valley. He would let the deputy sheriff off in a clearing with the excess baggage and then return to finish the rescue. He looked at his copilot. MacCracken's face was ashen. "You okay, Mac?" Rod asked.

"Yeah, I guess so. But we sure cut it thin."

Thin indeed. Rod had overtemped number one engine and overtorqued the gearbox during his very first rescue attempt. He'd never again ride with such a thin margin for error.



#### ABOUT THE AUTHOR

Lieutenant Anderson graduated from Marquette University in 1972. Following his commissioning at Lackland AFB he attended helicopter pilot training at Fort Rucker and Hill AFB, winning his wings in 1974. Lieutenant Anderson was then assigned to HH-53's in Thailand and subsequently to UH-1's at Hill. He is currently flying UH-1N's and has logged three actual saves.