

SOS ... SOS ... *Titanic!*

Radio operators' courage still inspires amateurs.

In 1910, the government required all ships to have a wireless telegraph. Yet by 1912, fewer than 400 ships were equipped with Marconi wireless. It was the Titanic disaster, just off the coast of St. John's, Newfoundland, which finally proved the value of wireless to the world. This article is about the Titanic's fateful day and the two wireless operators, John Phillips and Harold Bride, who performed their duties with valor and honor. We reprint it to honor the 90th anniversary of the disaster.

Working on the *Titanic* was serious business and hard work for senior telegraphist John George Phillips, 24, and junior telegraphist Harold Sidney Bride, 22. Although signed on with the crew as telegraphists, the two men were actually employees of Marconi International Marine Communications Company, Ltd. Ship-to-shore wireless transmission was in its infancy and viewed more as a convenience than an integral part of the ship's command. The operators were under the captain's command, but only with regard to receiving and transmitting messages of importance to the ship. Their main job was taking care of the passengers' telegrams while at sea. The ship's weather reports and ship-to-ship telegrams came second, as they weren't paying customers. Under its agreement with the Marconi Company, the White Star Line, owner of the *Titanic*, was provided with free wireless messages between the ship and its owners or other ships regarding navigation, safety, or the ship's business, provided the messages did not exceed

a 30-words-per-day average. Excess words were charged to the ship's owner at half the usual tariff rates. In return, White Star was to provide the Marconi operators with their meals and lodging. The Marconi Company, in turn, paid John Phillips and Harold Bride approximately \$23 per month and \$12 per month, respectively.

The fateful Sunday

On Sunday, 14 April, 1912, Phillips and Bride had been busy receiving, logging, and transmitting passenger messages. Wireless transmitting and receiving ranges increased markedly at night, and night signals from the powerful British land station at Poldhu (call letters MPD) relayed by intermediate ships had included news, stock reports, and some personal messages. There had been daily traffic messages to and from *Titanic*'s passengers. The ship's 1.5-kilowatt wireless transmitter, among the most powerful afloat, had a 400-mile daytime transmitting range. This range increased significantly at night, but during the day, particularly now in the North Atlantic, its functions were limited to ship-to-ship messages.

Signals were transmitted and received on closely adjacent standard frequencies, with two, three, or even more signals being sent or received at the same time. Much of the operator's skill involved being able to discriminate and select the particular messages addressed to his station. To assist operators, each station had its particular identifying call letters. With few exceptions, call letters from British ships generally began with M, while those of German ships started with D, and United States naval vessels with N. *Titanic*'s call letters were MGY.

The long hours and tedious work made the job very stressful for Phillips and Bride, but fortunately for them they would work in shifts to help each other at the Morse key. In 1912, laws did not require two operators or 24-hour watches on the ship's wireless. Many passenger liners and all freighters had single wireless operators who rested or slept when they could.

Ice!

Wireless operators were supposed to intercept for their captain's attention all messages relating to the navigation and safety of his vessel. Phillips and

Bride received several messages concerning ice conditions in an area toward which the *Titanic* was directly heading. At 9:00 a.m., a message from the *Caronia* was taken immediately to the bridge, where it was posted for the officers' attention. Another message was received from *Athinai* via the *Baltic*:

Captain Smith, Titanic

Greek steamer Athinai reports passing icebergs and large flotation of ice field today.

This message placed icebergs within a few miles of *Titanic*'s track. It was taken to Captain Smith. The message was not posted on the bridge nor entered in the scrap log until 7:15 p.m.

As daylight turned to dark, the cool air began to turn cold. At 7:00 p.m., it was 43 degrees. Because of the day's wireless messages, an iceberg watch was ordered. By 7:30 p.m., atmospheric temperature had dropped to 39 degrees.

At this time a message from the *Californian* to the eastbound freighter *Antillian* was overheard by the *Titanic*'s wireless operators. Harold Bride delivered the message to the bridge and handed it to an officer. The *Californian* message reported ice about 18 miles north of *Titanic*'s track. By 8:40 p.m., the air had fallen to 35 degrees as the *Titanic* steamed full ahead at 21 knots. Around 8:50 p.m., Captain Smith was briefed by his officers about weather conditions and the ice and about the precautions that had already been taken.

More warning

It was 9:40 p.m., and in the wireless shack Harold Bride had turned in for a nap before working the busy late-night traffic. John Phillips was manning the transmitter alone when a message was received from the westbound *Mesaba*:

To Titanic and eastbound ships:

Ice reports. Saw much heavy pack ice and great number large icebergs.

Also field ice. Weather good, clear.

The land station at Cape Race, Newfoundland (call letters MCE), was in range now and John Phillips was very busy transmitting messages which had accumulated during the day. Unable or unwilling to leave his key unattended, he ignored the *Mesaba*'s ice message which described ice directly ahead for *Titanic*.

The message never did get to the bridge. With lights from the ship's decks seemingly guiding the way, *Titanic* sped with determination through the night at 21 knots. The sea was so calm that one officer on the bridge made the comment that in all his years on the sea he had never seen it so flat. The stars shone brightly in the moonless sky.

As 10:30 p.m. approached, the steamer *Rappahannock*, passing on an opposite course, signaled the *Titanic* with its Morse lamp:

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Have just passed through heavy field ice and several icebergs.

Titanic replied by signal light:

Message received. Thanks. Good night.

Titanic continued on her course, speed undiminished. In the wireless room, John Phillips was very busy with Cape Race traffic as well as sending and receiving messages to and from other ships. A few minutes before 11:00 p.m. he was interrupted by a very strong signal from a nearby ship, the freighter Californian, twenty or so miles away to the north:

I say old man we're stopped and surrounded by ice.

She was so close that she almost blasted Phillips' ears off. Annoyed by the intrusion interrupting his traffic, John Phillips curtly responded:

Shut up. Shut up. I am busy. I am working Cape Race.

Californian's wireless operator, Cyril Evans, rebuffed by John Phillips' curt message, listened for several more minutes to Cape Race traffic. Then, around 11:30 p.m., he turned off his equipment and turned in.

Doomed

On the *Titanic*, two crewmen in the crow's-nest swung their arms in an effort to keep warm in the freezing air. Their eyes strained into the night's darkness ahead. They had wished they had their binoculars to help them see better. Somehow, the binoculars had been misplaced the day before.

Suddenly, without a word, one of the crewmen hunched forward and peered intently into the black, moonless night. He immediately reached for the bell lanyard and gave three sharp pulls to signal an alarm. He then picked up the phone piece and called the bridge: "Iceberg right ahead."

The warning was too late. The officers in the bridge stopped and reversed engines and averted a head-on collision with a large iceberg, but the huge iceberg managed to strike a glancing blow on the *Titanic* fifteen feet above her keel. The gash extended for 300 feet along her side, flooding five of her compartments. The *Titanic* was designed to float with three or four flooded compartments, but not five. She was doomed.

Carpathia to the rescue

By 12:05 a.m., the *Titanic's* front compartments were rapidly filling with water and all engines were stopped. Captain Smith, realizing the ship was sinking, personally went to the wireless room and instructed the wireless operator to order a call for assistance. "You had better get assistance," Captain Smith told his wireless operators.

John Phillips set the frequency on the multiple tuner to 600 meters, adjusted the spark gap for maximum range, and sent out the standard CQD distress call (some operators called it Come Quick, Danger) from *Titanic's* huge antenna. Later that night, Harold Bride decided to use the new distress signal, SOS, which was just coming into use. *Titanic's* wireless operators sent one of the first SOS's from a ship in distress.

SOSSOSCQDCQD—MGY.

This was a call for help to save over 2,200 lives on a ship that only had enough lifeboats to save 1,178.

By 12:45 a.m., several ships and land stations had responded to Harold Bride's and John Phillips' distress calls. The *Carpathia* was 58 miles from the *Titanic* at the time of collision and responded immediately. *Carpathia's* captain turned his ship around and raced to the rescue.

Opportunity lost

Although the *Carpathia* was close to the distressed *Titanic*, there was another ship that was much closer — but it never heard the *Titanic's* wireless distress calls. The wireless operator on the *Californian* had turned off his

wireless and gone to bed after John Phillips had told him not to interfere with his commercial traffic. The *Californian* could have saved the lives of all the *Titanic's* passengers if only the operator had not shut off his wireless and turned in for much-needed sleep.

Abandon ship!

On the *Titanic*, Captain Smith ordered loading of the lifeboats with women and children first. By 1:30 a.m., *Titanic's* bow was distinctly down and she listed heavily to port. The slant of the ship's deck was becoming steeper and people were having trouble keeping their balance as they moved toward the stern. Lifeboats were being lowered into the calm sea 60 feet below the ship's deck. Although the lifeboats were capable of carrying 65 passengers, some boats were filled with fewer than 20 people.

Signs of panic began to appear. In the wireless shack, John Phillips and Harold Bride were still at their posts, their distress calls becoming increasingly desperate:

Engine room getting flooded.

At 1:45, another distress call:

Engine room full up to boilers.

Every man for himself

By 2:05 a.m. most of the lifeboats had been lowered (except for the collapsibles) and had moved away from the *Titanic*. More than 1,500 people still remained aboard. With the boats all gone, hundreds of passengers left behind stood quietly on the upper decks. A quiet calmness set in. Captain Smith made his way to the wireless room and told John Phillips and Harold Bride that they had done their duty. Now it was every man for himself.

Into the sea

As the ocean water filled one compartment after another, the water's weight pulled the *Titanic's* bow completely under. The great ship's immense bulk started a catastrophic arc into the star-filled sky. As the *Titanic*

upended, hundreds and hundreds of people were thrown into the sea. The water temperature of the North Atlantic was about 28 degrees Fahrenheit. As energy from the generators faltered, the last wireless signal spluttered to a halt.

At 2:20 a.m., the liner started its nearly vertical descent downward into the sea. Not yet completely under the surface, with a loud roar the sinking hull broke in two near an expansion joint and engine room shaft. The forward section of the ship began its drop to the ocean floor over two miles below, while the stern section remained afloat a few seconds more before it, too, plummeted to the bottom.

Down with the ship

Almost immediately, the silent night was filled with the calls of floating survivors, growing in number until there was almost a continuous wailing chant. Hundreds of people cried for help as they struggled in the icy cold water. Some of the ship's 1,500 passengers managed to reach some of the lifeboats, but most did not. Long before dawn, hypothermia had claimed the lives of most of the floating survivors. The rescue ship, *Carpathia*, arrived around 4:00 a.m. and started to take on survivors from the lifeboats that held mostly women and children. Everyone was still in shock, not only from the horrendous experience they had just witnessed but also from the bitter cold that engulfed them. In all, 711 passengers survived the ordeal. Captain Smith did not survive. He went down with his ship.

Constant duty

Of the two wireless operators on the *Titanic*, only Harold Bride survived the tragedy. Even after his subsequent rescue by the *Carpathia*, he continued to perform his duties as a wireless operator. The ship already had a wireless operator named Harold Cottam, but he had not slept for many hours and was totally exhausted. Bride had to be carried from the dispensary, where he was treated for severely frostbitten feet, to the wireless room where the exhausted

Cottam was working. Once Bride began to transmit, Cottam got a few hours of precious sleep. Both Cottam and Bride ignored all information requests from private and public sources even as the *Carpathia* sailed full-steam to America.

Once the *Carpathia* reached New York, Bride was carried ashore on the shoulders of two *Carpathia* officers. Among the last of the survivors to be brought ashore, Bride had been almost constantly on duty since boarding the ship from an overturned collapsible boat and now, totally exhausted, he was taken to a nearby hospital for treatment of crushed and frostbitten feet.

Inquiry

At the *Titanic* inquiry, several proposals were made:

1. Lifeboats required to have increased capacity, a seat for each person aboard, and adequate manning.
2. Wireless stations required to have 24-hour manning.
3. Amateur interference banned.
4. All ships required to provide reliable auxiliary power sources.
5. Wireless operators required to maintain secrecy of all messages.

These wireless recommendations resulted in the Radio Act of 1912, which required all ships to carry wireless stations. The Act also contributed to the Marconi Company's extraordinary financial success.

"The last I ever saw of him ..."

The wireless operators of the *Titanic*, John G. Phillips and Harold Bride, went into the history books as two young men who heroically stood at their post, bravely transmitting distress signals until moments before the huge ship sank. John Phillips' body was never recovered. Harold Bride said of his coworker, "Phillips ran aft and that was the last I ever saw of him."

Harold Bride kept a very low profile in the years following the *Titanic* disaster. World War I found him as a wireless operator aboard the steamer *Mona's Isle*. Later in life, he became a salesman before returning to Scotland, where he died in 1956.

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