You Never Forget Your FIRST...

By Lt. Ron Martin

We were in the fourth day of an operation that later would be dubbed Unified Assistance, the largest humanitarian assistance and disaster-relief operation ever conducted in Southeast Asia, and the largest Navy operation in this theater since the Vietnam War. USS *Abraham Lincoln* (CVN-72) Strike Group was fast deployed to Northwest Indonesia, which was hardest hit by the tsunami, to stop the march of death looming on Aceh Province, Sumatra.

I was a junior helicopter-aircraft commander (HAC), with 533.7 total flight hours but only 33.7 hours as HAC on my first deployment. I was section lead in a two-helicopter section delivering food, water and medical supplies to this devastated region. Flying in a section instead of single-aircraft operations later proved to be a saving grace for me.

Our first mission of the day had us land in a soccer field next to the overwhelmed airport of Banda Aceh, the hub of all humanitarian operations in this area. The mission was to deliver 3,000 pounds of supplies to the village of Lamno, 45 miles to the south. I had delivered aid to this village the day before and was very familiar with the area and its landing zone (LZ), which was a pee-wee-league-size soccer field in town center. This LZ was fraught with its own dangers. On the approach end and around the entire perimeter, power lines and trees reached 25 to 30 feet—begging a helicopter to land short. On the departure end, two-story houses and 40-foot trees made for a real-world, obstacle-clearance takeoff. To add to the character, left and right of the field, crowds of hungry people waited to mob the helicopters as they landed and to take away their precious cargo.

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As we descended into Lamno, we spotted an MH-60S from HC-11 already in the LZ, dropping off its cargo. I directed my co-pilot to lead the section in an overhead pass of the LZ for reconnaissance and evaluation. While we orbited, I established radio contact with aircraft on deck to coordinate their departure and our arrival. As we overflew the LZ, we saw a civilian air service H-3 shut down in the forward right corner of the small soccer field, making the available area even smaller. We later learned they shut down because they were running out of fuel.

I directed my copilot to begin the approach to land, just behind and to the right of the spinning MH-60S aircraft. My copilot was in the left seat, with the best view for clearance with the turning aircraft. The landing was graceful and exactly in the area I directed. I took the controls and asked him to hurry, help unload, and control the crowd under our turning rotors.

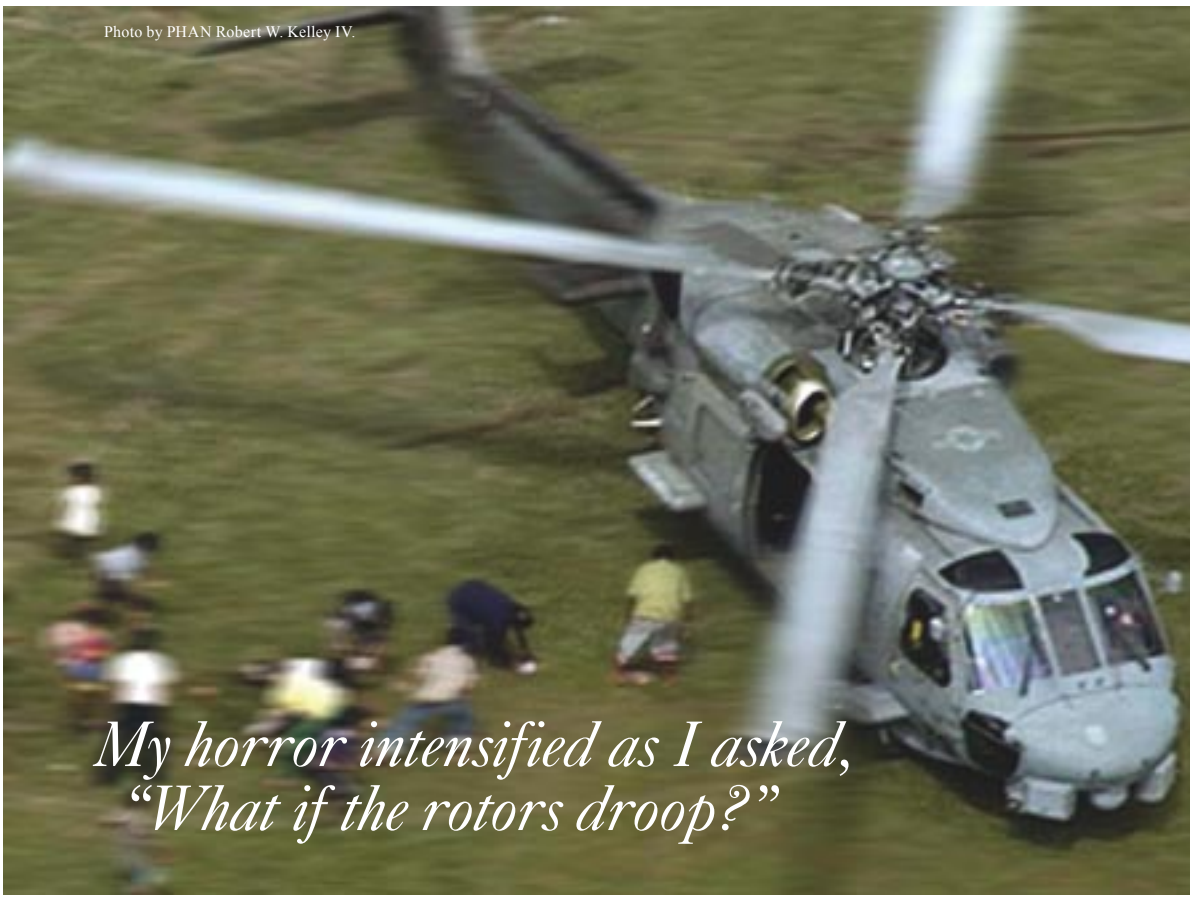
Photo by PHAN Robert W. Kelley IV.

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My copilot quickly exited the cockpit and walked around the nose of the aircraft to the cabin area. He began offloading supplies, while the crewman coordinated the local military presence to help establish security. With security in place, my crewman began assessing villagers injured by the tsunami. As I looked over my right shoulder, onto the coordinated chaos to watch the food offload, my attention was drawn to the left as the MH-60S aircraft called "lifting." As she departed, my eyes naturally shifted through the cockpit for a quick scan of the instruments. Here is when the story really begins.

In the minutes that followed, all hell broke loose. As my eyes shifted to the pilot-display unit (PDU), I was horrified. All of my gauges were fluctuating into the redline, and all three red-main-rotor, overspeed lights were illuminated.

My mind was screaming, "High side! High side!"

My left hand held down the collective, as I glanced outside to my right for my crewman and copilot. They were heavily engaged with the local population—all of them under my rotor arc.

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I quickly regained my focus and screamed at the

USS *Abraham Lincoln's* (CVN-72) vertical lift capability consisted of Carrier Air Wing Two's helicopter squadrons, HSL-47, HS-2, and HC 11, and included 17 SH-60B/F/H/S aircraft. This three helicopter-squadron complement was a first in carrier aviation. HSL 47's main body of four SH-60B helicopters was embarked on *Lincoln*. Additionally, HSL-47 had two combat elements, consisting of another four helicopters, with two detached to USS *Shiloh* (CG-67) and USS *Shoup* (DDG-86), respectively. The Saberhawks were part of a restructuring concept called "Bravo to Sea," which was designed to validate integration of SH-60B, light airborne multi-purpose systems (LAMPS) into the air wing, paving the way for the MH-60 Romeo transition. The entire surge deployment was punctuated with firsts for the SH-60B community.

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Photo by PH3 Tyler J. Clements. Modified.

top of my lungs for my copilot and crewman.

The radio came to life with the voice of my wingman, a lieutenant commander, "Ron, what's the problem?"

My concentration totally was focused inside the cockpit. His call went unanswered, as I executed the "engine high-side failure, on deck" emergency procedures.

During the first stages of my diagnosis, an instant moment of clarity hit me. I noticed my copilot's PDU still was normally indicating, but the No. 2 NG was maxed out. This situation wasn't as serious as I thought.

Admittedly, in those few seconds following the emergency, I forgot I even had a wingman. His second call brought my focus back to him. "OK, he's asking me to read my indications to him," I told myself.

As I took a deep breath, my skipper's voice ran through my head, "Ron, what is the aircraft telling you?"

My self-conscience made me think I had damaged one of his aircraft. With the prompting of my skipper's voice and my wingman, I listened to the aircraft. The helicopter sounded normal, the copilot's indicators still remained in the green, the No. 2 engine NG still was topped out, and my PDU was fluctuating and redlining.

I added a little collective to troubleshoot. This change in sound was my prebriefed attention-getter to the aircrewman to get back into the cabin if there was a problem. My salty first-tour crewman immediately manhandled my copilot and our embarked photographer into the helicopter. Still yelling, I ordered my copilot to get strapped in. As he began throwing his lap and shoulder harness into the buckle, I briefed him and the aircrewman on the situation.

During our postflight debrief, I was surprised to find out that my crewman thought we were being attacked and were about to make a hasty egress out of the LZ. That assessment was not far from what my wingman and his crew said, after hearing my unintentional panicked radio broadcast.

Five minutes slipped by while I fixated on the problem. In the meantime, another H-60 from our sister squadron arrived overhead. He, too, lent his experience to the situation. Both my wingman and the HAC of the orbiting SH-60F came to the conclusion I was ever so slow to realize: an indicator problem. With the LZ clear, with the exception of the fuel-exhausted civilian H-3, my wingman landed to get an "eyes on" look at the situation.

By now, the engines were at idle, per the high-side emergency procedure. We agreed what I had experienced was an indicator problem—no audible secondary indications, no increase in Nr or TGT. We discussed my options: Run up the engines to determine conclusively the aircraft responded appropriately, or execute a five-minute hover check.

My wingman left the aircraft, and my copilot jumped back in. I briefed him and my lead (on the radios) of my plan. The penalty hover was uneventful, so as prebriefed, we began an obstacle-clearance takeoff from the LZ. This takeoff was uneventful, and we headed to the carrier for an early precautionary recovery. With the pilot-side PDU gauges still fluctuating, I requested my wingman make all appropriate calls and follow us back to *Lincoln*. We recovered onboard, and I left the aircraft running to allow squadron maintenance personnel to see the indications for troubleshooting. As expected, they said it was an indicator problem. All I could think about was, "Why was I the last to figure this out?"

What are the take-aways from all this excitement? As a HAC, you must be vigilant and be a calm voice of reason. As a result of my training, I was predisposed to literally interpret the gauges. Take a deep breath, assess the situation, then execute the proper emergency procedure. If the situation does not have an emergency procedure, then use your best judgment to troubleshoot the issue. In this case, my snap diagnosis of high side was aggravated by the fact there were people in dangerous proximity of the rotor arc, despite the best effort of my crew to keep them at bay. It also proved the saying, "No fast hands in the cockpit." The continued scanning of the cockpit indicators and assessment of what my aircraft was "telling me," gave me enough information to troubleshoot effectively.

Finally, I cannot overstate the need for crew-resource management. Following this situation, I feel even more like an inexperienced HAC but not a weak one.

In this instance, my crew was engaged in a necessary part of the mission. The LAMPS community does not fly regularly as a section. As the emergency developed, my thought processes wrongly snapped back into HSL-style, single-aircraft operations. It was because of my wingman's prompting that I used his crew as an extension of my own, as well as the SH-60F overhead. CRM went outside the aircraft as they all became part of my crew.

Even though this emergency turned out to be benign (SDC channel failure, unindicated), the exercise was an eye-opener and positive learning experience for me. Taking a moment to analyze the situation, looking at not only your instruments but assessing the actual aircraft environment, will speak volumes and only takes seconds. Don't discount other outside assistance in your decision-making. You never forget your first emergency as a HAC—and you shouldn't.

Lt. Martin flew with HSL-47 and currently is with CFC-A CJ5.