Chapter XII

A MATTER OF TIME

On the night of April 14, 1912, at 10:25pm in New York (NY), a spark-excited radio transmitter blasted out a stream of radio waves into the night air. To wireless operators stationed on the steamships *La Provence*, *Mount Temple*, and *Frankfurt*, and to the wireless operator stationed at Cape Race, Nova Scotia, there came the staccato sounds of a series of dots and dashes that read something like:

CQD DE MGY Require assistance. Position 41.44 north, longitude 50.24 west. Come at once. Iceberg.

It was a general call of distress (CQD) to anyone who could hear, sent from the steamship *Titanic* (radio call letters MGY) on her maiden voyage to New York. Ten minutes later, at 10:35pm New York time, *Titanic* sent:

MGY CQD, Here corrected position 41.46 north, longitude 50.14 west. Require immediate assistance. We have collision with iceberg. Sinking. Can hear nothing for noise of steam.

For 73 years, the location of the wreck of *Titanic* remained a mystery, lying at the bottom of the Atlantic ocean some 13 nautical miles to the east of the so called "corrected" distress position of 41° 46'N, 50° 14'W. Yet, back in 1912, all of *Titanic*'s surviving officers, as well as Captain Rostron of the rescue ship *Carpathia*, believed *Titanic* had gone down in the position worked out by *Titanic*'s Fourth Officer Joseph Boxhall. In 1985 Dr. Robert Ballard proved that they were wrong.

A Time Gone Wrong?

At local apparent noon, Sunday, April 14th 1912, *Titanic*'s clocks would have shown exactly 12:00 noon. At that time *Titanic* had reached a longitude of about 44° 31'W having traveled 1549 nautical miles since leaving Queenstown harbor three days earlier. At that longitude on April 14th 1912, local apparent noon (LAN) occurred at 2:58pm Greenwich Mean Time (GMT). Therefore, on that fateful Sunday, time on *Titanic*'s clocks, which were keeping what was called Apparent Time Ship (ATS), would have been 2 hours and 58 minutes behind GMT. This is the same as being 2 hour and 2 minutes ahead of clocks in New York and Washington since both those cities in 1912 were keeping mean time for the 75th meridian of west longitude, exactly 5 hours 0 minutes behind GMT, just as they do today.

However, according to what *Titanic*'s Fourth Officer Joseph Boxhall told a US Senate subcommittee on April 29th 1912:

"At 11.46 p.m., ship's time, it was 10.13 Washington time, or New York time."

This statement, if true, implied that clocks on *Titanic* were 1 hour and 33 minutes ahead of clocks in New York and Washington, or 3 hours 27 minutes behind clocks keeping GMT.



This was not the first time that that particular time difference between ATS and GMT showed up. Originally, that alleged time difference first came to light in a wireless message from Captain Rostron of *Carpathia* to Captain Haddock of *Olympic* on Monday, April 15th when Haddock asked Rostron to send details about the loss of *Titanic*. In that message Rostron wrote:

Capt. Haddock, *Olympic*: South point pack ice 41.16 north. Don't attempt to go north until 49.30 west. Many bergs large and small, amongst pack. Also for many miles to eastward. Fear absolutely no hope searching *Titanic*'s position. Left Leyland SS *Californian* searching around. All boats accounted for. About 675 souls saved, crew and passengers; latter nearly all women and children. *Titanic* foundered about 2.20 a.m., 5.47 GMT, in 41.46 north 50.14 west; not certain of having got through. Please forward to White Star, also to Cunard, Liverpool and New York, that I am returning to New York. Consider this most advisable for many considerations. – Rostron.

The reported foundering time, "about 2:20 a.m., 5:47 GMT," implied that time carried on *Titanic* was 3 hours 27 minutes behind GMT, or 1 hour 33 minutes ahead of mean time in New York. These same foundering times were repeated by *Titanic*'s Second Officer Charles Lightoller before the US Senate subcommittee on April 23rd 1912. The same time difference was implied in Boxhall's statement before that same subcommittee just 6 days later.

The official US Senate report into the loss of the SS *Titanic* claimed that an iceberg was sighted from *Titanic* "at 11.46 p.m. ship's time, or 10.13 p.m. New York time, Sunday evening, April 14." It listed the foundering time "at 12:47 a.m., New York time, April 15." Its conclusions were based on the 1 hour 33 minute time difference that was given to them by *Titanic*'s surviving officers Charles Lightoller and Joseph Boxhall, and also contained in the content of that wireless message sent by Captain Rostron to Captain Haddock.

Were they right? Could a time difference of 1 hour 33 minutes really have been the case? Or, was a mistake made in the ship's foundering time when given in GMT, just like a mistake was made in calculating the location where it was that *Titanic* struck ice and sank?

Time Kept at Sea

On land, time is based on a mean (or fictitious) sun that takes exactly 24 hours to go around the earth each day. However, time on board a ship in the early part of the Twentieth Century was based on the position of the sun in the sky and therefore needed to be adjusted every day, an adjustment that was necessary because of the movement of the ship eastward or westward and something called the equation of time. Time kept by the apparent position of the true sun in the sky was called Apparent Time Ship (ATS) or more simply Apparent Time.

Titanic and other White Star Line vessels in 1912 set their clocks in accordance with the International Mercantile Marine (IMM) Company's "Ship's Rules and Uniform Regulations (July 1907)" that were in effect at the time:

Rule 259. *Ship's Time.* The Officer of the Watch [OOW] will see that the ship's time is changed between the hours of 10 p.m. and 6 a.m., the clocks to be set for Noon before 6 a.m. The Engine Room Clock must at all times agree with the Clock in the Wheelhouse, and must be corrected accordingly.

