

How the Big Sky Becomes Small

By LCdr. Scott Hielen

As a command-and-control (C2) platform, the E-2C Hawkeye is supposed to be the purveyor of situational awareness. With the “big picture” on three displays in the back and two sets of eyes up front in each plane, two Hummers never should meet unexpectedly in a dark alley. So, how did our squadron nearly put two planes and 10 people in the water on a sunny California afternoon?

Nearing the end of a joint-task-force exercise with our carrier-strike group, our crew was off-station and en route the ship, transiting around the simulated geography over SOCAL (Southern California) waters. As is the case with standard CV-cyclic operations, our relief was first off the pointy end and climbing to take their turn against the simulated enemy forces.

Let’s cover the spoken issues. As we transited back, our carrier-aircraft plane commander (CAPC) in the right seat told the crew that he would like the junior pilot in the left seat to practice an emergency descent. Hawkeye pilots rarely get an opportunity in fleet-replacement-squadron (FRS) training to execute this procedure, and an actual emergency shouldn’t be the first time they try it. The crew was well-briefed on what to expect, with no dissensions. After we made a good visual sweep of the skies, the flaps went up, power levers to flight idle, and the gear came down as we lowered the nose and accelerated toward 250 knots.

The Hawkeye weapon system, with its superb long-range radar, originally was designed for early-warning capability. Unlike a strike-fighter radar, however, its performance is limited at very close ranges and is not optimized for close traffic or collision avoidance.

As our playmate climbed, and we made a dirty descent along the same flight path—neither pilot had situational awareness (SA) of the other because they weren’t getting information from our organic sensors. But what we did have in both planes was Link-16. The air-control officer (ACO) in our aircraft saw a precise-position-location identification (PPLI), which is an accurate self-reported track from our playmate; the track was in close proximity to us, as was their reported altitude. Bypassing the standard interplane-communications flow, the ACO selected the cockpit and called for an immediate level off, which they did. The copilot spotted our playmate between the 3 and 4 o’clock positions, and they passed beneath us, with about 500 to 1,000 feet of clearance.

Now let’s cover the unspoken issues. At the end of a work-up cycle, complacency is a major green-eyed monster. We were lulled by the routine of cyclic operations and didn’t brief a transit-deconfliction plan. Days of safely transiting from points A to B to A had set a precedent. Adding to the “it can’t happen to us” attitude, we didn’t brief a plan for ownship lookout. We’re Hawkeye guys. Why wouldn’t we all know where another Hawkeye was?

During the flight back to the ship, we were busy

debriefing the mission events and no longer focused on the multi-million-dollar weapon system we'd just used to find, fix, track, target, engage, and assess an orange-surface-action group. In an aircraft with significantly restricted cockpit visibility, the pilots depend on a good heads-up from the operators in back for traffic calls. We broke what should be a verbal contract every time we go fly: Who has ownership lookout at each phase of flight, whether it's sensors or eyeballs?

Big skies are made small by airspace controls and aircraft with similar operating envelopes. If an orbit is good for one plane, why wouldn't our relief want to go to the same place?

Our lesson learned from work-ups served us well in the Iraqi theater of operations. During deployment, our aircraft was allotted a 1,000-foot vertical block to operate, with limited lateral airspace to boot. Each night, we

briefed deconfliction well in advance. We maintained good SA as we provided relief on-station and communications support to the Army and Marine convoys on the roads of Iraq each night. Historically, we've been our own worst enemy, even in wartime. Don't set the conditions for your own close pass. 🦅

LCdr. Hielen flies with VAW-113.

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Photo by PHA Michael B.W. Watkins