

TITANIC

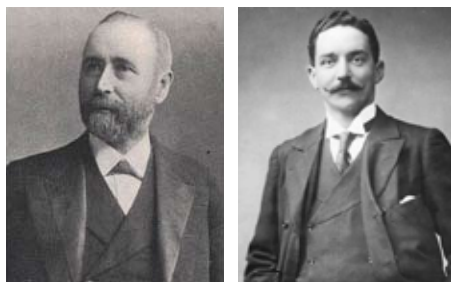
100 YEARS OF MYSTERY



History of Titanic



At Noon on Wednesday April 10, 1912, the majestic RMS Titanic began her maiden voyage from Southampton, England, bound for New York. She was the largest man-made moving creation on land or sea at that time. Dignitaries, reporters, workmen, and a crowd of more than 100,000 gazed in awe at the departure of the magnificent ship. She was taller than a ten-story building and nearly a sixth of a mile long. The Titanic was, for her time, the most luxurious ocean liner ever built. She was destined to become the most famous ship in history, just not in the way most expected.



Left: Lord Pirrie, Chairman, Harland & Wolff Shipbuilders

Right: J. Bruce Ismay, Director, White Star Line

The concept for a fleet of three ships of unrivaled size and luxury was hatched three years earlier. On April 30, 1907, Lord Pirrie, chairman of the Harland & Wolff shipbuilders, held an informal dinner meeting at his mansion. In attendance was J. Bruce Ismay, director of the White Star Line. The three ships they planned to build would be the Olympic, Titanic, and Gigantic (renamed the Britannic). Their goal was to top their rival, The Cunard Line, which had built the Lusitania and the Mauritania, the most luxurious and fastest liners on the Atlantic Ocean at that time.



Construction of the Titanic began nearly two-years later at the Harland and Wolff Shipyard (HWS) in Belfast, Ireland on the River Lagan on March 31, 1909. At the peak of construction, more than 14,000 Irish Shipyard workers labored at the site, working from 7:30am to 5:30pm five days a week, plus a half-day on Saturday.

The great ship's hull was launched May 31, 1911 as more than 100,000 people watched. It took over 44,000 pounds of grease to lubricate Titanic's slide down the slipway. Her outfitting was completed by March 31, 1912. Titanic measured an incredible 882 feet 9 inches long and 92 feet 6 inches wide. She was run by two huge steam engines and one low-pressure turbine, which powered three propellers. Twenty-nine boilers fired by 159 coal burning furnaces made possible a top speed of 23 knots (26.5 mph). Only three of the



four 63 feet tall funnels were functional; the fourth, which only served as a vent, was added to make the ship look more impressive. The ship could carry a total of 3,547 passengers and crew. Because she also carried mail, her name was given the prefix RMS (Royal Mail Steamer) as well as SS (Steam Ship).

For its time, this ship was unsurpassed in luxury and opulence. The domed Grand Staircase formed a spectacular entrance to the reception area. The ship featured an onboard swimming pool, gymnasium, Turkish & electric baths, a library and squash court. First-class common rooms were ornately appointed with elaborate



wood paneling, expensive furniture and other elegant decorations. Three elevators transported first-class passengers and, as an innovation, second-class passengers enjoyed one elevator as well. She also had an extensive electrical system powered by



“You weren’t there at my first meeting with Ismay, to see the little red marks all over the blueprints. First thing I thought was: ‘Now here’s a man who wants me to build him a ship that’s gonna be sunk.’ We’re sending gilded egg shells out to sea.”

— *Thomas Andrews, Managing Director of Harland and Wolff Shipyards.*



The Edwardian Era (1901-1919)

The Titanic, embodying human progress, opulence, and material excess, epitomizes the Edwardian era. The era is defined by the reign of King Edward VII in Great Britain, often called the “Gilded Age.”

Tremendous technological and social change as well as modern industrialization and mass-produced abundance took place. Britain was at its imperial height

with one in three of the world’s population her subjects. Americans experienced newfound wealth and indulged in cuisine, fashion, entertainment and travel as never before.

It was a time of great inequality. The privileges of the aristocracy were made possible by the labor of their working class servants. Inequalities between wealth and poverty were stark. Class status and even one’s occupation were rigidly defined. Mobility of the lower or middle classes to the upper class was restricted by tradition and sometimes even by law.

For Classroom Tips, See Page 15

steam-driven generators and ship-wide wiring for electric lights, telephone system and two Marconi telegraphy radios. Two Marconi Company operators worked in shifts sending and receiving passenger messages using the 5,000-watt system. First-class passengers paid a hefty fee for such amenities; the most expensive one-way trans-Atlantic passage was \$4,375 (equivalent to \$99,237 in 2011).



Titanic's passengers and crew required tons of food supplies. Among the supplies were: 115,000 pounds of fresh meat & fish, 80,000 pounds of potatoes, 10,000 pounds of rice & beans, 40,000 eggs, 36,000 oranges, 7,000 heads of lettuces, and 1,500 gallons of milk.

"You could actually walk miles along the decks and passages covering different

Control your Irish passions, Thomas (builder). Your uncle here tells me you proposed 64 lifeboats and he had to pull your arm to get you down to 32. Now, I will remind you just as I reminded him these are my ships. And, according to our contract, I have final say on the design. I'll not have so many little boats, as you call them, cluttering up my decks and putting fear into my passengers."

— J. Bruce Ismay, Director of the White Star Line.

ground all the time. I was thoroughly familiar with pretty well every type of ship afloat but it took me 14 days before I could, with confidence, find my way from one part of that ship to another." — Charles Lightoller, Second Officer

Titanic carried 20 lifeboats, 4 of which had collapsible canvas sides, which were more than was required by law at that time, but not enough for all passengers. Alexander Carlisle, a Managing Directors at HWS, suggested that the number of

lifeboats should be increased. Bruce Ismay thought this to be too expensive and unsightly (a decision he would deeply regret).

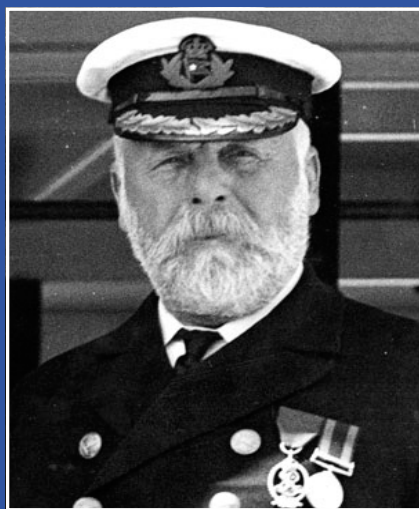
No one thought lifeboats would be needed, since Titanic was considered a pinnacle of naval architecture and technological

Let the Truth be known, no ship is unsinkable. The bigger the ship, the easier it is to sink her. I learned long ago that if you design how a ship'll sink, you can keep her afloat. I proposed all the watertight compartments and the double hull to slow these ships from sinking. In that way, you get everyone off. There's time for help to arrive, and the ship's less likely to break apart and kill someone while she's going down."

— Thomas Andrews, Managing Director of Harland and Wolff Shipyards

achievement. *Ship Builders* magazine proclaimed the ship "practically unsinkable."

Titanic was divided into 16 watertight compartments, which had doors, held up by magnetic latches, that would drop on the command of a switch on the bridge or automatically if water got too high in a compartment. The bulkheads reached the height of the E-Deck, but were not enclosed at the top. This was a design flaw that would prove deadly. Titanic could stay afloat if flooded in any two of the middle compartments or in the first four compartments; beyond that, the ship would sink because water would spill over each bulkhead into the next compartment.



"When anyone asks how I can best describe my experience in nearly 40 years at sea, I merely say, uneventful. Of course there have been winter gales, and storms and fog the like, but in all my experience, I have never been in any accident of any sort worth speaking about. I never saw a wreck and never have been wrecked, nor was I ever in any predicament that threatened to end in disaster of any sort. You see, I am not very good material for a story"

— Captain Smith, Commander of Titanic



An inquisitive Mrs. Albert Caldwell asked a deck hand, "Is this ship really unsinkable?" He replied, "Yes, Lady, God Himself couldn't sink this ship." The crew, builders, patrons, general public, and governments all believed that the modern technology of the Titanic made her unsinkable.

On April 2, 1912 Captain E. J. Smith and his officers participated in Titanic's sea trials to test the ship. Engines were run. The crew practiced port and starboard turns, stopping, turning a full circle, and running at different speeds. The trials lasted

"I cannot imagine any condition which would cause a ship to founder. I cannot conceive of any vital disaster happening to this vessel. Modern ship building has gone beyond that."

— Captain Smith, Commander of Titanic

less than a day because the crew was sure that Titanic would perform the same as her sister-ship, Olympic, which was completed before her. That evening she started the 570-mile trip to Southampton, just southwest of London, England along the River Test, which flows into the English Channel. It was an easy location from which London passengers could embark.

As Titanic got underway on April 10, she passed the American liner, S.S. New York moored at the dock. The smaller ship began straining at her lines, drawn by the invisible suction from the Titanic's three mammoth propellers, driven by a power plant capable of 55,000 horsepower. Abruptly, loud reports shattered the lighthearted mood. The three-inch steel cables securing New York to her moorings snapped, recoiling through the air and landing within a few feet of startled onlookers. New York's stern swung out towards the passing Titanic. Captain Edward J. Smith, who was planning to retire after completion of this voyage, promptly ordered the port propeller reversed.



Crewmembers rigged collision mats and an uneasy hush fell upon the spectators. The quick action of Captain Smith and the quick attention of the tugboats prevented Titanic's maiden voyage from ending at

Southampton. In retrospect, it probably would have been better for everyone if that particular collision had taken place than the far deadlier one with the iceberg days later that doomed Titanic.

A stranger commented to Mrs. Renee Harris, "Do you love your life?"

She responded, "Yes, I love it."

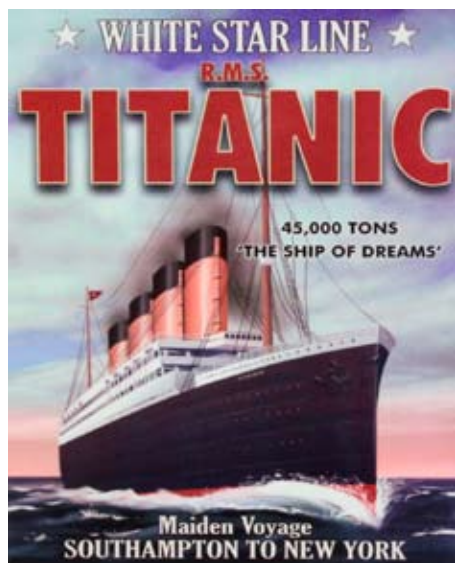
"That was a bad omen. Get off this ship at Cherbourg, if we get that far. That's what I'm going to do."

Mrs. Harris laughed, thinking the ship unsinkable, but she never saw the man on board again.

That evening, Titanic stopped in Cherbourg, France to pick up additional passengers, and the following day arrived at Queenstown, Ireland. The docks at both locations were not large enough and Titanic anchored in the harbor while specially built tender ships carried new passengers, luggage, mail, reporters, and immigration officers out to Titanic.

Crew member George Symons, hired specifically as a lookout, expressed concern to Second Officer Charles Lightoller, "Sir, we have no lookout glasses in the Crow's Nest." Lightoller responded, "All right, I'll look into it directly." Little did he know that the binoculars had been removed from the Crow's Nest and stored in a locker. The binoculars were never found, making it much harder for the lookouts to keep an eye out for icebergs.

Meanwhile, the crew was more worried about another problem. Coal in bunker No. 6 had spontaneously combusted and tons of coal burned "red hot" against the bulkheads, possibly weakening the steel. The firemen had worked non-stop for days to put out the fire, but to no avail. "The stokers were alarmed over it, but the officers told us to keep our mouths shut. They didn't want to alarm the passengers," told Fireman J. Dille.



Titanic Advertising Poster 1912

On April 11, 1912 at 1:40pm the Titanic

started her maiden trans-Atlantic voyage to New York City. The first warnings of icebergs and sea ice in the shipping lanes came the following day from several east-bound ships along with congratulations on her maiden voyage. They communicated through the Marconi wireless operators who sent and received messages in Morse code. Captain Smith decided to steer further south to try to avoid the ice.

The first day Titanic traveled 386 miles, the second 519, and the third 546 miles at an increased speed of 22.5 knots (almost 26 mph). Bruce Ismay was satisfied. He had given Capt. Smith a list of various speeds to travel at points along the way. Titanic was performing flawlessly. Ismay explained to Capt. Smith, "Today we did better than yesterday, and tomorrow we shall do better still. We shall beat the Olympic's time to New York and arrive Tuesday night!" It would be a major publicity coup with newspaper headlines, if the new and luxurious White Star Titanic arrived ahead of schedule. Ismay, as the owner representative, had no problem usurping some of Capt. Smith's authority. He felt the right to weigh in on ship operations, despite the maritime code that held the Captain as the ultimate authority on a ship.

On April 14, 1912 more warnings came. At 9:00am, eastbound liner Caronia reported, "bergs, growlers and field ice in Latitude 42° N, from Longitude 49° to 51° W." At 11:40am, the Dutch liner Noordam reported "much ice" in roughly the same place. At 1:42pm, the White Star Liner Baltic reported icebergs and field ice about 250 miles in front of the Titanic, while the German liner Amerika reported that it had passed 2 large icebergs. Reports continued with the Californian reporting 3 large icebergs at 7:30pm. That message was never posted or passed on to Captain Smith. At 9:30pm, the steamer Mesaba warned of heavy pack ice and large icebergs. If those on the bridge had plotted all the positions of ice reported, they would have understood there was a 78-mile wide expanse of ice across Titanic's course. Then they could have made the needed decision to change course and reduce speed to avoid the danger. They also might have posted additional lookouts on the bow to increase the chances of spotting icebergs early.

Shortly after 10:00pm the watch changed, with Second Officer Lightoller relieved by First Officer Murdoch in command of Titanic and lookouts Archie Jewell and George Symons relieved by Frederick Fleet and Reginald Lee in the Crow's Nest located on the forward mast. The newcomers were only told to watch for "small ice and growlers", not larger icebergs (growlers are the smallest icebergs at only 3 feet by 16 feet). With the sea "as smooth as a plate of pol-

ished plate glass," there would be no warning white wash formed by ocean swells at the iceberg base. Fleet sorely missed having the binoculars to help him look farther ahead.

At 11:00pm, Marconi Operators Phillips and Bride were making headway at sending a backlog of passenger messages due to an earlier power outage to the system. Without invitation to break in, as was the courtesy, the operator of the nearby ship Californian burst into their system announcing, "Say, old man, we are surrounded by ice and stopped." Because they were only about 12 miles away, the message boomed into Phillips' headphones with a deafening roar. Phillips was furious at the rude interruption. Instead of taking down the message to relay to the bridge as required, he signaled back, "Shut up! Shut up! I am busy, I am working Cape Race!" (Cape Race was a land-based station in Newfoundland, Canada, that would forward the messages.) The Californian operator, feeling hurt and



Titanic's Marconi Room showing Operator Bride during her maiden voyage, April 1912. Double-image photo was taken by Father Browne

"A number of us who enjoyed the crisp air were promenading about the deck. [First Officer Murdoch] was on the bridge when the first cry from the lookout came that there was an iceberg ahead. It may have been 30 feet high when I saw it. It was possibly 200 yards away and dead ahead. [First Officer Murdoch] shouted some orders... A number of us promenaders rushed to the bow of the ship. When we saw he could not fail to hit it, we rushed to the stern. Then came a crash, and the passengers [who saw it] were panic-stricken."

— George Brayton,
First Class Passenger

not wanting to be blasted again, went off to bed without communicating with Titanic any further about the ice danger.

On Sunday, April 14, 1912 at 11:39pm, the Lookouts spotted an iceberg. They sounded the warning bell three times and telephoned the bridge reporting, "Iceberg, right ahead!" "Stop! Full speed astern!" First Officer Murdoch ordered the Engine Room, and "Hard a'starboard!" was his command to Quartermaster Robert Hichens. Tension filled the bridge as the men waited and hoped the bow would swing clear. To Fleet in the Crow's Nest, it was clear that Titanic would not turn in time and he braced for the collision.

Thirty-seven seconds after the warning to the bridge, Titanic collided with the iceberg. The sound of ripping metal could be heard and felt for a length of 300 feet (a football field) along her starboard side (right side when facing the front of a ship). The entire impact lasted approximately 10 seconds. Eyewitnesses report the iceberg was 60 to 100 feet high. As the ship brushed past the berg, the foredeck was covered with chunks of ice. Now the Lookouts could tell why it had been so hard to spot the iceberg; it was a "blue" berg, meaning one that had turned over in the seawater, which makes it look dark blue.



This iceberg may have sunk Titanic based on location & survivor's descriptions (photo taken April 20, 1912 from German Steamer Bremen). Icebergs are chunks of ice that fall into the sea from polar glaciers formed over thousands of years. Due to the density of ice only 10% to 20% of the iceberg may be seen above the water.

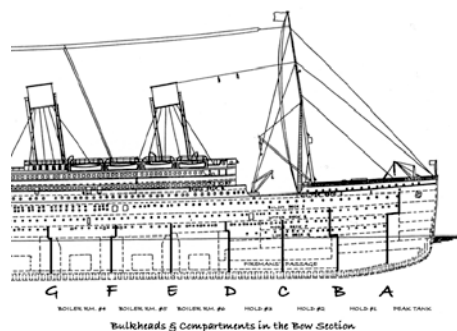
Within a minute of the collision, Captain Smith had raced up to the bridge. "What have we struck?" he asked Murdoch. "An iceberg, sir," he replied. "I hard a-starboarded and reversed the engines and I was going to hard a-port around it, but she was too close. I could not do any more." "Have you closed the watertight doors?" "They are already closed, sir." "All stop." Murdoch responded, "Aye, sir" and relayed the order to the engine room.

Capt. Smith told Fourth Officer Boxhall, "Go find the carpenter and get

him to sound the ship.” The carpenter, Jim Hutchinson, had already learned enough. He blurted out, “She’s making water fast,” Right behind him was postal clerk Iago Smith calling out, “The mail hold is filling rapidly!”

After the report Capt. Smith turned to Chief Officer Wilde, “It is more than serious.” He asked that Thomas Andrews, the builder of the Titanic, be brought to the bridge immediately. He then checked the commutator, the device that shows if a ship is leaning to either side or front to back. “Oh, my God,” was Smith’s response as he realized the Titanic was already listing (leaning) to starboard (right) and toward the bow (forward). Bruce Ismay arrived and asked, “Do you think the ship is seriously damaged?” Smith replied, “I’m afraid she is.”

Capt. Smith and Thomas Andrews went to inspect the damage in person. They traveled by crew corridors to attract less attention and not alarm the passengers. They kept straight faces so no one would feel their concern. Their assessment: the iceberg had split seams, bent plates, and popped rivets along a 300 foot length, and 6 watertight compartments were flooding. The ship could float with up to four compartments filled, but not six. A design flaw became apparent. As water filled the flooded forward compartments, the weight would pull the ship deeper. As the ship went deeper, the water would breach the next bulkhead and start filling it. Then one after the other the compartments would fill. The bulkhead design did not place them high enough above the waterline to keep water from entering. Titanic was doomed!



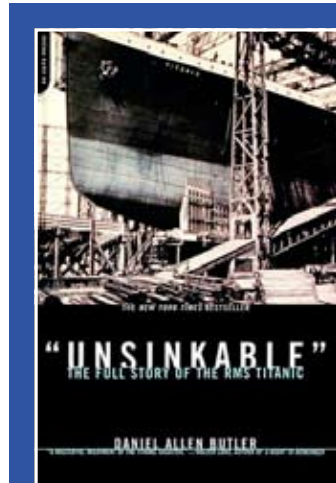
The rest of the crew and passengers were not yet aware of the impending disaster. They wondered what had occurred, but there was no sense of danger. Third-Class passengers were on the forward deck kicking around the chunks of ice from the berg, having ice ball fights, some taking chunks inside as trophies to show others. Many passengers paid more attention to the stopping of Titanic’s engines than they had to the collision with the iceberg. Curiosity drew passengers and crew onto the decks; some came out in their pajamas, while others took the time to dress warmly for the

below-freezing temperatures. They bantered various comments: “Oh, it’ll be a few hours then we’ll be on our way again.” “Looks like we lost a propeller blade, but it’ll give us more time for [playing] bridge.” “We’ve struck an iceberg—a big one—but there’s no danger. An officer told me so.” “Oh, come and let’s see the berg—we’ve never seen one!”

Awareness of the danger increased by degrees. Miss Shutes wondered, “...What makes the ship list so?” She soon heard an officer: “We can keep the water out for a while.” A steward told a worried Mrs. Becker, “Nothing is the matter; we will be on our way in a few minutes.” Reassured, she rested a while. But still concerned she asked another steward who told her, “Put your lifebelts on immediately and go up to the Boat Deck.” She asked, “Do I have time to dress?” “No, madam, you have time for nothing!”



Mrs. Helen Candee expressed her perception of the lifebelts: “On every man and every woman’s body was tied the sinister



“The quips and jokes only served to underscore the disorganization that was already beginning to make itself felt and would continue to frustrate the efforts of the Titanic’s officers and crew throughout the night. For some reason, Capt. Smith, usually so decisive and swift to action, was slow to react to what he knew to be an impending disaster — the commands he was giving were sound as far as they went, but often they didn’t go far enough. ...Chief Officer Wilde did little to help the situation. ...He was demonstrating very little initiative...never expanding on [orders] or clarifying them as he saw fit, and rarely issuing any orders of his own.”

— Daniel Allen Butler, *Author Unsinkable*

emblem of death at sea, and each walked with his life-clutched pack to await the coming horrors. It was a fancy-dress ball in Dante’s Hell.”

Below deck Second Steward George Dodd yells, “Get up lads, we’re sinking! Get every man up! Don’t let a man stay here!” Bosun Nichols called out, “Turn out, you fellows, you haven’t half an hour to live! That’s from Mr. Andrews. Keep it to yourselves and let no one know.” The concern was that if passengers knew they would panic and make the situation even worse.

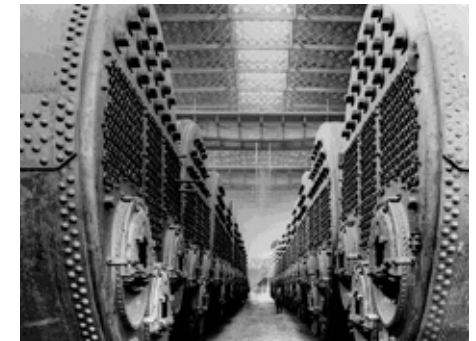
Most passengers maintained their composure. Clinch Smith made an amusing remark to a young girl with a Pomeranian puppy, “Well, I suppose we ought to put a life preserver on the little doggie too.”

Capt. Smith, and especially First Officer Wilde, spent most of the evening on the bridge, not providing enough direction to quell the chaos in order to save more lives, particularly related to the lifeboats. The Captain ordered women and children to the lifeboats, but he and Wilde took no decisive action to make sure the lifeboats left full to save as many lives as possible.

The five Postal Clerks worked valiantly to retrieve the mailbags and take them to higher decks. Water was rising rapidly and mailbags were floating. All five clerks eventually lost their lives trying to save the mail.

Meanwhile in Boiler Room No. 6 the men heard the alarm and started up the ladders to escape, but were called back with a shout of, “Shut the dampers! Draw the fires!” They valiantly returned; racing against the rising waters and clouds of steam to vent the steam and put out the fires so hot boilers would not explode when icy seas inundated them. The engineers, assistant engineers, stokers, firemen and trimmers worked continually through the ordeal to keep electricity available for

the lights and telegraph radios. They kept shutting down boiler after boiler as the waters rose to keep them from exploding and sinking the ship immediately. They worked until the end; few of them survived. They gave their lives to keep the ship afloat as long as possible and save as many others as they could.



Titanic’s Boilers

“I was on the whale deck in the bow calling the watch that was to relieve when the ice first came aboard. The collision opened the seams below the waterline but did not even scratch the paint above the line. I know that because I was one of those who helped to make an examination over the side with a lantern. I went down into the engine-room at 12:40am. We even made coffee, so there was not much thought of danger. An hour later I was still working at the light engines. I heard the chief engineer tell one of his subordinates that number six bulkhead had given way. At that time things began to look bad... I was told to go up and see how things were, and made my way up a dummy funnel to the bridge deck. By that time all the [life]boats had left the ship, yet everyone in the engine-room was at his post. I was near the captain and heard him say, ‘Well boys, it’s every man for himself now.’” — Alfred White, A greaser in the engine-room

On Monday, April 15, 1912 at 12:05am (Monday) Captain Smith orders Chief Officer Wilde to uncover the lifeboats and for all passengers to come to the Boat Deck. Smith entered the telegraphy cabin and told Operators Phillips and Bride. “We’ve struck an iceberg and I’m having an inspection done to see what it has done to us. You’d better get ready to send out a call for assistance, but don’t send it until I tell you.” A few moments later Smith returned and told them, “Send the call for assistance.” He handed Phillips a slip of paper with Titanic’s present position.



At 12:10am the first distress signals were sent, which were CQD, MGY, SOS, and their latitude and longitude position 41.46 ° N, 50.14 ° W. CQD is old Morse code for Come Quick, Disaster! MGY was the Titanic's call letters to identify her to other ships. SOS is the new Morse code distress signal, with Titanic being the first ship to use this new SOS code. (Morse code is used for transmitting messages in which letters of the alphabet and numbers are represented by various sequences of dots and dashes or short and long signals.) Several ships were reached and were changing course to reach them, but they were not very close. Among them were: Mount Temple, Virginian, Niagara, The Olympic, and The Frankfurt.

“...Lightoller called out for women and children. The response wasn't even half hearted—it seemed no one was willing to forfeit the warmth and bright lights of the Titanic for the chill of an open boat. Why should they? There was no apparent danger, the ship seemed to be perfectly sound, and besides, if the Titanic really was unsinkable, there wasn't any need to bother with lifeboats. Suddenly, as if to heighten the sense of security aboard the ship, there was music playing. Bandmaster Wallace Hartley had assembled the Titanic's orchestra in the First Class Lounge and quickly launched into a set of lively ragtime...The tempo was fast, the tone light and cheerful.”

— Daniel Allen Butler,
Author Unsinkable

The ship Carpathia missed the first distress signal. Phillips reached them stating, “Come at once. We have struck a berg and require immediate assistance. It's a CQD, old man...” Phillips received the first good news; Carpathia was only 58 miles away and was “coming hard.”

At 12:25am the order was given to put “women and children” into lifeboats. They were given first priority.

“As I dressed, I heard the order shouted, ‘All the passengers on deck with lifebelts on.’ We all walked up slowly with the lifebelts tied on over our clothing, but even

then we presumed that this was merely a wise precaution the captain was taking. The ship was absolutely still, and except for the gentle, almost unnoticeable, tilt downwards, there were no visible signs of the approaching disaster. But, in a few moments, we saw the covers being lifted from the [life]boats and the crews allotted to them standing by and uncoiling the ropes, which were to lower them. We then began to realize that it was a more serious matter than we had at first supposed. Presently we heard the order, ‘All men stand back away from the boats. All ladies retire to the next deck below.’ The men all stood away and waited in absolute silence, some leaning against the end railings of the deck, others pacing slowly up and down. The boats were level with the deck where all the women were collected, the women got in quietly, with the exception of some, who refused to leave their husbands. In some cases they were torn from their husbands and pushed into the boats, but in many instances they were allowed to remain, since there was no-one to insist that they should go.” — Lawrence Beesley, English Schoolmaster

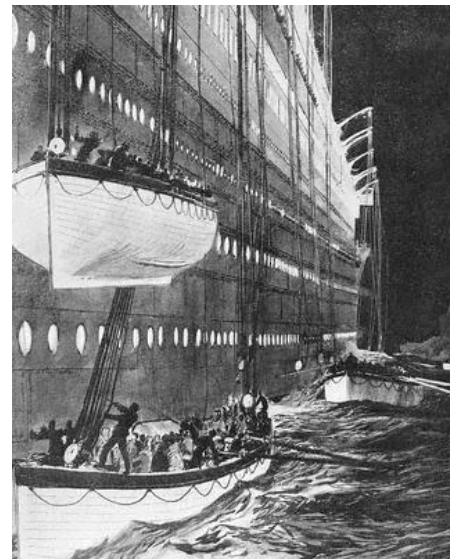


At 12:45am, Lifeboat No. 7 was first to be lowered to the sea by First Officer Murdock. Movie star Dorothy Gibson and two honeymoon couples were among those onboard. Murdock and other officers were concerned that the lifeboats would buckle and break in the middle if they were fully loaded. They were never informed that the lifeboats had been tested and could withstand the weight of passengers in every seat. He told Fifth Officer Lowe, “That is enough before lowering. We can get a lot more in after she's in the water.” Between the lack of urgency on the part of passengers and the Officer's concern about weight, it was filled with only 25 people, even though it could hold 65! Lifeboat No. 7 and other lifeboats were unable to load more people when they reached the water. Most of the lifeboats started rowing away from the Titanic to avoid being sucked down with the sinking ship.

Bruce Ismay was trying to help evacuate the women and children. He felt a keen responsibility. He had made the decision to have only 20 lifeboats. He now knew most passengers would die due to his choice to

save money over the safety of his passengers.

Lowe was slowly lowering lifeboat 5, but an anxious Ismay kept yelling, “Lower away, lower away.” Lowe exploded at Ismay. “If you get the hell out of the way, I'll be able to do something! You want me to lower away quickly? You'll have me drown the lot of them!”



Thomas Andrews, when asked about the situation by Stewardess Mary Sloane, responded, “It is very serious, but keep the bad news quiet for fear of panic.” Panic would only make matters even worse.

Meanwhile men were saying their final goodbyes to their wives, children or women friends, as they were loaded into the lifeboats. “Be brave. No matter what happens be brave!” were Dr. W.T. Minahans parting words to his wife. Women cried out for their husbands and loved ones to come, who responded that they “must be gentlemen” and stay behind. A crewman gave his lifebelt to Minnie Coutts commenting, “There, now, if the ship goes down, you'll remember me.” She started for the Boat Deck with her two young boys, but was blocked by a locked door. As her panic rose, a crewman showed up and led her to the lifeboat. She never knew either of their names.

An older women, Mrs. Ida Straus, stepped away from the lifeboat and to her husband Isidor declaring, “We have been living together for many years: where you

As I was put in the boat, he (husband), cried to me, ‘It's all right, little girl. You go. I will stay. As our boat shoved off he threw me a kiss, and that was the last I saw of him.’

— Mrs. Daniel Marvin
(on her honeymoon)

go, I go.” Standing nearby Hugh Woolner suggested to Mr. Straus, “I'm sure no one would object to an old gentleman like yourself getting in.” To which he firmly replied, “I will not go before the other men.” The old couple sat together to the end. (Isidor Straus was the founder of Macy's department stores.)



Isidor & Ida Straus

Lifeboat No. 1 was the least filled, with only 12 people on board including affluent Sir Cosmo and Lady Duff Gordon. This led some to believe they used their wealth to secure their own lifeboat and crew. Forever after they were criticized.



Benjamin Guggenheim

Even though the order was “women and children first,” the fate of the men depended on which side of the Titanic they were on. First Officer Murdock was much more



Col. John Jacob Astor

lenient on his side of the ship than Second Officer Lightoller was on his. Murdock let men on the lifeboat if there were no more women or children ready to get in. Murdock also allowed some newlyweds celebrating their honeymoon on lifeboats together. This saved many men that would have otherwise perished.

Each man responded to his mortality differently. Benjamin Guggenheim, founder of American Smelting & Refining Company, and worth about \$95 million, set aside his lifebelt and changed into fine evening wear. He simply said, “We’ve dressed in our best and are prepared to go down like gentlemen.”

Colonel John Jacob Astor, worth probably \$150 million, heir of the famous house of Astor, was returning with his bride from Egypt. As he helped her he said, “Get into the lifeboat, to please me.” He asked Lightoller if he could join her. “No sir, no men are allowed in these boats until women are loaded first.” Astor told his wife, “The sea is calm. You’ll be all right. You’re in good hands. I’ll meet you in the morning.” He walked away to his fate.

Some men built their own rafts of deckchairs and other buoyant items they could find in an effort to save themselves and others.

Bruce Ismay, on the other hand, jumped into a lifeboat while it was being lowered. He was later castigated in newspapers as a coward for abandoning the ship.

Capt. Smith handed Fourth Officer Boxhall a revolver. “Captain, is it really serious?” was his stunned response. “Mr. Andrews tells me that he give her an hour and a half.” Other officers were also provided pistols in case they were needed to control panic.

An older boy managed to get past Fifth Officer Lowe into Lifeboat 14. Lowe thrust his gun in the boy’s face and bellowed, “I’ll give you just ten seconds to get back onto that ship before I blow your brains out!” But the boy sobbed and pleaded all the

“Some of the passengers fought with such desperation to get into the lifeboats that the officers shot them, and their bodies fell into the ocean. ...I saw an officer of the Titanic shoot down two steerage passengers who were endeavoring to rush the lifeboats. I have learned since that twelve of the steerage passengers were shot altogether, one officer shooting down six.

— Dr. Washington Dodge of San Francisco

more. Lowe changed tactics, “For God sake, be a man. We’ve got women and children to save.” The boy crawled out of the lifeboat.

In another instance Lightoller found several men, including crewmen, in a lifeboat. Drawing his revolver he shouted furiously, “Get out of there, you damn cowards! I’d like to see every one of you overboard!” The men scrambled out of the boat.

Women also gave up their seat for other women. One lifeboat had only one seat left for two women. Miss Evans said to Mrs. Brown, “You go first. You have children waiting for you.”

Word had come down to Third-Class to send the women and children to board the lifeboats. Immigration law required gates between the third-class section and those of 1st and 2nd. This was to make sure they went through immigration stations when they got to shore and could not bypass them. Some gates had been unlocked, while others had not. A seaman guarding a gate would not allow three pleading young women through. Jim Farrell arrived and shouted, “Good God, man! Open the gate and let the girls through.” The seaman immediately complied and then ran off.

Steward Hart realized that Third-Class passengers stood little chance of finding their way to the lifeboats. Hart organized small groups and led them to the lifeboats. Many husbands and wives did not want to leave each other, but he had his orders for women and children only. Hart had brought up another group when he was ordered by Murdock to command Lifeboat 15. He protested that he needed to go back to lead others up, but to no avail.

American and British inquiries never reached a final conclusion as to whether Third Class passengers were discriminated against or whether the crew and the policies were inadequately prepared to deal with the magnitude of the disaster. Regardless, they were lost at a much higher rate than that

Passenger Category	Saved	% Saved	Lost	% Lost
Children, First Class	5	83%	1	17%
Children, Second Class	23	100%	0	0%
Children, Third Class	26	40%	53	60%
Women, First Class	139	97%	4	3%
Women, Second Class	79	84%	15	16%
Women, Third Class	76	46%	89	54%
Women, Crew	18	86%	3	14%
Men, First Class	57	33%	118	67%
Men, Second Class	14	8%	154	92%
Men, Third Class	75	16%	381	84%
Men, Crew	193	22%	684	78%
Total	705	32%	1502	68%

of 1st or 2nd class passengers. The greatest loss, more than any of the three classes, was the crew, with only 214 out of 892 surviving. Many worked heroically at their posts to the end to save lives.



“Many brave things were done that night but none more brave than by those few men playing minute after minute as the ship settled quietly lower and lower in the sea...the music they played serving alike as their own immortal requiem and their right to be recorded on the rolls of undying fame.”

— Lawrence Beesley, Titanic Survivor

Throughout the mayhem, the band played on. Initially it lured passengers into a feeling of comfort and complacency. Now it kept them from panic. Years before Bandmaster Wallace Hartley had told a friend what he’d do in this situation, “I would gather the band together and begin

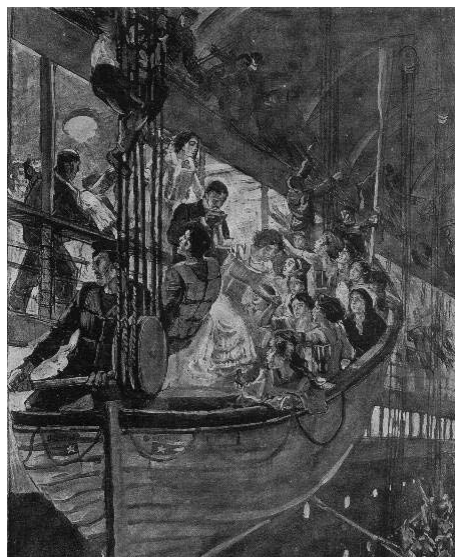
playing.” The band kept playing until the very end. The music ended as they were seen washed off the deck as the Titanic began to sink. The last song thought to be heard was the hymn “Nearer, My God, to Thee”, while others thought it was a song named “Autumn”.

At 12:55am, Fourth Officer Boxhall and Quartermaster Rowe started firing the first emergency rockets. A total of eight rockets were fired between then and 1:40am. It is unclear why more rockets were not fired since more were available. They also were not fired based on emergency protocol. So other ships, in particular the Californian, which was only about 12 miles away, did not understand the dire situation. They kept trying to reach the Californian by telegraph, by Morse lamp, and with the rockets, but to no avail. They even wished they had a 6-inch naval cannon to “wake that fellow up.”



Californian

Californian’s skipper, Captain Lord had gone to bed. Even though he was told about the rockets, he never ordered his crew to check by telegraph or move closer to the Titanic to learn more. Later his Second Officer Herbert Stone noticed, “She looks queer out of the water—her lights look queer.” He thought Titanic was listing. Still, he never roused alarm so his crew could determine Titanic’s status. The Californian was the only ship nearby that could have saved those on Titanic. But she failed to





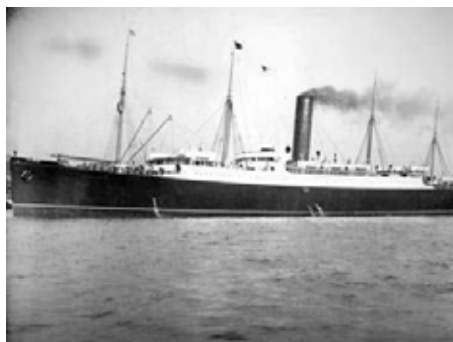
“When our boat had rowed about half a mile from the vessel the spectacle was quite fairylike, The Titanic, which was fully illuminated was stationary, like some fantastic piece of stage scenery. The night was clear and the sea smooth, but it was intensely cold. Presently the gigantic ship began to sink by the bows, and then those who had remained on board realized the horror of their situation. Suddenly the lights went out and an immense clamor filled the air in one supreme cry for help... As moments [went by] the cries of terror were lulled and we thought it was all over, but the next instant they were renewed in still keener accents. As for us we did nothing but row, row, row, to escape from the death cries.

— Paul Chevre, *French Sculpture*

respond, allowing the tragic loss of life.

First Officer Dean of the Carpathia rushed from the bridge to inform his Captain Arthur Rostron of the disaster. The captain asked him, “Are you sure it’s the Titanic and she requires immediate assistance?” “Yes, sir,” Dean replied. “You are absolutely certain?” “Quite certain, sir.” “All right, tell him we are coming along as fast as we can.”

As much as Capt. Smith was struggling with making command decisions and giving orders on Titanic, Capt. Rostron was absolutely clear, resolute, and decisive. At the Carpathia’s top speed of 14 knots, it would take four hours to reach the Titanic, which in this emergency was not good enough for Rostron. He swung into action. He charted the new course to reach Titanic. He wanted more speed. He aroused all off-duty crewmen and coal stokers. Looking each man eye-to-eye, he paused, and intoned, “Every man to his post and let him do his duty like a true Englishman. If the situation calls for it, let us add another glorious page to British history.” He cut the heat and hot water to the passengers and had the stokers heat the boilers to capacity so as to put every ounce of steam the ship could muster to the task of increased speed. The Carpathia surged ahead gaining speed beyond her usual range to 15, then 16, to 17 knots (nearly 20 mph).



8 **Carpathia**

At 1:45am the Carpathia received this last message, “Engine room full up to boilers.” At that time Captain Smith released Wireless Operators Phillips and Bride and the crew saying, “You can do no more. Now it’s every man for himself.” They declined the offer and kept working until the end.

“Just then the ship took a slight but definite plunge — probably a bulkhead went — and the sea came rolling along up in a wave, over the steel fronted bridge, along the deck below us, washing the people back in a dreadful huddled mass. Those that didn’t disappear under the water right away, instinctively started to clamber up that part of the deck still out of water, and work their way towards the stern, which was rising steadily out of the water as the bow went down. It was a sight that doesn’t bear dwelling on... watching the frantic struggles to climb up the sloping deck, utterly unable to even hold out a helping hand.” — Charles Lightoller, Second Officer

At 2:15 the bridge succumbed to the sea



Painting © Ken Marschall

“Not until the last five minutes did the awful realization come that the end was at hand. The lights became dim and went out, but we could see. Slowly, ever so slowly, the surface of the water seemed to come towards us. So gradual was it that even after I had adjusted the life jacket about my body it seemed a dream. Deck after deck was submerged... I was far up on one of the top decks when I jumped. About me were others in the water. My bathrobe floated away, and it was icily cold. I struck out at once. I turned my head, and my first glance took in the people swarming on the Titanic’s deck. Hundreds were standing there helpless to ward off approaching death. I saw Captain Smith on the bridge. My eyes seemingly clung to him. The deck from which I had leapt was immersed. The water had risen slowly, and was now to the floor of the bridge. Then it was to Captain Smith’s waist. I saw him no more. He died a hero. The bows of the ship were far beneath the surface, and to me only the four monster funnels and the two masts were now visible. It was all over in an instant. The Titanic’s stern rose completely out of the water and went up 30, 40, 60 feet into the air. Then, with her body slanting at an angle of 45 degrees, slowly the Titanic slipped out of sight.”

— Robert W. Daniel, *Philadelphia Banker*

washing away Captain Smith. Moments later the boat shifted as the forward expansion joint gave way. The forward funnel fell to the sea instantly killing many passengers who were trying to swim clear of the ship. Panic ensued. Passengers dashed higher up the inclined deck toward the stern of the ship. The elderly, the weak, or just plain unlucky, slid down into the sea. Titanic was crashing and groaning as furnishings fell and walls gave way inside. Booms came from within the ship as watertight bulkheads gave way under the immense pressure of the sea. Titanic rose higher until her massive propellers extended above the sea.

As the ship sank, Father Thomas Boyle, a Roman Catholic priest, heard confessions and led prayer at the stern of the ship: “Hail Mary, full of grace. Our Lord is with

thee. Blessed art thou among women, and blessed is the fruit of thy womb, Jesus. Holy Mary, Mother of God, pray for us sinners, now and at the hour of our death. Amen.” He perished with his flock of passengers of all classes and all faiths.

The Virginian, at around 2:17am, heard a faint distress message. Three minutes later, at 2:20am on Monday, April 15, 1912,



Jack Thayer, Age 17

“...I jumped out, feet first. I was clear of the ship; went down, and as I came up I was pushed away from the ship by some force. I came up facing the ship, and one of the funnels seemed to be lifted off and fell towards me about 15 yards away, with a mass of sparks and steam coming out of it. I saw the ship in a sort of a red glare, and it seemed to me that she broke in two just in front of the third funnel. ...The partly filled lifeboat standing by about 100 yards away never came back. Why on Earth they never came back is a mystery. How could any human being fail to heed those cries.”

— Jack B. Thayer, *Titanic Survivor*, Age 17



Titanic, nearly perpendicular and with many of her lights still aglow, dove beneath the icy surface of the sea.

“What impressed me at the time that my eyes beheld the horrible scene was a thin light-gray smoky vapor that hung like a pall a few feet above the broad expanse of sea that was covered with a mass of tangled wreckage. That it was a tangible vapor, and not a product of my imagination, I feel well assured. It may have been caused by smoke or steam rising to the surface around the

area where the ship had sunk. At any rate it produced a supernatural effect, and the pictures I had seen by Dante and the description I had read in my Virgil of the infernal regions of Charon, and the River Leth, were then uppermost in my thoughts. Add to this, within the area described, which was as far as my eyes could reach, there arose to the sky the most horrible sounds ever heard by mortal man except by those of us who survived this terrible tragedy. The agonizing cries of death from over a thou-



“After sinking with the ship, it appeared to me as if I was propelled by some great force through the water. This might have been occasioned by explosions under the water, and I remembered fearful stories of people being boiled to death. Again and again I prayed for deliverance, although I felt sure that the end had come. I had the greatest difficulty in holding my breath until I came to the surface. I knew that once I inhaled, the water would suffocate me... I got to air again after a time, which seemed to me to be unending. There was nothing in sight save the ocean, dotted with ice and strewn with large masses of wreckage. Dying men and women all about me were groaning and crying piteously. By moving from one piece of wreckage to another, at last I reached a cork raft. Soon the raft became so full that it seemed as if she would sink if more came on board her. The crew for self-preservation had therefore to refuse to permit any others to climb aboard. This was the most pathetic and horrible scene of all. The piteous cries of those around us [‘Save one life! Save one life!’] still ring in my ears, and I will remember them to my dying day. ‘Hold on to what you have, old boy!’ we shouted to each man who tried to get on board. One more of you would sink us all!’ Many of those whom we refused answered as they went to their death, ‘Good luck – God bless you!’”

— Colonel Archibald Gracie, Jumped from the top deck and was sucked down by Titanic



“The sounds of people drowning are something that I cannot describe to you, and neither can anyone else. Its the most dreadful sound and there is a terrible silence that follows it.”

— Eva Hart, Titanic Survivor, Age 7, seen with her parents. Mr. Hart died when Titanic sank. Eva lived to age 91.



“I saw the way she [Countess of Rothes] was carrying herself and the quiet, determined manner in which she spoke, and I knew she was more of a man than most aboard, so I put her in command at the tiller. There was another woman in the boat who helped, and was every minute rowing. It was she who suggested we should sing, and we sang as we rowed, starting with ‘Pull for the Shore.’ We were still singing when we saw the lights of the Carpathia, and then we stopped singing and prayed.”

— Seaman Thomas Jones,

Praised the courage of the Countess of Rothes in lifeboat 8

Seaman Jones, the Countess, and two other women wanted to go back for survivors, but all others were unwilling. Jones scolded them, “Ladies, if any of us are saved, remember I wanted to go back. I would rather drown with them than leave them.”



Mrs. Margaret “Molly” Brown, later know as the Unsinkable Molly Brown, took command of lifeboat 6, fighting with Quartermaster Hitchen for control. She and others wanted to rescue survivors. Hitchen coldly suggested, “There’s no use going back, ‘cause there’s only a lot of stiffs there.” This was too much for Molly. She took over the tiller and threatened to throw Hitchen overboard if he got in her way. It is unclear if lifeboat 6 picked up any survivors since the cries for help quickly ebbed after Titanic sank. Molly maintained command of the tiller and the lifeboat until they were rescued.

sand throats, the wails and groans of the suffering, the shrieks of the terror-stricken and the awful gasping for breath of those in the last throes of drowning, none of us will ever forget to our dying day.” — Colonel Archibald Gracie, Titanic Survivor

Third Officer Pitman felt he no longer could ignore the pleas for help: “Now men, we will pull toward the wreck.” Women in the lifeboat cried out, fearing survivors swamping the boat. “Why should we lose all our lives in a useless attempt to save others from the ship,” one woman pleaded. Pitman gave in, but always felt guilty for not going back. Before the women did not want to leave their husbands, family, or friends and had pleaded for them to be let on the lifeboats. Now they were unwilling to go back to save them.

Only one lifeboat went back. A determined Fifth Officer Lowe was not going to stand by without taking action. Once his lifeboat 14 was in the water, he pulled together four other lifeboats and commanded passengers to “jump, damn you, jump” into other boats so he could empty his lifeboat and return for survivors. With the water 28 degrees, there was little time to spare. Hypothermia would set in within 20 minutes for those in the water and perhaps an hour for those that found something to float on. Tragically, it took 45-minutes for Lowe to move the passengers. As they searched they heard calls, but the voices seem to fade into death before they could reach them. They found W.H. Hoyt, then Steward John Stewart, and one more. Hoyt passed within an hour. Lowe remarked,



seeing an Asian man floating on a door, “What’s the use? He’s dead, likely, and if he isn’t there’s others better worth saving than a Jap!” He had second thoughts and lifted the man onboard. The man quickly revived and soon took to the oars to help in their search efforts. “By Jove, I’m ashamed of what I said about the little blighter! I’d save the likes of him six times over if I had the chance!” He didn’t get the chance. Lowe continued looking for another hour, but to no avail. (Only 12 people total were pulled from the water alive after Titanic sank.)



“Icebergs loomed up and fell astern and we never slackened. It was an anxious

time with the Titanic’s fateful experience very close in our minds. There were 700 souls on Carpathia and those lives as well as the survivors of the Titanic herself depended on the sudden turn of the wheel. When day broke, I saw the ice I had steamed through during the night. I shuddered, and could only think that some other hand than mine was on that helm during the night.”

— Captain Arthur H. Rostron,
Commander of Carpathia

His, and the other 19 lifeboats, drifted forlorn waiting for rescue.

Carpathia was “coming hard” to rescue the Titanic. Captain Rostron’s heart jumped seeing a green flare in the distance, “There’s his light! He must still be afloat!” Occasionally another flare was seen, but not the ship. To give hope to the Titanic that he was coming, Rostron fired flares and Roman candles every 15-minutes.

His lookouts called out, “iceberg,” then again, more bergs came into view. Perfectly timing his orders, he moved past the bergs and the fields of ice never slowing his charge to Titanic. There was still a glimmer of hope that her passengers might be saved. Below deck his crew shoveled coal at a frantic pace and the ship literally shook as if possessed by some god of the sea.

Fourth Officer Boxhall was firing green flares. They became a beacon for other lifeboats to row towards. This was what Rostron had seen, not flares from the Titanic.

Perhaps in shock, some in the lifeboats bickered. Some took control of their boat like little tyrants with newfound power. However, most comforted and took care of each other. As they settled into the aloneness of floating on the sea, the initial shock wore off giving way to hysteria for some as they cried out for their lost loved ones, and an intense silent grief for others. Mrs. Vera Dick lamented, “Oh my poor father! He put me on the boat, and wouldn’t save himself! Why didn’t I die? Why can’t I die now?”

At 3:30am, a little over an hour after Titanic sank, the lifeboats heard a boom and spotted a rocket fired by the Carpathia. People bolted upright filled with hope. Soon they could see a light on the mast-head of an approaching ship, coming hard, continuing to fire rockets.

Although Capt. Rostron had kept faith,



as he neared Titanic’s coordinates, having not heard from her since 1:50am, he now knew the ship was gone. He dejectedly ordered, “All stop.” Moments later his heart leapt when another green flare lit over his bow and he saw a lifeboat only a quarter-mile ahead. He ordered, “Slow ahead.” Lifeboat No.2 came alongside the Carpathia. A rope ladder was dropped and a lifeline was secured around each person before they climbed up. Young children were hauled up in mailbags. Miss Elizabeth Allen was the first on deck at 4:10am.

Captain Rostron needed a report from Fourth Officer Boxhall of what had occurred. Rostron asked him, “The Titanic has gone down?” Boxhall, nearly breaking down, replied, “Yes, she went down about 2:30.”

“Were many people left on board when she sank?” “Hundreds and hundreds! Perhaps a thousand! Perhaps more! My God, sir, they’ve gone down with her. They couldn’t live in the cold water. We had room for a dozen more people in my boat, but it was dark after the ship took the plunge. We didn’t pick up any swimmers. I fired flares. ...I think that the people were drawn down deep by the suction. The other boats are somewhere nearby.”

As dawn broke the rest of the lifeboats came into view spread out over five miles. Cheers and cries of relief rose from many lifeboats, while others were solemn, speechless with grief and shock. But they were saved. They rowed toward the Carpathia.

There was still work to be done. Fifth Officer Lowe, who had searched during the night for survivors, swung back into action. Collapsible lifeboat A was low in the water. Half the survivors on her had died during the night. Lowe quickly got the living onboard his lifeboat. He then turned to Collapsible B and towed her as he sailed his lifeboat toward the Carpathia.

There were a few happy reunions as loved ones were reunited, but also tragic realizations that family and friends were gone. “There was scarcely anyone who had not been separated from husband, child or friend... We could only rush frantically from group to group, searching the haggard faces, crying out names, and endless questions. No survivor knows better than I the bitter cruelty of disappointment and despair. I had a husband to search for, a husband whom in the greatness of my faith,

I had believed would be found in one of the boats. He was not there.” — Charlotte Annie Collyer

Bruce Ismay came on board announcing, “I’m Ismay...I’m Ismay,” as if any would have cared to know. He sequestered himself in a room, perhaps to contemplate his failure.

At 8:30am the last lifeboat No. 12, overloaded with 75 people picked up along the



Lifeboat along Carpathia

“Oh at daybreak, when we saw the lights of that ship, about 4 miles away, we rowed like mad, & passed icebergs like mountains, at last about 6:30[am] the dear Carpathia picked us up, our little boat was like a speck against that giant. Then came my weakest moment, they lowered a rope swing, which was awkward to sit on... Then they hauled me up, by the side of the boat. Can you imagine, swinging in the air over the sea, I just shut my eyes & clung tight saying “Am I safe.” At last I felt a strong arm pulling me onto the boat... we lived in for the next four days & nights on the darling Carpathia. Oh but they were so kind to us, everybody lent us everything, & their beds, but of course, all had to sleep on tables, floors, or anywhere.”

— Laura Mabel Francatelli,
Titanic survivor

way, pulled aside. By 9:00am Carpathia was loaded with 705 survivors. Tragically 1,502 lives were lost, more than two-thirds of the passengers.

Shortly after all survivors were picked up the ship Mount Temple arrived. She was asked to search the area one more time. Then the Californian, the only ship close enough at 12 miles away to have saved those lost, arrived. She soon headed westward, seemingly more concerned about being on time to Boston, than the heart-breaking loss of life she could have helped



avoid.

Guests on Carpathia gave generously of their clothes, toiletries, and other necessities to the survivors. But some women were inconsolable. Upon being offered a cup of coffee, a couple of women snapped, “Go away! We’ve just seen our husbands drown.” Captain Rostron, deeply devout, held a memorial service hoping to help survivors work through their grief. After inventorying supplies, Captain Rostron decided it was best to turn around and head back to New York City.

Telegraph messages about the shipwreck were reaching newspapers in America, England, and around the world. At first there was little information to go on. Messages came in slowly, at first stating there was a major accident, but with no clear indication that Titanic had sunk or that lives were lost. Some of the first headlines read, “THE NEW TITANIC STRIKES ICEBERG AND CALLS FOR AID, VESSELS RUSH TO HER SIDE” by the New York Herald and “ALL SAVED FROM TITANIC AFTER COLLISION” by the Evening Sun. Initially, because Titanic was considered unsinkable, most newspapers thought the accident couldn’t be serious. Phillip Franklin, White Star Line Vice-President, reinforced that viewpoint stating, “There is no danger that Titanic will sink. The boat is unsinkable and nothing but inconvenience will be suffered by the passengers.”

The Olympic finally came into wireless range and at 6:15pm that night relayed the message that the Titanic had sunk with great loss of life. Phillip Frank then informed the newspapers, “Gentlemen, I regret to say that the Titanic sank at 2:20 this morning.” Shortly every newspaper in

America reported the story. Later that evening Frank could not contain himself and tearfully relayed more information: “We very much fear there has been a great loss of life” and then later announced a “horrific loss of life.” The Titanic disaster dominated the world’s newspapers for many days. Shock ensued along with questions: How could such a modern ship hit an iceberg? How could an “unsinkable” ship go down with such catastrophic loss of life? Who was at fault and who would be held responsible?

The Carpathia arrived in New York on Thursday, April 18, 1912 with the 705 survivors. Over 30,000 people had gathered in a cold rain punctuated by thunderstorms. As the ship entered the harbor, a fleet of boats greeted her blasting their steam whistles. Photoflashes lit the night. Reporters were so eager to interview the survivors that some chartered boats to sail alongside her, shouting questions through megaphones. Some tried to force their way or sneak on board. They were held back by force.

The ship first stopped at the White Star dock to drop off the lifeboats that had held the survivors, returning them to their owners. Then she docked before the masses. Carpathia’s original passengers left the ship first to save them from the tumult of reporters clamoring for stories from the

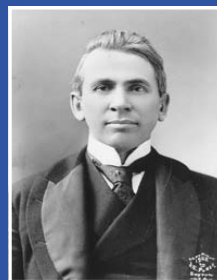


survivors.

Californian Officer Gibson sold his story to the press, detailing how officers aboard the Californian saw several rockets and told Captain Stanley Lord, who took no prompt action. The inquiry found evidence that the ships logs had been tampered with and pages removed. The press blamed Captain Lord for the appalling loss of 1,502 lives.

Also waiting was U.S. Senator William Alden Smith. From April 19 to May 25, 1912, Senator Smith would conduct an American Inquiry by the U.S. Senate, delving into the Titanic disaster. The goal was to learn what went wrong and what could be done to prevent future disasters. Eighty-two witnesses testified including 21 passengers. The British Inquiry took place from May 2, 1912 to July 3, 1912.

Bruce Ismay was brutally portrayed in newspapers and aggressively cross-examined in the Inquiries. Historian Brooke



U.S. Senate Inquiry Results

U.S. Senator William Alden Smith

...No sufficient tests were made of boilers or bulkheads or gearing or equipment, and no life-saving or signal devices were reviewed; officers and crew were strangers to one another and passengers to both; neither was familiar with the vessel or its implements or tools; no drill or station practice or helpful discipline disturbed the tranquility of that voyage, and when the crisis came a state of absolute unpreparedness stupefied both passengers and crew, and in their despair the ship went down...a sacrifice of noble women and brave men...

Titanic though she was, [Captain Smith’s] indifference to danger was one of the direct and contributing causes of this unnecessary tragedy, while his own willingness to die was the expiating evidence of his fitness to live. Those of us who knew him well — not in anger, but in sorrow — file one specific charge against him: Overconfidence and neglect to heed the oft-repeated warnings...

...When other and less pretentious vessels doubled their lookout or stopped their engines, ...overconfidence seems to have dulled the faculties usually so alert. With the atmosphere literally charged with warning signals and wireless messages registering their last appeal, the stokers in the engine room fed their fires with fresh fuel, registering in that dangerous place her fastest speed.

Adams sent a letter to the Inquiry that expressed his condemnation: “Ismay is responsible for the lack of lifeboats, he is responsible for the captain who was so reckless, for the lack of discipline of the crew, and for the sailing directions given to the captain which probably caused his recklessness. In the face of all this he saves himself, leaving fifteen hundred men and women to perish. I know of nothing at once so cowardly and so brutal in recent history...”

White Star Line contracted to have the S.S. Mackay Bennett sent from New York on April 22 to recover the last of the bodies from the ocean around the area where

Titanic sank. Another ship, the Minia, contributed to the effort. Even in death, class was observed. First-Class passengers were embalmed and placed in coffins. Second- and Third-Class victims were sewn in canvas and placed on ice. Crewmen were only placed on ice. A total of 328 corpses were recovered by May 15, of which 119 bodies that could not be properly salvaged were given final services and burial at sea. The rest were taken to Halifax, Canada. Each of the 209 bodies was numbered. The first of 59 recovered by kin was John Jacob Astor. The 150 not recovered were buried in three cemeteries in Halifax.



New York Times editor, Carr Van Anda, felt there must be more to the story since Titanic was not heard from again. The Times became the first newspaper to report the sinking, a bold news scoop, especially since there were no wireless reports yet confirming the sinking. This headline is from April 16, 1912, the day after Titanic sank.

Search & Discovery of Titanic

“What do you think I am? Do you believe that I’m the sort that would have left that ship as long as there were any women and children on board? That’s the thing that hurts, and it hurts all the more because it is so false and baseless. I have searched my mind with deepest care, I have thought long over each single incident that I could recall of that wreck. I’m sure that nothing wrong was done; that I did nothing that I should not have done. My conscience is clear and I have not been a lenient judge of my own acts.”

— J. Bruce Ismay, Director of the White Star Line

Two and a half miles below the ocean floor, even a century after her tragic sinking, RMS Titanic continues to fascinate. Historians and treasure-hunters alike have plumbed the ocean depths to reach the artifacts far below and determine, at last, how

the ship sank. The story of Titanic and the story of ocean technology are inseparable. Titanic serves both as inspiration — daring scientists to create new technology — and as a proving ground for their latest equipment and instruments.



Californian Captain Stanley Lord

...The captain of the Californian...deluded himself with the idea that there was a ship between the Titanic and the Californian... That ice floe held but two ships — the Titanic and the Californian. The conduct of the captain of the Californian calls for drastic action by the Government of England and by the owners of that vessel, who were the same

owners as those of the ill-fated ship.

— Excerpts from Senator William Alden Smith speech, U.S. Senate Inquiry

...It seems to be universally conceded that this ship was not equipped with a sufficient number of lifeboats to provide for the safety of its passengers... The failure of foreign steamships to carry searchlights is utterly inexcusable; [with] ...a proper searchlight...the accident could have been avoided. The failure to supply the proper officers with binoculars was unquestionably an act of negligence... There was not the proper attention paid to the wireless messages that the ship received... The speed of the vessel was not lowered, as it should have been when notice was received that she was in a dangerous zone...

— Excerpts from Senator Ididor Raynor speech, U.S. Senate Inquiry

“The committee is forced to the inevitable conclusion that the Californian, controlled by the same company, was nearer the Titanic than the nineteen miles reported by her captain, and that her officers and crew saw the distress signals of the Titanic and failed to respond to them in accordance with the dictates of humanity, international usage and the requirements of law. The only reply to the distress signals was a counter signal from a large white light, which was flashed for nearly two hours from the mast of the Californian. In our opinion such conduct, whether arising from indifference or gross carelessness, is most reprehensible and places on the commander of the Californian a grave responsibility.

— U.S. Inquiry Committee



“I could really relate the loss of the space shuttle Challenger, to the loss of the Titanic — where we...put a little too much faith in our technology and it bit us.”

— Dr. Robert Ballard

Almost immediately after the sinking on April 15th 1912, people started plotting about locating and possibly raising Titanic. Vincent Astor, John Jacob Astor’s son hoped to recover his father’s body and began planning an expedition for that purpose. When his father’s body was recovered, he abandoned the idea. But the mystery of where the ship was located continued to preoccupy under-water explorers and the general public. Were Titanic’s treasures still accessible, and what stories were waiting to be unlocked on the ocean floor?

In addition to solving the mystery of how exactly she sank, researchers are devoted to learning more about if, and how, the wreck could have been avoided or handled in a way that saved more lives.

Recent expeditions have revealed new insights that help answer all of these questions. But the first major breakthrough came in 1985 when the Titanic wreck site, which occupies more than a square mile, was discovered by an American-French joint expedition led by Jean-Louis Michel and Dr. Robert Ballard.

In the 1970s, Ballard was a young scientist at the Woods Hole Oceanographic Institution. He and his colleagues decided to use their developing technology to solve the greatest maritime mystery of all time — finding Titanic. The plan blossomed in 1977, when the Alcoa Corporation lent their salvage vessel, the Seaprobe, to the Institution. The ship featured a huge pipe apparatus that could send instruments 3000 feet into the ocean.

“I went to Westinghouse Corporation. I borrowed a deep tow Sonar System. I went



Alcoa Seaprobe

Imagine a supersonic jet filled with the most famous movie stars, the wealthiest people in the world, the owners of big business, and suppose that that jet were to crash. That’s pretty much what happened with Titanic.

to the Navy and borrowed a big lighting system. And I borrowed about six hundred thousand dollars worth of equipment to put on the end of the Alcoa Sea Probe,” related Ballard. But inexperienced boat hands incorrectly fastened the pipe. The mistake was not realized until they began towing operations, a few days out of port. “And all of a sudden, the pipe broke. Everything went and the counter weight came running down, right towards us, ‘cause we were in a room underneath all that, and then hit it [smack noise]. ... And then we ran out and everything was gone.”

The 1977 accident sent Ballard and his team at Woods Hole back to the drawing board. They would not mount another expedition for Titanic until 1985.

The scientists, engineers and technicians at Woods Hole worked on a concept they were convinced would open the mystifying ocean floor to the world dubbed “telepresence,” they planned on bringing video cameras to the depths of the ocean.

By 1982, the Office of Naval Research contributed \$2.8 million for the development of the telepresence system, particularly the “Argo” camera apparatus, named after the mythical ship that carried Jason and the Argonauts in their search for the Golden Fleece. To test Argo, they had their own golden fleece: Titanic. But the funds weren’t enough to mount an expedition. So Ballard “...Went deeper into the Navy [he laughed]. And being a Naval officer, and having been involved in a lot of programs, I went to the other side of the Navy, the more classified side of the Navy. And I talked to them.”

The Cold War was still raging, and Argo

could help the Navy with another problem: locating two sunken submarines. The USS Thresher had sunk due east of Woods Hole in 1963. The USS Scorpion sank just five years later 400 miles southwest of the Azores off the coast of Portugal. The Navy wanted Dr. Ballard to use the new technology to monitor the nuclear stability — or instability — of those sunken subs and their nuclear reactors.

With the additional Navy funding, Woods Hole engineers and technicians started bringing Argo to life in 1982. The 4,000-pound cage the size of an automobile filled with three specialized dark-vision cameras and sonar were a leap ahead in deep-sea imaging. In 1984, Argo started its secret mission at the USS Thresher. Ballard found the sunken sub. “The Thresher was just destroyed. ...It was just like blasted through a shredding machine...”



Argo Sled and Equipment on Deck

In addition for the funds from the Navy, Ballard sought a partnership with the European counterpart to Woods Hole. The French Institute for Research and Exploration of the Seas, or IFREMER, joined the effort. They came up with a two-pronged attack.

The first leg of the voyage started on June 24, 1985. IFREMER scientist Jean-Louis Michel began the search for Titanic. He employed their new Sonar Acoustic Remorque (SAR), or towed acoustic sonar. The SAR is a side-scan sonar device. It travels about four hundred feet from the bottom down to a depth of twenty thousand feet. The plan was that SAR would find the wreck and then Argo would photograph it.

Ballard and the Woods Hole scientists joined their French colleagues on board the French research vessel Le Suroit on July 22, 1985. The party steamed to the search site and deployed the SAR, directly over a previous unchecked target from an earlier search done by another explorer, Jack Grimm. As it was on its way down the SAR's on-board metal detector went crazy, and the ship was pushed away from this small section of the ocean. They never made it back to check the site. The searchers disembarked from Le Suroit on August 8th, 1985.

On August 12, Ballard and Michel joined

the American portion of the quest, the part that was supposed to be a photo opportunity after the SAR found Titanic.

The 245-foot Woods Hole ship Knorr left dock from Ponta Delgada, in the Azores. But first, Ballard had a top-secret commitment to the Navy to keep — the survey of the other sunken nuclear sub, the USS Scorpion, 400 miles southwest of the Azores.



Sonar Acoustic Remorque (SAR)

With each of these sub hunts, Ballard was learning more about how he might find Titanic. The Thresher had been completely blown apart, while the Scorpion was basically intact. Yet they had similar debris fields — ones that showed up right away on Argo's cameras. “You pass this line. It's like just a line. There's nothing and then there's everything. ...You come into a debris field,” Ballard described as a lesson to remember.

After finishing the surveys of the two sub sites, Ballard was now free to do what he wished with the rest of his time on this voyage.



French research vessel Le Suroit

On August 24th, the Knorr, packed with expectant French and American scientists and researchers, arrived near the area where the French search had left off. Argo's video cameras would prove or disprove Ballard's idea that video is a better search tool than SONAR. They zigzagged up the eastern end of the survey area, gambling that if they zigzagged tight enough they would intersect the debris. Quickly, though, the crew's morale plummeted as days clicked by without a trace of the elusive wreck. People started checking off the hours until they could head home.

August slipped by. The crew was just

4 days from their return date. It seemed Titanic was about to elude yet another determined and skilled search party.

Then just before 1:00a.m. on September 1, 1985, everything changed.



Woods Hole Ship Knorr

“It was just another watch...we had all been used to staring at black and white images of the deep seafloor...a featureless deep seafloor, for watch after watch after watch,” said Bill Lange. “And in this watch we started to pick up little objects here and there.”

“They weren't rocks. They weren't fish. They weren't sand waves. They were very angular bits of something,” shared Cathy Offinger “And as it turns out...the first images that were coming back were of the boiler with the very recognizable pattern of rivets on the face of the boiler.”

“It's a boiler! It looks like a boiler! Yes! Yes! Fantastic! It's a boiler! Somebody better get Bob!” the crew screamed. There was no mistaking it. The object was an early 20th-century coal-fired steamship boiler. The crew aboard the Knorr was awakened.

The reaction of some crewmembers: “My first reaction was to roll over and go back to bed, because the big joke on the trip had been, ‘Hey, wake up, we found the Titanic.’” “Dr. Ballard rushed into the cabin, threw the door open and yelled, ‘We found it!’ I sat upright in my bunk and proceeded to put a crease in my forehead from the pipes overhead.” “We knew that we were two and a half miles directly above a very significant grave site... You get a catch in your throat.”

Robert Ballard shared his feelings: “It was two o'clock. The Titanic sank at...2:20a.m. And someone said, ‘Oh. The Titanic's about to sink.’ And my mood just [snaps fingers] went boom. We stopped and we went out on the fantail and we had a ceremony.”

After 73 long years, a few persistent researchers and scientists became the first to gaze upon Titanic. They were determined to get photos of the wreck site, and the most difficult challenge they faced was to negotiate around the wires that supported Titanic's mighty smokestacks.

Ballard was happy to find that “The stacks were gone. Thank God the stacks were gone and with it, all the rigging. So I



Titanic Boiler on Sea Floor: Courtesy NOAA

had a clean top. We had just done something that none of us had ever done before. And we knew we were at the edge of the technology. We pushed it to its limit and we got out free... That was cool. It's worth all the...troubles and trials and tribulations... [laughs] I'll never, I'll never forget those moments.”

Dana Yoerger expressed her excitement. “And I remember those first passes with the Argo sled over the ship, and how absolutely thrilled we were that we immediately recognized what we were seeing. There it was. It wasn't a pile of scrap where maybe you could identify some of the pieces. I mean, we were looking at the Titanic.”



Titanic Bow: Courtesy NOAA

They hoped to find Titanic in one piece, but at the middle of the ship, they found a mass of confusing twisted steel. They came back and made a run to where they thought the stern would be. And there was nothing.

Key eyewitnesses on the night of the sinking, like Jack Thayer, were right after all. The two sections of the ship had broken apart between the 3rd and 4th funnel and were 2000 feet away from each other. Thayer made a series of sketches. One of those drawings shows the ship breaking in two at the ocean's surface. They could now confirm that Titanic did break apart at the surface.

Just one day after they found Titanic, a raging storm blew in. To save the multi-million-dollar vehicle, it was brought back to the deck. But the crew had another trick



Officers Quarters and Expansion Joint: Courtesy NOAA

up its sleeve: the Acoustically Navigated Geological Underwater Survey, or ANGUS.

This warhorse was over ten years old – and the crew was willing to risk losing it. Like Argo, ANGUS was dragged below the Knorr, but instead of shooting video, it took 35mm still images, photographs that could only be developed after it returned to the ship.

ANGUS snapped thousands of pictures, including the world's first up-close look at the debris field. Those images of everyday items bridged the years from 1912 to 1985 in a way that no one could have predicted.

The scientists and crew returned to Woods Hole, happy to have proven their equipment worked, but not fully understanding the import of what they accom-

plished.

“One of our friends had a brief radio conversation with people on the beach, and I'd asked him...so, did we make the newspapers? And he started laughing: “Try the front page of every newspaper in the world,” said Dana.

Discovering the wreck was one thing. Dr. Robert Ballard and his team wanted to take a closer look at what happened to the ship during three quarters of a century in the deep ocean. Several months after their discovery of Titanic in 1985, the researchers started to make preparations to document the site up close.

The only way to do that was in a specialized submarine called a Deep Submergence Vehicle – and Woods Hole happened to



Woods Hole Robot Jason Jr.

operate one of the few in existence – the U.S. Navy-owned Alvin. The Woods Hole team wanted to explore the interior of Titanic, but Alvin was too large to go inside safely.

Ballard gave his team at the Deep Submergence Lab the go ahead to start work on a tiny robot. They adapted key systems from a larger robot currently in blueprint stage called Jason. They dubbed the smaller robot, Jason Jr., or J.J. It was basically a robotic eyeball. The plan was to attach the probe to Alvin by a tether. The idea was for the submarine to send the camera into areas and spaces too hazardous or too small for the submersible to enter.

On July 12, 1986, the Woods Hole team returned to the satellite position they left nearly a full year before. By the next morning, they were ready to attempt their first dive with the submersible, with Jason Jr. tucked into its cage aboard Alvin. There was a heightened state of anxiety among the crew. Diving near a wreck in freezing water 2 1/2 miles under the ocean is not a routine task.

On July 13 the Alvin crew was filled with both fear and expectation. The three men,

Bob Ballard, pilot Ralph Hollis and co-pilot Dudley Foster, settled in for their two and a half hour descent.

Equipment problems plagued Jason, Jr.'s engineers, but they managed to successfully navigate the Titanic site and capture amazing imagery.

In all there were 12 different dives, most of them highly successful. But perhaps the highlight of the entire cruise was Dive 3, when Martin Bowen maneuvered J.J. down Titanic's first class grand staircase. “That was really spooky, because it's just this giant hole up on the top, and I had to set the sub on the deck there and move ahead far enough for J.J. to go straight down. To see that crystalline light fixture was one of the things that made it personal for me. Those human sort of artifacts...gives you the connection.”

Ballard shared his feelings: “I felt like I was dancing in the ballroom...it was the culmination of everything. The 1986 expedition was a celebration. ...We...wanted to commemorate the sinking...and we took bronze plaques down — one on the bow and one on the stern...hoping that people would leave this ship alone. And that was our hope.”

But the lure of this legendary ship was too great. In just one year, a submersible similar to Alvin, using similar robotic arms arrived on the site – not to leave plaques, but to bring pieces of Titanic back. Was it for this purpose that science had found the wreck?

By the autumn of 1986, Titanic's location was no longer a secret. But it still held many mysteries, and as it turned out, many artifacts – objects that people around the world were interested in seeing for them-



Shoes, Bench, and Dishes in Debris Field & Telemotor Where Bridge Had Been: Courtesy NOAA



Titanic's anchor weighs over seven tons. Hanging down around and over it are “rusticles” — icicle-like secretions — the waste product of deep-sea bacteria that eat iron in the steel: Courtesy NOAA



Titanic Propeller: Courtesy NOAA

selves.

In 1987, IFREMER, the French Oceanographic Institute, was at the Titanic site with their 20 million dollar submersible, *Nautile*. Their goal was to collect relics, in conjunction with a for-profit company funded by international investors. In this expedition 1,800 artifacts were brought back to land. The salvage company went public in 1993 under the name RMS Titanic, Incorporated and was named “Salvor in Possession” by a federal judge in 1994 with complete right to the Titanic and all its artifacts.

As the centennial of the sinking of the Titanic approached, RMS Titanic, Inc. made plans to sell many artifacts, worth millions of dollars, to the highest bidders.

Artifacts like the ship’s tri-tone whistle, the largest ever-built, were sent on traveling exhibit. Ten million people from London, England to Santiago, Chile attended – and many historians and museums warmed up to the idea of artifact retrieval. The idea of studying Captain Smith’s megaphone – or any of the other 6,000 items brought back since 1987 – had a power of its own.

Yet the complete story of Titanic was yet to be told, and many expeditions to the site attempted to piece together an even fuller picture of what remained of the ship, and to tell the whole story of her sinking. Each of these expeditions built upon the techniques of Ballard and his team, and they utilized increasingly sophisticated technology to bring a sharper picture of the Titanic disaster into view.

In the summer of 2000, a Pennsylvania lawyer named David Concannon made what he believed was a significant find while exploring the Titanic wreck site in a Russian submersible. Concannon and his team believed that they had located long sections of the Titanic hull. The location of these sections and the patterns of damage suggested to Concannon that there may have been an additional rupture to the ship’s bottom which indicated that Titanic had sideswiped the iceberg, also known as grounding damage.

But there was a problem with the team’s evidence. When they came to the surface, they realized that the film in their camera

was not advancing. Hundreds of photos they believed that had taken, and hope to analyze, were never captured. Their theories were compelling, but their chance to gather new evidence was lost. Concannon’s hypothesis inspired future expeditions to test his theories.

Beginning in 2005, the History Channel sponsored an expedition to the Titanic site to shed new light on the sinking. Led by veteran wreck divers John Chatterton and Richie Kohler, this expedition used forensic techniques to pursue lingering mysteries about the wreck.

Naval Architect Roger Long describes the efforts of the 2005 expedition team to reconstruct Titanic and put together the pieces of the wreck like a puzzle. Long explained that “to really understand what happened here you have to look at where things are on the bottom, and then you have to figure out how fast they fell and where they are. Draw that all back to the surface, in a way that makes sense, with putting together the structural pieces to really reconstruct the event.”

Their first step was to conduct a detailed forensic photographic examination of the wreck site. Expedition team members had hundreds of hours of video to study to piece together the story of the wreck. Team member Bill Lange explains that they spent “many, many months analyzing imagery from the wreck site, doing photo interpretation, plotting out where the wreck items are, identifying them, plotting their positions, then creating some maps.”

These maps helped investigators sketch out new theories about the nature of the accident. The expedition team also relied on the eyewitness testimony of Titanic survivors taken after the wreck, illustrating the importance of oral history in retracing the past. Finally, the team compared the personal accounts with the data collected from the ocean floor. After assembling as much data as possible, the expedition leaders started to piece together some conclusions based on the evidence.

Among the key findings of the expedition were two large sections of Titanic’s hull. Together, these pieces account for almost 70 feet of Titanic’s bottom, located just beneath and aft of the third funnel — right where she broke apart. These pieces are the best forensic evidence engineers and marine architects have ever had to understand the breakup.

After using animation to analyze the two pieces, the team concluded that the breakup of Titanic may have occurred at a shallower angle than previously assumed. What this means is that the ship may have broken apart much more suddenly and unexpectedly than historians and experts first thought. This theory helps explain

why some Titanic survivors described the scene aboard after the iceberg hit as one of relative calm, rather than complete panic. Perhaps Titanic passengers thought the boat would stay afloat for much longer than it ultimately did.

The 2005 expedition uncovered new information and surprising revelations. Yet after this expedition, over 40% of the wreck site was still unexplored.

In 2010, an unprecedented expedition led by RMS Titanic, Inc., Woods Hole Oceanographic Institute, and History Channel documented the entire wreck site of Titanic, using high-resolution optical video, sonar, and acoustic imaging. For the first time, this technology enabled the experts to map the entirety of the wreck site, using autonomous underwater vehicles

and cutting-edge technology.

The ability to map the whole wreck site has enabled the expedition team to closely analyze the evidence in order to fully understand the timeline and mechanics of the wreck. The release of the expedition’s most recent findings is scheduled to correspond with the 100th Anniversary of the disaster. History Channel will feature a full-length program entitled **Titanic at 100: Mystery Solved** on April 15, 2012 (check local listings for air times, or visit History.com) which will unveil these findings, promising to close the book on many questions that still linger about the disaster. Even 100 years later, Titanic continues to intrigue people worldwide.

Learn more about Titanic

These sites and books were used for research for this supplement.

HISTORY: www.history.com/topics/titanic

Academic: www.titanichistoricalsociety.org
www.encyclopedia-titanica.org
http://en.wikipedia.org/wiki/RMS_Titanic
www.titanic-nautical.com
www.titanicuniverse.com
www.webtitanic.net

Art Prints/Posters:
www.transatlanticdesigns.com

Awesome Stories:
www.awesomestories.com/disasters/titanic

Images:
www.maritimequest.com/liners/titanic_page_1.htm

Inquiries - U.S. & British:
<http://www.titanicinquiry.org>

Paintings:
www.kenmarschall.com

Newspaper Stories:
www.lva.virginia.gov/exhibits/titanic

Timeline:
www.titanicandco.com/timeline.html



Unsinkable: The Full Story of the RMS Titanic

Unsinkable was an invaluable source of interesting stories and information for this supplement, and is highly recommended. It may be purchased online or at your local bookstore.

Lost Voices from the Titanic: The Definitive History

This book is a wonderful resource for primary source materials.

Titanic at 100: Tips for the Classroom

1. This supplement contains many valuable oral histories. Ask students to analyze some of these oral histories and respond to this question: Why do you think it is important to read about the Titanic story from the perspective of those who lived through it?
2. Ask students to create collages about Titanic, using images and newspaper articles from the past 100 years.
3. Have students search for recent newspaper articles about Titanic. What is the latest information about Titanic’s sinking?
4. Have students write a letter or journal entry from the perspective of a Titanic passenger, keeping in mind the class divisions that existed on board.
5. Ask students to write a short op-ed piece about Titanic. Why are we still fascinated with this story today? What lessons were learned from this disaster?

Educators may reproduce this supplement as needed for classroom use.

THE
TRUTH
WILL
FINALLY
SURFACE.

TITANIC AT 100

MYSTERY SOLVED



PREMIERES APRIL 15
SUNDAY 8/7c

©2012 A&E Television Networks, LLC. All rights reserved.