

Illustrations by *Ted Wilbur*

Clash by Night

A group of CH-46E *Sea Knights* was conducting a three-wave, low-light-level troop insertion, using night-vision devices, from an amphibious assault ship to a landing zone (LZ) ashore. The operation employed AH-1W *Super Cobras* in support. The first two waves were uneventful but between the second and third wave, the simulated threat scenario changed. There were conflicting reports of a simulated threat in the LZ. The air mission commander elected to attach two AH-1W escorts to the third wave CH-46E flight rather than keeping the *Super Cobras* detached from the flight as previously briefed; thus, the AH-1Ws were attached to the CH-46E division for the final insertion.

The flight pushed toward the beach, and about 14 kilometers from the LZ the escorts sprinted ahead of the CH-46Es at 140 knots. At the LZ, the escorts made a clearing pass, then proceeded northwest as briefed. The transports continued toward the initial point of the planned flight route. Near the initial point, however, the CH-46E flight leader became disoriented and deviated from the route, leading the



division west of the LZ.

None of the *Sea Knight* flight crew members questioned the leader about the deviation. Meanwhile, the AH-1W escort flight leader had cleared the LZ, but his wingman was still in a right-hand clearing turn in the vicinity of the zone and trailing the leader by approximately one kilometer. The

Sea Knights were west of the LZ as the AH-1W wingman was rolling out of his clearing turn.

Very shortly thereafter the AH-1W collided with the number two CH-46E. Both aircraft caught fire and crashed to the ground. The impact resulted in 14 fatalities and two major injuries.



Grampaw Pettibone says:

Gol dang it! You just can't let up for a second when you're dealing with flyin' machines makin' their way through the same section of sky. Throw in the dark and night-vision devices and it doesn't take much of a mistake to cause havoc. The air mission commander's decision to attach the AH-1Ws to the CH-46Es helped crowd the skies. That's one problem. Then, the flight leader got off course. That's another.

Ole Gramps knows the wingman's flight crew had their hands full stayin' in position, but wingmen navigate, too. Why didn't somebody speak up and help when the leader got off track?

Lack of crew coordination and communication led to this tragedy. There was time to "deconflict" the



airspace, but nobody took advantage of it. This was a tough but necessary training mission—the type that taxes even the most professional and competent of our flyers. No matter how good you are, without coordination and communication—another phrase for teamwork—trouble can take over.

Hornet High-Low

A pair of F/A-18Cs was on a one-versus-one air combat maneuvering training flight over water. After the first merge, the wingman had become “defensive,” that is, his *Hornet* had lost positional or energy advantage relative to the other aircraft. The pilot, however, believed he was in an “offensive” status.

After the second merge, the wingman was 100 knots slower and slightly lower than the leader. The wingman attempted a nose-high reversal in response to the leader’s pure vertical loop, but his aircraft ran out of flying airspeed and the nose of the F/A-18 fell below the horizon. The pilot unloaded to increase airspeed but only had 168 knots prior to pulling up to counter the leader’s offensive positioning. During the pull-up, sun glare washed out the aircraft’s head-up display symbology. With little reference to attitude and airspeed information, the pilot exceeded 80 degrees nose up and airspeed dropped to below 48 knots. The pilot recognized the degraded flying qualities and commenced out-of-controlled-flight departure recovery procedures by neutralizing controls.

The pilot became apprehensive when he experienced violent inverted negative-G gyrations and saw spin arrows on the data display indicators. Although he had not completed the departure recovery check-



list—the step remaining was to “check altitude, angle of attack, airspeed and yaw rate”—he decided, as he was descending through 11,000 feet, to eject.

Due to the negative-G load he was experiencing, the pilot focused his attention on achieving proper body position for ejection, rather than monitoring instruments for signs of the aircraft’s recovery from the departure.

The aircraft was now accelerating, with an 80-degree nose-low attitude, and no yaw tones. In effect, the F/A-18 was recovering from the departure. Nevertheless, the pilot successfully ejected at approximately 5,000 feet and the *Hornet* crashed into the sea.

Grampaw Pettibone says:



Holy *Hornets!* Fetch me a brace of ibuprofen tablets! Make that four. The F/A-18 was comin’ out of its miseries, but the driver punches out and King Neptune logs a strike fighter into his inventory. In defense of the pilot, he was adhering to that cardinal rule

embodied in the phrase “No one would criticize a pilot for ejecting at 10,000 feet if still out of control.” But there were signs the *Hornet* would probably have made it. Airspeed was increasing and nose attitude was stabilizing.

The pilot got into a fix to begin with when he tried a tactical vertical maneuver with inadequate airspeed. Better instrument scan woulda helped. Also, even though he was “defensive,” he *perceived* he was faster and in better tactical shape than he really was. Situational awareness is more than knowing what’s going on around you. It’s knowing the whole picture—especially your aircraft. It’s like battlin’ that old demon, vertigo; you gotta read the instruments and trust ’em. I admit, sun glare at a critical point in the maneuver didn’t help.

Bottom line: the *Hornet* got ahead of this pilot. It shoulda been the other way around.