

Photo by Matthew J. Thomas

by Lt. Wilmer Gange

Being a new HAC can be a trying time for any pilot. Not only do you lack the experience of the older squadron HACs, but you're under pressure, whether actual or perceived, to complete the mission and prove yourself as an aircraft commander. Sometimes, this pressure can motivate you to succeed; other times, it can cloud your judgment and be downright dangerous.

It was a beautiful VFR day in sunny San Diego, and I was a new HAC in the H-46D. I was scheduled to fly a 4.5-hour day-training flight. The first two hours would be day VFR with a lieutenant commander who was new to the squadron but was an experienced H-46D pilot. The remainder would be an IFR training flight with a new H2P. We planned to fly the first event at a local airfield, RTB, refuel, and switch pilots for the second event. We also were scheduled to hotseat to a night event that required an auxiliary fuel tank. I requested the aux tank not be fueled for

the first part of the flight, since we needed a light aircraft for the single-engine practice maneuvers. We checked the aux tank to make sure it was empty during the preflight, and manned up 30 minutes before to our takeoff time.

The starting sequence went well until it was time to light off our auxiliary power unit (APU). We hit the switch; the APU sputtered briefly and died. After a brief inspection, maintenance personnel told us the corrective action would take only 10 to 15 minutes. It would take less time to fix the APU than to preflight the backup aircraft. I decided to wait until maintenance completed their work.

The 10-to-15-minute fix became 20 minutes, then 30. When maintenance finally downed the aircraft, it was an hour after the problem occurred and 30 minutes past our scheduled takeoff time. I was a little perturbed and impatient at this point. With our missed takeoff time looming in my head, I instructed the crew to quickly move to the backup

Checked the Aux Tank?

aircraft while I went into maintenance control to discuss our problem.

After a cursory preflight, we started up and launched. Looking at my watch, it was only an hour after our scheduled takeoff time. We had managed to preflight the backup and launch in only a half hour. We proceeded to the outlying field and began our training maneuvers. I was proud of myself; despite our previous setbacks, I expeditiously had gotten our event off the deck. We still would be able to get almost two hours of training for each pilot. This would be more than enough to complete the needed training.

After a few normal approaches and some hover work, my copilot wanted to practice single-engine approaches to the pad. We quickly discussed the simulated emergency and lifted from the pad. Once established in the landing pattern at single-engine airspeed, I pulled the No. 1 engine condition lever (ECL) out of the fly position, effectively causing the aircraft to run on only the No. 2 engine.

We went through the emergency procedures, but we left the No. 1 ECL out of fly to practice landing single-engine. This should have been no problem; we had computed weight-and-balance during the brief, and we had

plenty of single-engine power available. I also had my hand on the No. 1 ECL in case we needed to regain use of the engine. However, as we approached the pad, our rotor rpm began to decay. When we landed on the pad, our rotor rpm had decayed to 80 percent, well below our NATOPS limit of 88 percent. I thought the copilot came into the pad too low and fast and

pulled too much collective at the bottom of the approach. We attempted the maneuver again, but with the same rotor problem. I took the controls and tried the maneuver, with the same results.

The crew and I were confused. It was a nice, cool San Diego day, and we should have had much more power than what was indicated. While we remained on deck to contemplate our problem, the copilot hit on the answer.

“Check the aux tank,” he said to the crew chief.

Sure enough, the aux tank was full of fuel. The cause of our rotor-rpm decay instantly became clear. We had been flying single-engine approaches when our aircraft was almost 1,700 pounds heavier than we thought, precariously close to the edge of our single-engine capability.

My biggest mistake had been a direct result of my new HAC mentality. I allowed a perceived operational requirement to rush my preflight decision-making. This resulted in a failure to properly ORM the situation. ORM teaches us to assess all hazards and make risk decisions based on those hazards. What consequences would have resulted if I had instructed the crew to perform a more thorough preflight? We may have lost 15

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minutes or so off our training time, but we probably would have caught the full aux tank.

Later in the flight we were planning to perform practice autorotations and single-engine HOGE maneuvers, where the extra weight may have proven disastrous. I gladly would have traded 15 extra minutes of training time to prevent that. 🇺🇸

Lt. Gange flies with HC-11.