

Feeling Drunk on Thanksgiving

By Lt. Matt Hooker

Our strike group was halfway through work-ups, and, if everything went smoothly, we would get to enjoy Christmas at home before our long deployment. This meant spending Thanksgiving bobbing up and down off the Florida coast, but no one was complaining. It was my first exposure to cyclic ops, and, being a young, dumb, nugget, E-2 pilot, I was excited to find my name on the Thanksgiving-night flight schedule.

We gathered the crew early and briefed 15 minutes before the scheduled time, so we could take a few minutes before the flight to devour our turkey dinner. We reviewed the emergency procedures and then discussed ORM issues. We talked about the added distractions associated with flying on a holiday. Everyone joked about the dangers of tryptophan as we headed to the wardroom for our holiday feast.

Our timing worked out well, and, after squeezing into our flight gear, we got to the plane on schedule. Mom shot us into the darkness, and soon we were on station just east of Jacksonville. In the Hawkeye, everyone is part of the mission, and it wasn't long before the copilot had pubs and mission materials strewn across the cockpit.

We drilled holes in the sky for more than an hour before it happened: a sharp swerve and the groan of a dying engine. The master-caution light illuminated with a starboard generator light before I could get on the controls and disconnect the autopilot. The starboard engine was

winding down. In disbelief, I stumbled through the six memory items engrained in the head of every Hawkeye pilot.

With the engine-failure checklist complete, we took a minute to assess the situation before moving on to the less critical post-shutdown checklist. We selected the entire crew on the ICS panel and gave a sitrep to the backend. We seemed to have a perfectly good airplane (minus one engine). Once everyone had a warm and fuzzy, the mission commander expedited handing over control of our airborne assets. The copilot began stowing unnecessary materials in the cockpit. As I sat patiently in the left seat, I headed toward Jacksonville, and maintained a shallow descent to keep the plane flying.

But, something didn't feel right. The Hawkeye is surprisingly stable when operating with one engine; however, focusing on single-engine ops seemed to require all my concentration. I initially had written off this feeling as nerves; I felt like my IQ was decreasing by the second. My skin felt cool and clammy. It wasn't until I felt the tingle in the tips of my fingers that I realized what was happening: hypoxia!

The E-2C is designed with numerous safety features to keep aircrew out of trouble. When an engine fails in flight, bleed air from the opposite engine is auto secured to maximize performance of the remaining operating engine. Without bleed air, the air-conditioning system shuts off. The air conditioning is not only a nice creature comfort; it also keeps the cabin

pressurized, allowing aircrew to fly without oxygen masks. Oxygen masks are connected on preflight but only are used in an emergency. After securing an engine, aircrew can restore pressurization by selecting override on the air-conditioning panel. This step is addressed in the post-engine-shutdown checklist, the same checklist we had postponed.

As I realized what was happening, I started to reach for my mask but first decided to get the crew involved. I reached over, grabbed the copilot's shoulder, and mumbled, "Get your mask on."

I snatched my mask and held it to my face. As I continued to fly with my free hand, each crew member donned his mask and checked in over ICS.

I nudged the copilot and pointed to the yoke. He took the controls while I connected my bayonet fittings and hooked up the mike in the oxygen mask. Once I was back on ICS, I explained to a very concerned and confused crew that we had allowed the airplane to depressurize, and I had been hypoxic. In just a few

seconds, the cabin altitude had risen to approximately 20,000 feet. I selected override, and, as cabin pressurization was restored, we were able to remove and stow our masks. At about this time, the ship told us they were making a ready deck. They wanted us back.

As is common during an emergency in the Hawkeye, the plane commander (PC) and I swapped seats, so the more experienced pilot could bring the plane aboard. In the right seat, I was sweating like a toilet in Casablanca, but I focused on being the best copilot ever. The PC flew a slightly high pass to an underline OK. It was over.

The hyperbaric-chamber training I had received in Pensacola was priceless. Hypoxia sets in fast, and a quick diagnosis is essential to a long, happy life.

There is no substitute for solid NATOPS knowledge; it's not enough to memorize your EPs and occasionally draw a system diagram. Every aviator needs to **review the purpose and effects of every step of every emergency procedure.** 

Lt. Hooker flies with VAW-121.

What's Your Real Altitude?

The effects of self-imposed stressors on physiologic altitude

Did you know you could impose physiologic effects that can make your body think it's at a higher altitude than you actually are? Self-imposed stressors, such as smoking, dehydration, and fatigue, can cause your physiologic altitude to be much higher than you think.

Some stressors, like fatigue, are not as well-defined, but smoking and dehydration have well-known effects. Smoking a pack of cigarettes per day can raise your physiologic altitude by 3,000 to 5,000 feet. Drinking one ounce of alcohol can raise physiologic altitude by 2,000 feet. While the 12-hour drinking rule will keep you legal if you drink moderately the night before, if you drink excessively, you probably still will have alcohol in your system when you start to preflight.

So, if you smoke a pack of cigarettes a day and drink hard the night before, you could be at a **real altitude** of more than 7,000 feet. If you are taking off from NAS Fallon, Nev., with a field elevation of 3,934 feet, you're already over 10,000 feet while on the deck!