Osborn

Float Coat

It was nearly daybreak when the loudspeaker of the *Perry*-class frigate boomed, "Flight quarters, flight quarters, all personnel man your flight quarters station for recovery of aircraft."

Having flown late the night before, the landing signal officer (LSO) – a LAMPS MK III SH-60 *Seahawk* pilot – was awakened by the call in a groggy state of surprise. He glanced at his watch. Flight quarters wasn't scheduled for another 30 minutes. He was unaware that the crew of the incoming *Seahawk* had requested an earlier recovery and that the ship approved the request.

The LSO crawled out of bed, pulled on his flight suit, and made his way to the hangar just as the horizon was growing light. Operating in Alaskan waters, the ship was pitching and rolling moderately. Sea temperature was 43 degrees, sea state three, with 800-foot ceilings and three miles visibility. The LSO requested a Recovery, Assist, Secure, and Traverse (RAST) landing. With all stations manned and ready, a "green" deck was prepared for the incoming helo.

The approach and landing were uneventful. The flight crew shut down and disembarked, and flight deck status returned to "red." The LSO went out onto the deck to greet the pilots. In the meantime, the ship had planned to continue prosecution of a subsurface contact and the Combat Information Center asked the bridge to execute a full starboard turn.

The inverted "Falling Leaf" invented by Al Williams.

The frigate subsequently took a 20-degree roll with a combination of ship and wave action. Water rushed over the flight deck and all hands on deck scrambled for handholds, such as main mounts and tie-down chains. The LSO, however, had fallen overboard.

When he was reported missing, the ship turned back in an attempt to locate and recover him. The search continued for two hours until the weather worsened. Immediate investigation revealed that in his haste to reach the hangar for the recovery, the LSO had failed to don his flotation vest – float coat.

Grampaw Pettibone says:

The LSO, the ship, the premature RAST recovery – they never happened. This was a fictional account submitted, we are grateful to note, by HSL-43, to make a point.

The LSO's float coat wouldn't have helped after 10 or so minutes in the cold water. But without it, his chances of survival were more sharply diminished. The point is, could this have happened? In a hurry, might that vital piece of gear be left behind?

Ole Gramps forgets his knobby cane now and then – and I'm seldom in a hurry to go anywhere. But when things get rushed, who knows? HSL-43 makes a good point. Gramps hopes it's well taken. Keep that float coat handy and wear it!

Hurtin' Hornet

An FA-18C launched in company with a two-seat FA-18D on a basic flight maneuvering (BFM) hop. A replacement pilot (RP) in training was up front in the two-seater, an instructor pilot (IP) in the rear.

Air Control told the flight that there was an altitude cap of 23,000 feet vice the standard 29,000 in the working area due to other traffic. General elevation in the area was 2,000 feet with the terrain rising rapidly, to as much as 7,000 feet, at its north end.

After three BFM engagements, the flight set up for a flat scissors. The *Hornets* were at 16,500 feet mean sea

level vice the briefed 20,000 (proscribed starting altitude for the maneuver) in order to preclude violating the altitude cap of 23,000 feet. The FA-18D was on the right side with about 3,000 feet lateral separation. The RP pulled the throttles to idle, pushed over, and then called "Fox Two," signifying an apparently successful simulated AIM-9 attack. He began a left roll away to disengage, while reselecting afterburner.

The instructor felt that sufficient separation remained for a simulated gun attack and instructed the replacement pilot to reverse back to the right for a shot.

Earlier, the instructor had cautioned the replacement pilot against attempts to use improper (multi-axis) control inputs. The RP had displayed a tendency to use excessive aileron inputs during rolling maneuvers at low airspeed and high angle of attack.

At 17,400 feet, the RP rolled right and pulled to achieve a gun solution. The IP felt something was wrong with the aircraft's response as it rolled. He took control and immediately neutralized the controls but was unable to keep the *Hornet* from departing controlled flight in a violent nose slice departure to the left. The left nose slice continued as angle of attack and aircraft pitch attitude increased significantly. Spin logic appeared on the indicators with the left spin arrow presented. The IP ensured controls were neutral, pulled the throttles to idle, and transmitted to the RP, "I have control. Are your feet on the floor?"

Although pinned up and right toward the canopy, the RP reported feet "on the floor."

The IP put in the left stick and after another left turn, the left spin arrow disappeared. The IP neutralized the controls but the *Hornet* sliced nose right and a right spin arrow appeared. The IP put in right stick and the arrow disappeared after one turn. So, the instructor neutralized controls once again.

At this point, the *Hornet* was extremely nose high. The crew heard the roar of air rushing about the outside of the cockpit. The IP now believed the *Hornet* was in an angle of attack hangup. He applied full forward stick and selected afterburner. The *Hornet* didn't respond and continued to exhibit random rapid pitch and yaw excursions.

"Check your altitude," called the flight leader in the other FA-18. The IP then initiated ejection after "sensing ground rush."

The ejection sequence was normal, although the flyers felt their descent was "fast." They landed in rough terrain. The IP's chute did not respond as expected when he tried to avoid a large boulder and he suffered major injuries on impact. The aircraft crashed almost vertically, with little rotation, at about 275 knots.

Grampaw Pettibone says:

Singe my whiskers – with afterburner heat, no less! The RP was cautioned not to be too aggressive on the controls but he yanked too hard anyway! The two-seater had external stores onboard but these weren't a factor in this accident. Excess aileron during a rolling manuever at high angle of attack was.

An FA-18 training document says, "Overaggressive misapplication of stick and/or rudder – that is, full control input or control reversal – may lead to nose slice departure or spin." Just ask these flyers.

Also, the Hornets commenced the maneuver below the 20,000 feet minimum. There was some question during the investigation as to whether 20,000 was supposed to be mean sea level or above actual ground level – a pretty big misunderstanding in this case, 'specially since this was the RP's introduction to the manuever. The Hornet hit the ground only 9,500 feet below the start altitude.

Get the most out of your equipment, folks. But don't hurt it, 'cause it can hurt you back!

The hairy Hornet ride!