

# Overstaged and Unc

By Lt. Billy Murphy

It was a dream day in the Gulf of Aden for a 46 driver. Not only did I hold the dubious distinction as the current flight-hour “low man” for the month, but I was scheduled for the biggest vertrep yet of our six-month deployment—over 400 pallets.

Our boat, USNS *Spica*, had transited from the Arabian Gulf to the Gulf of Aden to assist USS *Cole*. The vertrep hit was scheduled for mid-morning with the USS *Tarawa* ARG.

As I departed my single-man stateroom and went topside, fresh mug of coffee in hand, I couldn't help but smile at the thought of a fun-filled day. Mother Nature had woke up on the right side of the bed and afforded us a near-perfect October day in the Gulf: clear skies, calm seas, 30 degrees Celsius, and a steady 15-knot wind.

With the 0600 preflight complete, our crew of four gathered for a NATOPS brief on the flight deck. The ship's crew worked around us. They were prestaging the deck with assorted pallets of food, soda and other goods for the vertrep. We briefed the standard items, including what actions to take in the event of an engine failure. Our spirits were high. Before manning up, we headed to the galley to top off our stomachs for the long morning.

All the players maneuvered into position at 0830. USS *Tarawa*, our main customer, was on our starboard quarter, a couple of miles out and closing. Three tri-walls of mail were loaded internally (500 pounds each) in our aircraft and would be dropped off before the vertrep.

I took a final walk around the bird and noticed the prestaged loads were a bit closer than usual to the main-mounts. The aircraft was positioned fore and aft with five feet of load clearance to starboard and three feet to port. I pointed out this situation to my crew chief and second crewman, and we all agreed it would not be a problem. We would have to slide the helo a bit to starboard upon liftoff to avoid contact with the three-abreast, single- and double-stacked loads that surrounded the aircraft astern in a horseshoe manner. We were not worried about having to land immediately into this tight spot, because, after we lifted off mother, the ready deck for fuel and emergencies would be the LHA, not our heavily staged *Spica*. We were golden, unless we had an emergency upon liftoff.

With the tower-reported winds five to port at 15 knots, the takeoff was mine because I occupied the right seat. I had pre-beeped the engines to 103 percent Nf-Nr, and all the gauges looked good. My copilot completed the last few items of the takeoff checklist and said he'd “match my beeps in the hover,” a standard practice.

With our crewchief clearing us “up, straight up,” I pulled collective and brought the aircraft to a stable hover. When I initiated a pedal turn to port, Murphy's Law cold-cocked us.

I heard it first—an audible omen. On liftoff, my primary scan turned to the horizon, keeping the ship's structure in my peripheral while executing a 90-degree pedal turn. Nearly complete with the turn, I heard what appeared to be an engine winding down. My initial thought was my copilot had not matched my engine beep trim, and we were “drooping” a bit because of our internal cargo and the high-density-altitude conditions of the Gulf. I checked my gauges to see NR falling through 90 percent and the No. 2 engine at topping power. What I actually had heard was the insidious sound of rotor decay, due to the improper acceleration of the No. 1 engine. I announced to the crew, “Nose right, tail left, putting her down.” Without further words, the entire crew immediately was aware of our predicament, and instincts took over.

Rotor decay continued as I returned the aircraft to a fore-and-aft position. I reduced collective in an effort to settle to the deck 10 feet below. As we descended a few feet, the Nr passed through 85 percent, and our starboard mainmount hit the top of a single-stacked load. The crewchief instinctively called, “Power!”

I gingerly increased power to avoid drooping any more and settling on top of the load. The rotors groaned louder now as Nr fell through 80 percent. I quickly realized we were not going to make it safely to the deck, so I pulled additional collective to depart the flight deck to port. I nosed the aircraft over and armed the emergency throttle. Our rotors had enough energy left to enable the bird to clear the double-stacked loads by a foot to port. With one good engine, we now looked to prevent an unscheduled, and undesired, swim call in the waters of the Gulf 40 feet below.

# derpowered



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My crew performed their duties exactly as briefed. My copilot had the APU on line, had dialed in emergency, and had called out altitudes and airspeeds as we cleared the ship. All this action occurred within five to seven seconds from the onset of trouble. Both crewmen had kicked out emergency-escape hatches and announced themselves secured into troop seats.

As my thoughts turned to “flare and cushion” the aircraft for landing, I glanced at my triple tachometer one last time and noted NR passing through 76 percent. The controls were quite sluggish, yet the bird was surprisingly controllable. With the aircraft now at 25 feet and 40 knots, the No. 2 engine came alive. Both pilots and crewchief audibly and visually witnessed NG, T5 and TQ increase on the No. 2 engine. We were dual-engine and had been spared the unwanted swim call.

We headed to the nearby LHA for an uneventful, dual-engine landing. The troubleshooters found the acceleration check on the No. 2 engine required 15 seconds instead of the usual eight. Also, no air came from the P3 line when the crewchief disconnected it from the fuel-control unit, which indicated a failure of the P3-solenoid valve to the open or partly open position.

Fortunately, the second engine had spooled up to avert a possible emergency-water landing, and the crew had executed their briefed duties to near-perfection. A thorough brief, covering all aspects of mission parameters and potential emergencies, can save your life. We decided never again to take off from such a heavily staged deck. 🦅

Lt. Murphy flies with HC-5.