

Captain Chesley ("Sully") Sullenberger is flying an Airbus 320 on the 15th of January, 2009, when he takes-off from LaGuardia Airport. His plane, bearing call number N106US, is operating as US Airways Flight 1549.

Shortly after take-off, at about 3200 feet, the plane encounters a flock of birds. Listening closely to the crew, as they talk with Patrick Harten (LaGuardia's air-traffic controller), we can hear the thump of the bird strike.

So devastating is the encounter between the plane and the birds that both engines are extensively damaged. With no thrust, and the plane dropping at 18 feet per second, the aircraft must land. The question is: Where should that occur?

This clip, from the NTSB (National Transportation Safety Board), combines an animation of the plane's flight path coupled with the plane-tower communications. The flight crew remains calm in the face of a sudden emergency which could have had a very bad end.

With LaGuardia's controllers clearing the way for an emergency landing at different airports, Captain Sullenberger realizes that his plane will almost certainly not make it to an airfield. Instead, he makes a turn and flies over the Hudson River.

With a fully fueled plane, and no good options available to him, Captain Sullenberger keeps his aircraft straight and level. As he maintains control of the plane, he continues to update the controllers.

Declaring that the aircraft is "going into the Hudson," he operates his plane as though it's a 140,000-pound glider, keeps his focus on flying (no longer communicating with the tower), then makes a perfectly executed (albeit forced) water landing.

When Patrick Harten, the LaGuardia controller, hears the Captain say "We're gonna be in the Hudson," he is sure the plane will be lost. Testifying before Congress, about what happened that day, he later said:

*People do not survive landings on the Hudson.*

Meanwhile ... in the plane's cabins ... flight attendants are doing their best to keep the passengers calm. When it becomes clear the plane will make a crash landing, they tell everyone:

*Brace, brace; heads down; stay down.*

A security camera, on land, records the moment when the plane makes contact with the Jersey-side of the river.

The back of the plane hits the water first. One of the flight attendants later described the impact as "violent. Horrible. Things flew out."

At the front of the plane, where the impact is like a "slam," the flight attendants are thinking: "That wasn't so bad." What they do not-yet know is that the landing is on the Hudson River.

The passengers, for the most part, are calm:

*They did not try to get out until Sully [the captain] said "Evacuate."*

Because the front door is higher than the water, the evacuation chute automatically inflates when a flight attendant opens that door on the plane's starboard (right) side. Passengers remain calm as they quickly leave the plane. It takes a bit longer for the left-front chute to properly inflate.

In the back of the plane, however, a totally different situation is developing. Without permission from the crew, a passenger tries to open the door. Even worse ... the impact itself is so powerful that it tears a hole in the fuselage, under the airplane's tail.

As water continues to pour into the cabin, the flight attendant at the back of the plane worries that she and some of the passengers will be unable to make it out of the plane alive. She yells for passengers, in the back, to go over the seats so they can get out at the front.

Within the span of a few seconds, the flight attendant at the back—Doreen Welsh—realizes she might live. The situation causes an extreme emotional swing, from "accepting death and seeing life. It was unbelievable."

Doreen was one of only a few people who are seriously injured in the forced landing. Carried onto a life raft, she is initially unaware of the deep cut that she has in her leg.

After everyone is out of the plane, Captain Sullenberger walks up and down the aisle, twice, to make sure that everyone is actually out. After looking at his crippled plane one more time, he grabs the maintenance log and gets into the last life raft. It is filled with passengers.

Everyone, on board, is extremely fortunate that the plane is equipped with "Extended Over Water" life-saving devices. That is not usual for domestic flights.

The Captain has landed his plane between two ferry terminals. Boats from those terminals are able to quickly make their way to the plane, to rescue passengers who are standing on the wings. To the rescuers, the Captain later said:

*I have a debt of gratitude I fear I may never be able to repay.*

When Sully gets the final count - 155 passengers have safely left the plane - he has the confirmation he needs. Every passenger is saved. His reaction to that fact is profound:

*I felt like the weight of the universe had been lifted off my heart.*

This NTSB video - part of a [thorough investigation](#) into the plight of Flight 1549 - helps us to understand the path which the aircraft flew, from takeoff to water landing, and provides this description:

*This animation depicts the flight path of U.S. Airways Flight 1549 in Weehawken, New Jersey, on January 15, 2009. The animation begins after the airplanes takeoff from La Guardia Airport at 3:26:50 PM EST and ends with the water landing in the Hudson River.*

*Flight data recorder and radar flight path information is displayed on a satellite photo illustration of the area. Near the end of the flight, the animation transitions to surveillance video from Pier 88, which captured the landing.*

*Selected comments from the cockpit voice recorder transcript are displayed as text. The animation audio consists of portions of the recorded air traffic control communications.*

*The airplane's speed, altitude, and local time are displayed in the lower portion of the screen.*

The following code translations, shown on the video, will help to better understand the discussion:

- HOT = cockpit voice recorder
- HOT-1 = captain
- HOT-2 = first officer
- EGPWS = ground proximity radar
- RDO = ATC (air traffic control) radio

Because of mandatory FAA rules, Captain Sullenberger was forced to retire soon after the bird-strike flight. Commercial airline pilots are not allowed to fly past the age of sixty.

Credits:

NTSB animation, online courtesy NTSB.

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See Alignments to State and Common Core standards for this story online at:

<http://www.awesomestories.com/asset/AcademicAlignment/Plane-in-the-Hudson-River-Flight-1549>

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