

A Quick Change of Fortune

By Maj. Ted Martin, USMC

Our crew was having just another day in paradise. Our mission was to support the Naval Surface Weapons Center (NAVSWC). This flight was a good opportunity for us to leave the heat of the high desert in the middle of summer for the cool offshore breeze of San Diego. We had planned on doing helocast and recovery operations, followed by soft duck operations, where we deploy SEALs and inflatable boats. With this in mind, the brief thoroughly covered ORM, emergencies, and degraded power from salt buildup.

Our transit to the landing zone (LZ) just north of Imperial Beach pier was uneventful. We completed 25-hour, single-point plots on all three engines and found we had power to spare. We arrived in zone and shut down to conduct a detailed brief of the day's events. The students then would familiarize themselves with the helicopter and practice rigging the aircraft. After completing our safety briefs and ground training, we again strapped in, started up, and went through our checklists in preparation for the helocast and recovery mission.

Immediately after takeoff, we spotted the safety boats less than a mile off the coast and checked in on the radio. We made one dry pass and then came around to deploy the SEALs.

I took the first cast and recovery; it seemed as though it was going to be another easy day. We all commented on how the real work was being done by the guys in the water—they were being beaten by our rotor wash as we hover-taxed at 10 knots, at 10 feet. Crew coordination was textbook: My copilot gave me air-speed, altitude and heading calls, while the crew in the back let me know the status of the guy on the ladder. Our confidence was running high as we completed the

We heard a loud bang, and the mighty CH-53E sharply yawed.

first cast and recovery without incident. How quickly our fortunes changed.

I transferred controls to my copilot, and we came around for another pass. As I read off airspeed and altitude calls, I also scanned the engine instruments for any anomalies. Although it was early in the evolution, I wanted to note our engine-operating temps for any increases that would indicate salt buildup—the temps looked good.

Everything would change as we came in for our recovery pass. Once again, I read off airspeed and altitude as we decelerated and descended to make our pass. At 10 feet and 10 knots, with a man passing under the chin bubble, our troubles began. We heard a loud bang, and the mighty CH-53E sharply yawed.

“What was that?”

“Sir, you just lost No. 3 engine.”

I quickly scanned our engine instruments and saw No. 3 Ng winding down and T5 increasing. As I proceeded with engine-shutdown procedures, my copilot already had started to wave off and climb out on the remaining two engines—no big deal. We all breathed a sigh of relief, as NAS North Island only was 10 miles out. We had plenty of power on paper to fly dual engine. As I monitored the remaining two engines, T5 continued to climb on No. 3—now exceeding 1,000 degrees Celsius. As the crew chief jumped up on the troop-commanders seat and went through the pocket NATOPS, I selected “Emergency Start” and energized the start motor to cool off the engine. T5 started to wind down, we contacted tower, and declared an emergency. My copilot flew an uneventful running landing to a full stop, short of the arresting wires on the runway. That was enough excitement for today, I thought.

As we taxied off the runway, tower called, “Roadhog 48, you have smoke coming from the left side of the aircraft.”

Left side? He must mean right side, I thought, because No. 3 engine is on the right side of the aircraft. My copilot then caught a glimpse of the smoke and called to shut down No. 1. I could not believe my eyes as another glance of the engine instruments showed the No. 1 engine Ng winding down and T5 increasing.

“This can’t be happening,” I thought, as I reached up to secure the No. 1 engine. What else can go wrong?

With the fire trucks in position, I brought the APP on line and continued shutting down the aircraft. Once the rotor stopped turning, the aircrew quickly evacuated our passengers and turned to inspecting our smoking engines.



The quick post-flight revealed the compressor blades of both engines had shot forward into the EAPS barrels. On the van ride home we reflected how we were only a few seconds from being uninvited guests for lunch at the

Hotel Del Coronado—or something far worse.

Our assessment of the day’s events include these highlights:

- While engine failures or seizures are relatively rare, the loss of a second engine, within 10 minutes of the first one failing, is extremely rare and probably without precedent.

- Our decision to immediately discontinue the soft duck operations, turn toward land, and then handle the emergency en route made all the difference. Had both engines failed while over the water, we could have faced a dangerous water landing, with a risk to aircrew and passengers and the loss of an aircraft.

- The tower personnel’s quick call to the aircrew that they saw white smoke from the left side of the aircraft—the No. 1 engine position—after landing on the runway was critical. Our prompt actions to shut down the No. 1 engine and to discharge the engine compartment fire extinguisher, averted a possible engine fire from further spreading.

This incident is a good reminder that just because you have successfully handled one emergency does not mean the danger is over. Another emergency can be lurking around the corner. Maintain constant vigilance, good CRM, and prompt action until the flight is over—completely. 🏆

Maj. Martin flies with HMH-769.

Imperial Beach NOLF, a helo airfield, is closer to the pier than NASNI.—Ed.