

# **Situational Awareness in Action:**

## ***U.S. Airways Flight 1549 Ditches in Hudson River***

**By Kenneth J. Solosky, Newark (NJ) Police Department, NYPD Aviation Unit (ret.)**

On Jan. 15, 2009, New York City was in the grip of a deep freeze. Temperatures had barely reached the 20-degree mark as pilots and rescue crew chiefs from the New York Police Department Aviation Unit reported for the "third platoon," which began at 1430 hours. After roll call, personnel conducted their pre-flight checks, equipment checks and safety inspections. Little did they know all their experience and training would shortly be put to the test when U.S. Airways Flight 1549, an Airbus A320, ditched in the Hudson River.

Captain C.B. Sullenberger and First Officer Jeffrey Skiles were likely happy they were only delayed about 45 minutes when they took Runway 4 at New York's LaGuardia Airport for departure to Charleston, S.C. It had been snowing lightly all day in New York, and just a few hours earlier, the clouds gave way to clear, albeit very cold, skies. Despite the earlier snow, the delay must have seemed a minor inconvenience. In a matter of minutes after departure, any delay would become trivial, as the airplane lost power in both engines and, in what an NTSB representative said was "a completely calm and unremarkable manner," the pilots conducted a successful water ditching.

The Air-Sea Rescue alert tones sounded in the NYPD Aviation Unit's hangar shortly after 1530, reporting a plane crash in the Bronx (just north of LaGuardia Airport), subsequently followed by reports of a plane crash in the Hudson River. Ground units quickly confirmed that there was an airliner down in the Hudson, causing the NYPD Aviation Unit to deploy all available aircraft and personnel. En route to the scene, NYPD aircraft were gathering important information from ground personnel, including the fact that there were numerous people on the aircraft's wings and that the aircraft appeared relatively intact and was floating.

The Air-Sea Rescue aircraft, a Bell 412EP, was assigned with its normal complement of two pilots, two rescue crew chiefs and two scuba divers. (Normal staffing is one rescue crew chief unless circumstances indicate that a second crew chief might be needed. This was clearly one of those circumstances!). Two Koala aircraft were launched with two pilots and a rescue crew chief in the back. Before jumping into the back of the Koalas, each rescue crew chief, using pre-planned procedures, grabbed a bag containing approximately 50 personal flotation devices and liferafts. In most instances, the Koalas are not launched with an assigned rescue crew chief. However, procedures in an airline crash dictate a crew chief being assigned to every aircraft.

As the NYPD aircraft arrived on the scene, one of the Agusta aircraft, commanded by Chief Pilot/Detective Dennis DeRienzo, immediately realized the magnitude of the situation and performed a high reconnaissance. DeRienzo also realized they had a very serious problem developing; media aircraft were arriving overhead every 10 seconds or so, and very quickly, there were almost a dozen helicopters all operating in the relatively small, uncontrolled airspace.

DeRienzo quickly took control of the situation and became the designated "command and control" aircraft. He directed all aircraft via the NYPD's aviation frequency and led the aviation response. The NYPD also requested a temporary TFR in order to give rescue aircraft some breathing room. The second Koala, commanded by Sergeant Anthony Moccaldi, began dropping both PFDs and liferafts into the river in case anyone had fallen into the frigid water. Finally, the Air-Sea Rescue aircraft, commanded by Sergeant Mike Hendrix, performed a low reconnaissance in order to look for victims. The crew of the Air-Sea Rescue aircraft spotted two females in the water that appeared in distress.

Hendrix was faced with the task of moving in for diver deployment, while making sure the rotorwash did not knock any additional victims from the wings of the airliner into the water. Hendrix deftly moved the Bell 412EP into position among responding boats, and the divers were deployed, quickly rescuing the female victims. Although difficult to see in the extensive media coverage, a real challenge of the rescue was that the scene was constantly moving in a downstream current.

If there was any good to come out of the events of Sept. 11, 2001, it was the entire region's ability to mobilize quickly for any major accident, terrorist act or other catastrophe. Within a matter of minutes, the Nassau County Police Department responded with two Bell 407 medevac-capable aircraft, and the New Jersey State Police responded with an S-76 medevac aircraft. In addition, the Port Authority Police Department responded with their S-76. The NYPD Air Operations Center also had received numerous calls from other surrounding airborne law enforcement units offering their assistance and help.

In the end, the rescue operation was a success. If you had asked a panel of experts to forecast the casualties of an A320 aircraft ditching in frigid and swiftly moving river water, it is certain not one of them would have predicted only two broken legs.

The crew resource management and situational awareness demonstrated by all rescue aircraft was indeed remarkable. The "command and control" aircraft proved to be essential. Each rescue aircraft was assigned a block altitude to operate, and all arriving medevac aircraft were staged to the West 30th Street Heliport. The operation showed that training and pre-planning does work. Despite some incredible odds, it proved to be a successful day for airborne law enforcement.