

Crew Resource Management

Situational Awareness

Assertiveness

Decision Making

Communication

Leadership

Adaptability/Flexibility

Mission Analysis

Ditching Into the

Deep

By LCdr. Bill Mellen

“Ok guys, this is it, we gotta do this,” was the last thing I said before we lost all power to the aircraft.

Those words could have been my last ones had I not had the proper training. I was straight out of Aviation Safety School and just three weeks into my department-head job as the squadron safety officer; I couldn't help but shake my head at the irony of it all.

It was a typically brisk but clear, winter day in Norfolk. The water temperatures were reported to be in the high 30s to low 40s. I begrudgingly donned my dry suit—not thrilled by the prospect of having the suit's rubber seal chafe my neck, like a cheap, rented tuxedo, for the duration of a three-hour, airborne mine-countermeasure (AMCM) sortie. With a seasoned lieutenant for an aircraft commander (HAC) and a complement of six salty aircrewmembers, I felt the deck was stacked for an easy back-in-the-saddle flight for the old O-4. Good thing I didn't make a wager.

We were scheduled to hunt “mine like” objects in a training minefield 30 miles off the coast. When we reached the training field, I settled our MH-53E into a 75-foot hover as the crew prepared the AMCM gear. We completed our premission checklist in the cockpit and awaited the “ready to commence” call from the crew. Instead, we heard, “Sir, do you hear that noise?”

A high-pitched whining sound could be heard over the ICS. I quickly scanned the gauges—indications were normal.

I replied, “Everything looks normal up here. Where is the sound coming from?”

One crewman suspected the No. 3 engine. “No biggie,” I thought. After all, this is the mighty 53E, with three engines and power to spare; just transition to forward flight, and, if the engine fails, land as soon as practical. It was time to show the lieutenant how



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an “old school bubba” greases on a dual-engine landing.

I was awakened from my pretentious stupor by another crewman’s remark, “Ah, actually, sir, I think the noise is coming from the main gearbox.”

Yikes! The machine just upped the ante, and this was a winner-takes-all game.

We immediately headed for the beach. As I mentally reviewed the NATOPS procedures for an impending main-gearbox failure, I flew a “low and slow” profile of 100 feet AGL and 80 knots.

Within three minutes, the noises from the back grew deeper and louder; airframe vibrations now accompanied them. I could feel the aircraft laboring to stay in the air. I asked the HAC to check the pressure and temperature gages and to alert me of any abnormal indications. The gages checked within limits, but the aircraft was talking and telling a story whose plot was easy to follow. With numerous mishap accounts fresh in my mind from safety school, I knew the all-too-often abrupt ending.

“This is not good,” I remarked to the crew.

Reading between the lines, the HAC directed the aircrewmembers to prepare the cabin for a possible water landing. Still 28 miles from land, I wondered how much farther I could coax the aircraft to fly. I got my answer moments later when the MGB-chip-detected light illuminated, followed, in short order, by a hydraulic-pressure caution light.

Completely persuaded that the gearbox was catastrophically failing, I rapidly flared to set up for an immediate, no-hover landing.

“Ditch, ditch, ditch; we’re making a water landing guys,” I announced over ICS. I asked the HAC to raise the landing gear and to get out a Mayday call on guard frequency.

“I can’t believe I’m about to do this,” I thought, as I set the aircraft on the ocean.

The tail end settled and immediately began to take on water. The HAC reached up to secure the engines, while I did my best to keep the aircraft upright with the cyclic. Suddenly, power cut off, and all we heard was the whistle of the blades as they coasted down.

Seeing the water level creep up the chin bubble, I realized I needed to prepare for the inevitable egress. I reached down and pulled the window’s emergency-release handle, gave the window an elbow, and watched it fall into the water.

“What else?” my mind raced to recall. “Air, that’s right, I got air.”

I reached across my survival vest and grabbed the helicopter-aircrew-breathing-device (HABD) regulator, put it my mouth, and took a short breath to make sure there would be no surprises (I had been in too much of a hurry on preflight and hadn’t bothered to check the bottle pressure). As the rotor blades slapped against

the swells and came to a halt, the aircraft began a slow roll. I looked over to the HAC and saw he already was underwater. I held on to my window frame for reference, placed my other hand on the harness release, and braced myself for the big-ticket ride.

I was comforted by how surprisingly close the airframe-roll mirrored that of the 9D5 helo dunker. However, my comfort level soon was exceeded by the inrush of water from my window. It felt like a fire hose had been sprayed in my face. Every part of me desperately wanted to get out of that seat, but the phrase, “Wait until all violent motion stops,” rang in my mind, and I stayed strapped in until the rush subsided.

Suddenly, it got dark but calm. Breathing on my HABD bottle, I turned the harness release and fell out of the seat—still holding on to my window frame with the proverbial death grip. As I fought through debris that washed forward from the cabin and filled the cockpit, I pulled myself through the window and made a few strokes.

Next thing I saw was the blue Virginia sky as my head popped out of the water. I soon felt the cold bite of the frigid water; I now was glad to be wearing that cheap, rented tuxedo.

Regrettably, I had opted to leave my dry-suit underliner hanging in the paraloft, because I didn’t want to get too warm in flight. I pulled the beaded handles to inflate my survival vest and was granted the luxury of an auto-inflate. Others of the crew were forced to manually inflate their vests when the beaded handles failed them.

I looked around and spotted an orange raft floating 20 yards away—the crew chief had been able to deploy and inflate the raft during egress. I backstroked my way to the raft, where the rest of the crew met me. We all worked to get each other on board. I counted eight smiling—no, make that, giddy—faces and let out a sigh of relief that everyone safely had gotten out. We were cold and wet, but there wasn’t a scratch on anyone.

A Coast Guard C-130 crew heard our Mayday and, within minutes, was circling overhead. We established communications with the plane on the PRC-149 survival radio from one of the crewman’s vest. Help was on the way. Morale was high in the raft. I almost felt guilty about quenching the festivities by putting on my safety-officer’s hat and reminding the crew we still were in the ocean and needed to stay focused on our procedures for rescue. As advertised, the cavalry soon arrived in the form of two Navy H-60 helicopters that quickly hoisted us to safety.

Back at the hospital, a crewman asked me if that was the back-in-the-saddle flight I was looking for. “Not so much,” I replied. Yet, if experience is the best teacher, I earned a Ph.D. on that flight. Foremost, I learned that the aircraft doesn’t lie when it’s talking to you, so you better be all ears. Abnormal noises may be the first and possibly the only indication of malfunction before failure. What’s more, it has been said that the NATOPS was written in blood. Unless you want to write a postscript with yours, know its contents cold; there’s no time to cross-reference when things get ugly.

Don’t allow the donning of your survival gear to become a mere formality: Dress for survival, not for comfort. Preflight and thoroughly familiarize yourself with all personal- and aircraft-survival items; today might be the day you call on them to save your life.

Finally, believe in the emergency-egress training you’ve been taught. Does it really work? I bet my life on it—literally. 

LCdr. Mellen flies with HM-14.

AN/PRC-149

The AN/PRC-149 personal locator beacon and voice transceiver (PLBVT) provides GPS location and communication to SAR units. It is carried in the crewman’s survival vest and is activated by the crewman.

The integral voice transceiver features multiple-channel selectable VHF/UHF capability. The search and rescue satellite-aided-tracking (SARSAT) capability provides near instantaneous notification of distress signals to rescue agencies.

With its embedded GPS receiver, the AN/PRC-149 provides automatic position reporting. A detachable radio-control unit enables rescue swimmers to communicate hands-free with the hovering helicopter, and allows full use of their hands for the rescue operation.

The radios are being issued through normal logistics chains as a programmed replacement for the PRC-90 and PRC-125 survival radios. There are more than 10,000 AN/PRC-149 radios currently in the fleet, spread across all aviation communities.