

# Miracle On The Hudson

Six years have passed since that cold winter day in January 2009. Experts and lay people alike still marvel at the story of a commercial jet that stalled in midair over New York City and landed intact on the Hudson River without any fatalities. Even the pilot, who received universal acclaim for his heroism, had a hard time explaining all the details that needed to fall into place to avoid disaster. Read the dramatic and comprehensive account of the pivotal six minutes from when his plane took off until he ditched it in the frigid waters off Manhattan.



*Shimon Rosenberg*

When US Airways Flight 1549 took off from New York City's LaGuardia Airport on a routine flight to Charlotte, North Carolina, no one dreamed of the nightmare that awaited its 155 passengers and crew.

It was Thursday, January 15, 2009, at 3:24 PM. The Airbus A320 airplane was taxiing down the runway. To veteran pilot Captain Chesley Sullenberger, known to his friends as Sully, everything appeared normal.

Sullenberger's younger co-pilot, First Officer Jeffrey Skiles, was at the controls. Pilots divide their work and it was now Skiles' turn to pilot the plane.

At 3:25, the aircraft lifted into the air, soaring over the Bronx and crossing the East River (pilots sometimes call the airport "USS LaGuardia" because the relatively short runways near the water give it the feel of an aircraft carrier). The jet then banked toward a region over New Jersey that pilots call "Biggie Intersection," where flights leaving LaGuardia head toward in order avoid the heavy air traffic around nearby Newark Airport. From there, Flight 1549 was scheduled to head south toward Washington DC, and then to North Carolina.

The air traffic controller gave Flight 1549 clearance to climb to 15,000 feet. Sullenberger confirmed that the communication had been received.

Outside, a cold front was chilling the northeast. The skies, though, were clear and calm, offering ideal flying weather. Today was Sullenberger's last day of his pilot's four-day workweek. In a few hours he could return home to Austin, Texas, and relax with his wife over the weekend.

Skiles was the first to notice. Birds. Large birds. Dozens of them. Wherever the pilot and co-pilot looked they saw large geese filling the air: right, left, down, up. The birds filled and then replaced the bright blue sky with dark brown. Sullenberger's heart began pounding. His first thought was to head sharply downward, but it was already too late.

Then they heard a thud. And another. And another. It felt like the plane was being hit by massive hailstones.



The birds that disabled the engines of US Airways Flight 1549 were Canada geese.



Aerial photo of geese in flight.

Every experienced pilot recognizes the distinctive odor of a burning bird, since the ventilation system carries the odor throughout the plane. It comes from a bird getting sucked in by the massive turbines that force air through the jet engines. Usually it has no effect on the plane. One might hear an unusual sound, but the aircraft forges ahead, no worse for the wear.

Not this time, however. The cacophony of loud noises was followed by a mighty shudder... and suddenly the cabin was filled with an ominous silence. First Officer Skiles realized immediately that they were in trouble. Deep, serious trouble. A pilot's worst nightmare is his airplane falling silent.

Sullenberger also knew at once that they had a major problem. He had seen and heard everything Skiles had. Sullenberger had once experienced a similar situation many years before. During training, his flight instructor had suddenly cut the engines and called out, "Ok, what do you do now?" But this time it was not a training session with an experienced instructor at his side to save

him if he failed. He was flying a commercial airliner and *both* of his engines had just shut down. His Airbus A320 was gliding just 3,200 feet above ground with absolutely no power from the engines.

In the deep recesses of his mind, Chesley Sullenberger flashed back to his first flight lesson in 1967, when he was 16. And then to the time he enlisted in the Air Force two years later to become a fighter pilot. He recalled the time he told a reporter, "Flying has been a passion since I was five. I can remember at five knowing that I was going to fly airplanes.... I never even considered anything else." Sullenberger's 42 years of flight experience were invaluable, but when his Airbus A320 engines shut down he immediately knew that he had never been in a situation as dangerous as this.

As soon as power was lost, the plane immediately began losing air speed and altitude. Since they were barely into the flight, they had not yet picked up much speed or height to begin with. Making matters worse, they were flying directly above one of the most densely populated cities on the planet.

Sullenberger did not hesitate. He grabbed the wheel and blurted out two words: "My aircraft." Flight protocol recognizes this term as a statement by the captain that he is using his rank to take over control.

Skiles responded instantly: "Your aircraft."

Actually, Skiles' flying history was virtually equal to Sullenberger's. However, he had only recently completed training for the A320 and this was his first time flying it without an instructor. Sullenberger later commented that Skiles' recent completion of his A320 training was an asset in this situation. "Since it had been almost a year since I had been through our annual pilot recurrent training and Jeff had just completed it—he had just been in the simulator using all the emergency checklists—he was probably better suited to quickly knowing exactly which checklist would be most appropriate and quickly finding it in this big multipage quick reference handbook that we carry in the cockpit. So I felt it was like the best of

both worlds. I could use my experience; I could look out the window and make a decision about where we were going to go, while he was continuing his efforts to restart the engines."

Without engine power, the best a pilot can hope for is to guide the plane into a controlled glide. Sullenberger had actually once been an expert glider pilot, though this

## Flight Figures

### Flight 1549's Emergency Landing

**Date:** January 15, 2009

**Airplane Type:** Airbus A320-214

**Year Built:** 1999

**Trips Completed at Time of Crash:** 16,299

**Accumulated Flight Hours:** 25,241.08

**Airline:** US Airways

**Cause of Crash:** Collision with geese

**Site:** Hudson River between 48th Street and Weehawken, New Jersey

**Passengers:** 150

**Crew:** 5

**Wounded:** 75 (mostly minor)

**Fatalities:** 0

**Survivors:** 155

**Departed from:** LaGuardia Airport, New York City

**Intended Destination:** Charlotte International Airport, North Carolina

**Final Destination:** Seattle-Tacoma International Airport, Washington ■

**Airbus A320** The A320 is a short to mid-range commercial jetliner used since 1988.

Typical passenger seating 150  
Wingspan 111 ft., 10 in.  
Length 123 ft., 3 in.  
Typical operating weight 93,500 lbs.  
Max. takeoff weight 162,000 lbs.  
Max. fuel capacity 7,885 gal.  
Flight range 3,000 nautical miles  
Drawing is schematic.