The RMS Titanic, a luxury steamship, sank in the early hours of April 15, 1912, off the coast of Newfoundland in the North Atlantic after sideswiping an iceberg during its maiden voyage. Of the 2,240 passengers and crew on board, more than 1,500 lost their lives in the disaster. Titanic has inspired countless books, articles and films (including the 1997 Titanic movie starring Kate Winslet and Leonardo DiCaprio), and the ship's story has entered the public consciousness as a cautionary tale about the perils of human hubris.

The Building of the RMS Titanic

The Titanic was the product of intense competition among rival shipping lines in the first half of the 20th century. In particular, the White Star Line found itself in a battle for steamship primacy with Cunard, a venerable British firm with two standout ships that ranked among the most sophisticated and luxurious of their time.

Cunard's Mauretania began service in 1907 and quickly set a speed record for the fastest average speed during a transatlantic crossing (23.69 knots or 27.26 mph), a title that it held for 22 years.

Cunard's other masterpiece, Lusitania, launched the same year and was lauded for its spectacular interiors. Lusitania met its tragic end on May 7, 1915, when a torpedo fired by a German U-boat sunk the ship, killing nearly 1,200 of the 1,959 people on board and precipitating the United States' entry into World War I.

Did you know? Passengers traveling first class on Titanic were roughly 44 percent more likely to survive than other passengers.

The same year that Cunard unveiled its two magnificent liners, J. Bruce Ismay, chief executive of White Star, discussed the construction of three large ships with William J. Pirrie, chairman of the shipbuilding company Harland and Wolff. Part of a new "Olympic" class of liners, each ship would measure 882 feet in length and 92.5 feet at their broadest point, making them the largest of their time.

In March 1909, work began in the massive Harland and Wolff shipyard in Belfast, Ireland, on the second of these three ocean liners, Titanic, and continued nonstop for two years.

On May 31, 1911, Titanic's immense hull–the largest movable manmade object in the world at the time–made its way down the slipways and into the River Lagan in Belfast. More than 100,000 people attended the launching, which took just over a minute and went off without a hitch.

The hull was immediately towed to a mammoth fitting-out dock where thousands of workers would spend most of the next year building the ship's decks, constructing her lavish interiors and installing the 29 giant boilers that would power her two main steam engines.

'Unsinkable' Titanic's Fatal Flaws

According to some hypotheses, Titanic was doomed from the start by a design that many lauded as state-of-the-art. The Olympic-class ships featured a double bottom and 15 watertight bulkhead compartments equipped with electric

watertight doors that could be operated individually or simultaneously by a switch on the bridge.
It was these watertight bulkheads that inspired Shipbuilder magazine, in a special issue devoted to the Olympic liners, to deem them "practically unsinkable."
But the watertight compartment design contained a flaw that was a critical factor in Titanic's sinking: While the individual bulkheads were indeed watertight, the walls separating the bulkheads extended only a few feet above the water line, so water could pour from one compartment into another, especially if the ship began to list or pitch forward.
The second critical safety lapse that contributed to the loss of so many lives was the inadequate number of lifeboats carried on Titanic. A mere 16 boats, plus four Engelhardt "collapsibles," could accommodate just 1,178 people. Titanic could carry up to 2,435 passengers, and a crew of approximately 900 brought her capacity to more than 3,300 people.
As a result, even if the lifeboats were loaded to full capacity during an emergency evacuation, there were available seats for only one-third of those on board. While unthinkably inadequate by today's standards, Titanic's supply of lifeboats actually exceeded the British Board of Trade's requirements.
Passengers on the Titanic
Titanic created quite a stir when it departed for its maiden voyage from Southampton, England, on April 10, 1912. After stops in Cherbourg, France, and Queenstown (now known as Cobh), Ireland, the ship set sail for New York with 2,240 passengers and crew—or "souls," the expression then used in the shipping industry, usually in connection with a sinking—on board.
As befitting the first transatlantic crossing of the world's most celebrated ship, many of these souls were high-ranking officials, wealthy industrialists, dignitaries and celebrities. First and foremost was the White Star Line's managing director, J. Bruce Ismay, accompanied by Thomas Andrews, the ship's builder from Harland and Wolff.
Absent was financier J.P. Morgan, whose International Mercantile Marine shipping trust controlled the White Star Line and who had selected Ismay as a company officer. Morgan had planned to join his associates on Titanic but canceled at the last minute when some business matters delayed him.
The wealthiest passenger was John Jacob Astor IV, heir to the Astor family fortune, who had made waves a year earlier by marrying 18-year-old Madeleine Talmadge Force, a young woman 29 years his junior, shortly after divorcing his first wife.
Other notable passengers included the elderly owner of Macy's, Isidor Straus, and his wife Ida; industrialist Benjamin Guggenheim, accompanied by his mistress, valet and chauffeur; and widow and heiress Margaret "Molly" Brown, who would earn her nickname "The Unsinkable Molly Brown" by helping to maintain calm and order while the lifeboats were being loaded and boosting the spirits of her fellow survivors.

The employees attending to this collection of First Class luminaries were mostly traveling Second Class, along with academics, tourists, journalists and others who would enjoy a level of service and accommodations equivalent to First Class on most other ships.

But by far the largest group of passengers was in Third Class: more than 700, exceeding the other two levels combined. Some had paid less than $20 to make the crossing. It was Third Class that was the major source of profit for shipping lines like White Star, and Titanic was designed to offer these passengers accommodations and amenities superior to those found in Third Class on any other ship of that era.

Titanic Sets Sail

Titanic's departure from Southampton on April 10 was not without some oddities. A small coal fire was discovered in one of her bunkers–an alarming but not uncommon occurrence on steamships of the day. Stokers hosed down the smoldering coal and shoveled it aside to reach the base of the blaze.

After assessing the situation, the captain and chief engineer concluded that it was unlikely it had caused any damage that could affect the hull structure, and the stokers were ordered to continue controlling the fire at sea.

According to a theory put forth by a small number of Titanic experts, the fire became uncontrollable after the ship left Southampton, forcing the crew to attempt a full-speed crossing; moving at such a fast pace, they were unable to avoid the fatal collision with the iceberg.

Another unsettling event took place when Titanic left the Southampton dock. As she got underway, she narrowly escaped a collision with the America Line's S.S. New York. Superstitious Titanic buffs sometimes point to this as the worst kind of omen for a ship departing on her maiden voyage.

The Titanic Strikes an Iceberg

On April 14, after four days of uneventful sailing, Titanic received sporadic reports of ice from other ships, but she was sailing on calm seas under a moonless, clear sky.

At about 11:30 p.m., a lookout saw an iceberg coming out of a slight haze dead ahead, then rang the warning bell and telephoned the bridge. The engines were quickly reversed and the ship was turned sharply—instead of making direct impact, Titanic seemed to graze along the side of the berg, sprinkling ice fragments on the forward deck.

Sensing no collision, the lookouts were relieved. They had no idea that the iceberg had a jagged underwater spur, which slashed a 300-foot gash in the hull below the ship's waterline.

By the time the captain toured the damaged area with Harland and Wolff's Thomas Andrews, five compartments were already filling with seawater, and the bow of

the doomed ship was alarmingly pitched downward, allowing seawater to pour from one bulkhead into the neighboring compartment.

Andrews did a quick calculation and estimated that Titanic might remain afloat for an hour and a half, perhaps slightly more. At that point the captain, who had already instructed his wireless operator to call for help, ordered the lifeboats to be loaded.

Titanic's Lifeboats

A little more than an hour after contact with the iceberg, a largely disorganized and haphazard evacuation began with the lowering of the first lifeboat. The craft was designed to hold 65 people; it left with only 28 aboard.

Tragically, this was to be the norm: During the confusion and chaos during the precious hours before Titanic plunged into the sea, nearly every lifeboat would be launched woefully under-filled, some with only a handful of passengers.

In compliance with the law of the sea, women and children boarded the boats first; only when there were no women or children nearby were men permitted to board. Yet many of the victims were in fact women and children, the result of disorderly procedures that failed to get them to the boats in the first place.

Exceeding Andrews' prediction, Titanic stubbornly stayed afloat for close to three hours. Those hours witnessed acts of craven cowardice and extraordinary bravery. Hundreds of human dramas unfolded between the order to load the lifeboats and the ship's final plunge: Men saw off wives and children, families were separated in the confusion and selfless individuals gave up their spots to remain with loved ones or allow a more vulnerable passenger to escape. In the end, 706 people survived the sinking of the Titanic.

Titanic Sinks

The ship's most illustrious passengers each responded to the circumstances with conduct that has become an integral part of the Titanic legend. Ismay, the White Star managing director, helped load some of the boats and later stepped onto a collapsible as it was being lowered. Although no women or children were in the vicinity when he abandoned ship, he would never live down the ignominy of surviving the disaster while so many others perished.

Thomas Andrews, Titanic's chief designer, was last seen in the First Class smoking room, staring blankly at a painting of a ship on the wall. Astor deposited his wife Madeleine into a lifeboat and, remarking that she was pregnant, asked if he could accompany her; refused entry, he managed to kiss her goodbye just before the boat was lowered away.

Although offered a seat on account of his age, Isidor Straus refused any special consideration, and his wife Ida would not leave her husband behind. The couple retired to their cabin and perished together.

Benjamin Guggenheim and his valet returned to their rooms and changed into formal evening dress; emerging onto the deck, he famously declared, "We are dressed in our best and are prepared to go down like gentlemen."

Molly Brown helped load the boats and finally was forced into one of the last to leave. She implored its crewmen to turn back for survivors, but they refused, fearing they would be swamped by desperate people trying to escape the icy seas. Titanic, nearly perpendicular and with many of her lights still aglow, finally dove beneath the ocean's surface at about 2:20 a.m. on April 15, 1912. Throughout the morning, Cunard's Carpathia, after receiving Titanic's distress call at midnight and steaming at full speed while dodging ice floes all night, rounded up all of the lifeboats. They contained only 706 survivors.

Aftermath of the Titanic Catastrophe

At least five separate boards of inquiry on both sides of the Atlantic conducted comprehensive hearings on Titanic's sinking, interviewing dozens of witnesses and consulting with many maritime experts. Every conceivable subject was investigated, from the conduct of the officers and crew to the construction of the ship. Titanic conspiracy theories abounded.

While it has always been assumed that the ship sank as a result of the gash that caused the bulkhead compartments to flood, various other theories have emerged over the decades, including that the ship's steel plates were too brittle for the near-freezing Atlantic waters, that the impact caused rivets to pop and that the expansion joints failed, among others.

Technological aspects of the catastrophe aside, Titanic's demise has taken on a deeper, almost mythic, meaning in popular culture. Many view the tragedy as a morality play about the dangers of human hubris: Titanic's creators believed they had built an unsinkable ship that could not be defeated by the laws of nature. This same overconfidence explains the electrifying impact Titanic's sinking had on the public when she was lost. There was widespread disbelief that the ship could not possibly have sunk, and, due to the era's slow and unreliable means of communication, misinformation abounded. Newspapers initially reported that the ship had collided with an iceberg but remained afloat and was being towed to port with everyone on board.

It took many hours for accurate accounts to become widely available, and even then people had trouble accepting that this paragon of modern technology could sink on her maiden voyage, taking more than 1,500 souls with her.

The ship historian John Maxtone-Graham has compared Titanic's story to the Challenger space shuttle disaster of 1986. In that case, the world reeled at the notion that one of the most sophisticated inventions ever created could explode into oblivion along with its crew. Both tragedies triggered a sudden collapse in confidence, revealing that we remain subject to human frailties and error, despite our hubris and a belief in technological infallibility.

Titanic Wreck

Efforts to locate the wreck of Titanic began soon after it sank. But technical limitations—as well as the vastness of the North Atlantic search area—made finding it extremely difficult.

Finally, in 1985, a joint U.S.-French expedition located the wreck of the RMS Titanic. The doomed ship was discovered about 400 miles east of Newfoundland in the North Atlantic, some 13,000 feet below the surface.

Subsequent explorations have found that the wreck is in relatively good condition, with many objects on the ship—jewelry, furniture, shoes, machinery and other items—are still intact.

Since its discovery, the wreck has been explored numerous times by manned and unmanned submersibles—including the submersible Titan, which imploded during what would have been its third dive to the wreck in June 2023.