## ROCKAWAY'S MIRAGE

The purpose of this article is to draw a comparison of the events surrounding the disaster of the Titanic to a similar set of circumstances experienced by the crew of the Rockaway during its return from Ocean Station Able about the end of February, 1953. A few years ago, in preparation for the 100<sup>th</sup> anniversary of the Titanic disaster, an unusual amount of research was done and a number of detailed articles including a book were published revealing a more complete explanation of the events that ultimately caused the disaster. Extensive research was done in all areas of information in order to come to the conclusions reached. Very detailed explanations were given and a number of actual photos and sketches were included in these works.

On the night of April 15, 1912, Titanic was following the northern track across the Atlantic and about one day's travel east of Newfoundland. She had been warned about many icebergs and sheet ice in the area, but chose this route as it was the shortest route and a new speed record was being attempted. At that point, Titanic was in a large high pressure area, with very cold temperatures and little or no wind. There were two lookouts on watch and she was at full speed, about 21 knots. The lookouts were among the survivors who were questioned at length during the inquiry of the disaster. It was a moonless night as it was new moon, with the earth being nearer the moon and sun than in over a thousand years' history. This caused the highest tides ever measured in the 75 years of record keeping. Though very cold that night, the winter had been one of the warmest on record, a condition which caused the calving of an unusual high number of icebergs. This coupled with the very high tides which allowed more icebergs to become free from grounding in coastal waters, resulting in the greatest number of icebergs that had ever been recorded.

The weather and atmospheric conditions were unique that night. The very cold, windless air sat over another layer of warm, damp air directly over the water. These conditions caused a mirror like effect, preventing the lookouts from seeing the iceberg until it was close enough to be viewed at a higher angle where the mirror effect was diminished. It is basically the same effect as when you see what appears to be water on a dry road ahead on hot sunny days. This effect was well known to mariners, and reference was made in ships logs calling it refraction. Ships logs were studied for that night and in that area, and there were numerous entries remarking about significant or unusual refraction. Another feature about this condition is that with the mirror reflection, ships could be seen which were otherwise below the horizon. It's worth mentioning that these conditions were also the reason there was not earlier help provided which would have saved many more (all) the passengers and crew. The Californian, another passenger vessel was within "sight" of the disaster. She had but one radioman, who had shut down at midnight, about two hours before the incident. Everyone at sea knew about the Titanic and were hopeful of seeing her on her maiden voyage. The Californian had seen the Titanic, but could not recognize her due to the refraction ... nor could they identify her condition or rescue activities. They tried signal light messaging, but the distortion made the code unreadable. From the Californian, the Titanic appeared as a much smaller ship. In frustration, the Californian resumed her voyage, also

to New York. The Titanic sank carrying about two thirds of her passengers and crew to their deaths primarily because the lookouts could not see the iceberg until it was close enough to be viewed at a more upward angle.

To help in understanding sight distance, the following are the conditions on the Rockaway. From the bridge, height of eye is 35 feet, and the horizon is a mere 7 nautical miles distant. At that distance, the entire portion of another ship above the waterline can be seen. If the ship were 10 miles, only the portion above the main deck could be seen, and at 15 miles probably only the masts. From the flying bridge, where the lookouts normally are, vision is extended about an additional mile.

As mentioned above, I am now convinced that we experienced a very similar condition on the Rockaway, while returning from Ocean Station "A" in late February, 1953. It's worth mentioning some of the characteristics of that particular patrol. We were instructed to remain as close to the NE corner of the Station, as the USAF was moving new jet fighters to Europe because of the Soviet threat at the time. This didn't affect most routines, just operating from a slightly more northern part. Our relief was to be a ship from Netherlands, as this patrol was shared by them and the US. However, at the end of January a severe North Sea Storm hit Britain and the NW coast of Europe. There were 2200 deaths reported, of which 1800 were from the Netherlands. In addition nearly all of the lowlands of the Netherlands were flooded. As our time for relief approached we learned we would not be relieved by the Netherlands. Our relief was to be the Cutter Androscoggin, a 265 footer based in Miami, Florida. So, she was dispatched to relieve us, without the air search radar operating, a big problem, as it is crucial in tracking the weather balloons. She stopped at every port where the Navy could repair the radar. Each stop, it was working, and failed shortly after departure. Stop after stop, it was the same thing. Finally, after leaving Argentia, Newfoundland, it was still not working. The two top ET's and radar men from both ships worked and found a similarity to an earlier problem. Checking this out, they were in need of some parts which we had on the Rockaway. When they arrived, we put the parts (well waterproofed!) in a raft, and set it adrift. It was picked up, and the raft returned to us, and we were about to depart when we got the thumbs up ... all was working. All of this was in 30 foot seas and stiff winds in the middle of the night.

Now, finally, we are on our way to Argentia and then home, having been relieved at least a week late. We were low on most foods and completely out of some entrees. It was probably more than half way to Argentia when we encountered a large ice field. I was the seaman lookout, and noticed subtle changes in conditions. We were cruising at 15 knots, and the seas seemed to be slowly flattening out. Soon, it was calmer, very cold and a stiff wind off the bow. About that time, the OD and the Captain came out on the wing of the bridge, seemingly looking hard for something ahead. They turned and asked if I could see anything to which I replied, no. Unbeknownst to me, they already had seen something on radar like an ice sheet, but I couldn't see it. I still didn't know what they saw on radar, and finally they said it was ice. I still could not see it ... it was a bright day with thin overcast. In a very short moment later, I suddenly saw the

edge of the ice field very clearly, but seemed to disappear a few hundred yards farther away. When we approached it closely, it became clearer and ice was visible ahead of us. After some discussion, the Captain turned south to try to go around it. It seemed to be enormous in area, and he eventually chose to cut through it. We did so without incident, and several hours later we were back at "standard" speed, continuing toward Argentia, NFLD. After 24 hours in port, we were headed back to St. George, Staten Island, NY. You can imagine how we all felt to be back on Terra Firma. What lay ahead was a 3 week Newport Underway Training and a week at Cape May for firearms training. We then went to New London where many were reassigned, as the Cadets on summer cruise would perform their duties.

When I began to review the information with conclusions about the Titanic it, struck me how familiar it all seemed to me. The more I dug into it, the more convinced I became about the similarity of conditions as far as vision is concerned. Even in daylight, I am certain my view of the icefield was blocked by the same mirror effect that plagued the Titanic's lookouts. In spite of all that, however, the Rockaway did not strike an iceberg.

Semper Par!

Gilbert B. (Gil) Leach, QM1, Sept 52 to Aug 56.