

By Ltjg. Justin Hawkins

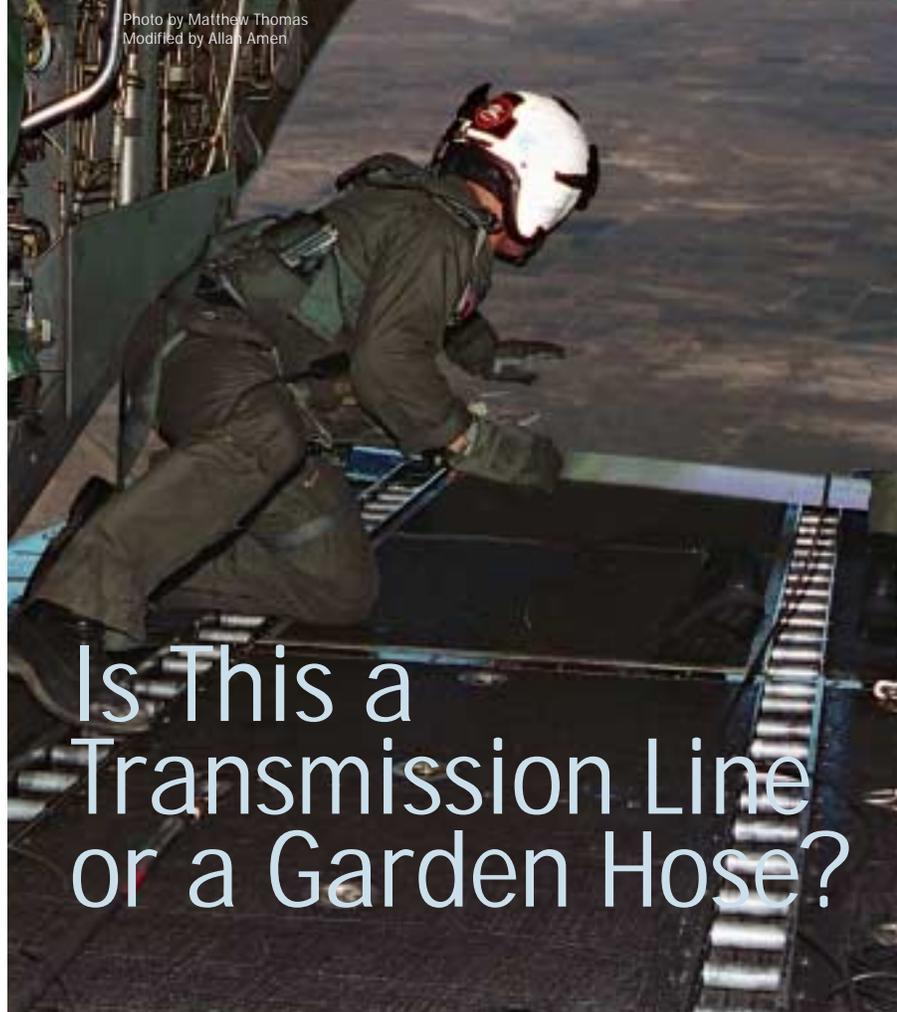
After wrapping up the NATOPS brief, we preflighted for my final fam flight in the H-46D FRS. It was uneventful, with the exception of a loose transmission-return line that runs down the right side of the aircraft into the mix-box assembly. After discussing it with the instructor, the crew chief noted this had been a recurring problem, and maintenance would only need to tighten a couple of bolts behind the line.

What the instructor didn't know was that, for the line to be correctly tightened, the aft transmission would need to be dropped. This would be a time-consuming, undesirable task for maintenance, so this information was not relayed to the HAC. It was only a matter of time before taking the easy way out almost proved costly to both aircraft and crew.

An hour-and-a-half later, we departed the channel. I prepared myself for the simulated-emergency procedure that would take me to an outlying field to practice for an upcoming NATOPS check flight. Like clockwork, my instructor gave me the expected simulated-compressor stall, and I promptly ran through the NATOPS procedures as we headed west.

Minutes later, we were on emergency throttle and turning toward Imperial Beach, when the crew chief saw something by the aft transmission that didn't look right. He put on the gunner's belt for an aft-station check. After lowering the hatch, the crew chief's voice became noticeably nervous as he told us we had a problem and to clean up the simulated-compressor stall. The rescue hatch was full of transmission fluid, which was pouring over the sides. The previously mentioned loose transmission line that leads into the mix box was spraying fluid everywhere like a stray garden hose. Upon realizing the severity of the leak, we instantly turned toward North Island and declared an emergency, proceeding inbound at 145 knots.

It didn't take long to realize this wasn't just another scenario thrown at me to make sure I was ready to move on from the fam stage. We were cleared directly to runway 36, and, after what seemed like an eternity, began our descent to the approach end of the runway. After landing,



## Is This a Transmission Line or a Garden Hose?

we taxied clear of the runway and immediately shut down the aircraft.

The crew chief inspected the aft transmission and noticed there was no fluid in the sight-gauge glass. There was only a gallon-and-a-half of transmission fluid remaining in the 5.8-gallon system. It took roughly five minutes from the time we noticed the problem to when we landed. The situation could have been catastrophic had we been farther offshore or flying at night. In the darkness, the crew chief probably wouldn't have seen the leak.

I learned a couple of valuable lessons. Don't take shortcuts to accomplish a mission. Take the conservative route, and make the proper fix the first time. Cutting corners eventually will sneak up and bite you. The flight also proved to be a wakeup call for how quickly a leaking system can turn into an emergency. In our case, it would have been only a couple more minutes before our aft transmission had emptied and a ditch would have been inevitable. 🦅

Ltjg. Hawkins flies with HC-11.