

GRAMPAW PETTIBONE

Illustrations by Ted Wilbur



Falling Short

The crew of an SH-60B Seahawk briefed for an antisubmarine warfare mission and launched at 1836 with recovery scheduled for 2230. Weather was 2,000 feet overcast and sunset was to occur at 1936. The pilot in command and copilot were seated in the right and left seats, respectively.

The crew donned night vision devices (NVD) at 2030, enabling them to see the horizon, and the mission continued without incident. However, the pilot elected not to land on the parent ship due to limited waveoff capability while the ship was undergoing replenishment at sea (RAS) with another ship alongside. The pilot decided to refuel at a DDG 51-class ship, even though he had not landed on this type of ship for a year. The copilot and aviation warfare systems operator (AW) had never made an approach to a DDG 51-class ship.

At 2045, upon learning the destination ship was unable to provide an NVD-capable platform, the pilot directed the crew to remove their NVDs and transition to white lighting. Given the go-ahead for landing, the Seahawk, with the copilot at the controls, made two passes at 200 feet as the ship turned toward the base recovery course.

The pilot then took the controls and turned toward final approach, 1.3 miles from the ship, a distance closer than is required by Naval Air Training and Operating Procedures Standardization (NATOPS) instrument approach procedures. The copilot did not challenge the pilot for the abbreviated pattern. The AW was preoccupied with post-landing duties and did not monitor navigation parameters.

After overshooting the final approach course by 20 degrees, the pilot rolled wings level at .8 miles, 200 feet above the water with 60 knots ground speed. Upon intercepting the red/amber interface on the stabilized glide slope indicator (SGSI) at .5 miles, the pilot

depressed the collective trim altitude hold switch. He established a three to five degree nose-up attitude and reduced power to commence a decelerating descent to maintain visual glide path. Due to excessive closure rate, the pilot lowered collective more than normal to maintain the descent profile. The pilot observed a 100 to 150 feet per minute (FPM) rate of descent on the vertical speed indicator. He saw red (below glide path) on the SGSI but was not concerned, because he knew that on the alternate approach profile he would see red until reaching one-quarter mile and still be on profile.

He released the collective trim switch to engage the automatic flight control system (AFCS) radar altimeter hold. The descent rate averaged 800 FPM inside .5 miles while on final approach, exceeding the recommended rate of 500 FPM, but the pilot did not immediately sense the excessive rate of closure and rate of descent.

As the Seahawk decelerated through 50 knots, the AFCS automatically changed from airspeed hold to attitude hold. At 50 knots, airspeed dissipated due to increased nose attitude, decreased power and increased parasitic drag caused by stabilator programming to the near-full-down position.

Simultaneously, the rate of descent increased as the helo slowed due to an increase in required power that was not

matched by a corresponding increase of collective power by the pilot. (The altitude hold function of the AFCS will overshoot selected altitudes due to limitations on its control authority, especially with a low power setting and high rates of descent.)

The copilot made altitude calls at 100, 80 and 60 feet followed by three rapid calls for power. Both pilots remember hearing radar altimeter warning system tones at selected altitudes of 100 and 60 feet. The rate of descent continued unabated until just prior to the aircraft's impact with the water. The crew did not see any engine, low rotor, master caution or other warning lights



which would have indicated the pilot attempted to pull more power than the engines were capable of producing. But the pilot did pull sufficient power to decrease the rate of descent just prior to impact. This effort served to avoid injury to the crew but was not enough to avoid crashing .3 miles aft of the ship.

The aircraft immediately rolled right and went inverted. Prior to the SH-60B sinking, the aircrew egressed without significant problems and were rescued by the ship's crew within 22 minutes.



Grampaw Pettibone says:

There's a sayin' from an old movie, "What we have here is a failure to communicate." That phrase fits this sortie, along with "violation of NATOPS." The pilot didn't stick with the approach parameters outlined in NATOPS. Speak of gettin' off to a bad start!

The pilot was a bit slow to detect the excess rate of descent—a no-no, especially in the dark. But even so, had the crew operated like a team, helpin' each other out by better monitoring situational awareness and talkin' to each other, there coulda been a more positive outcome of the flight. Did the ugly head of overconfidence rear itself here?

The main problem: crew coordination took a holiday during this night approach.

Gramps from Yesteryear

Fatal Error

An air group was conducting an aerial demonstration. All scheduled exercises had been running like clockwork. The finale was to be a coordinated attack on a target 2,000 yards off the port beam of a big attack carrier. The attack force consisted of four-plane divisions from each of four squadrons in the air group.

F4D Skyrays would lead, firing rockets from Aero 6A pods. A4D Skyhawks would follow with 250-pound bombs, then A4Ds and AD Skyraiders with rockets would finish the job. After the firing runs, the aircraft were to proceed to a point 10 miles astern of the ship to rendezvous for a formation flyover.

The F4Ds fired their rockets in a 30-degree run,



followed closely by the first A4D division. At the end of the attack, the F4Ds and A4Ds each made a climbing left turn to reverse course. The A4Ds proceeded to close the interval, so that at the completion of the turn they were in a parade formation and 150 feet below the F4Ds. The two divisions were at about 2,800 feet at 325 knots.

Suddenly, the following radio transmission broke the silence:

"Stand by to drop hung ordnance."

"A4Ds are behind us."

"Stand by to drop pods."

"Stand by, drop."

Before a warning could be shouted, the F4Ds dropped their empty rocket pods! The pods came tumbling back through the A4D flight. One struck the A4D division leader's plane squarely on the windshield, shattered the canopy and glanced off the vertical fin. His plane slowly rolled to the right, made two complete rolls, turned inverted and plunged into the ocean. Apparently incapacitated, the pilot did not eject.



Grampaw Pettibone says:

Holy smokes! This is the first time a miserable error like this has come to Ole Gramps' attention in many a year, and I read 'em all. We lost a 3,500-hour jet pilot and it could happen again!

With expendable rocket launchers in common usage, it behooves EVERY squadron to take a real close look at their doctrine to make sure this NEVER happens again!

A high price was paid for this blunder. Don't waste a lesson so dearly bought. Pass the word!