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# **The Human Perspective: “Lookouts”**

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## **Task of paper**

This paper looks at the role of the lookouts on the Titanic from the eye of an experienced seaman. There are several questions which arise and not all the answers are openly evident. Seamanship has traditionally been something that was acquired by apprenticing ones self to a ship or company and learned through association with others who were skilled in the trade. Like everything else there are, of course, different skill levels. Some never do acquire the “skill”, however because of the close scrutiny aboard a ship this normally does not go unnoticed for very long. Others, may inherently have a skill or the ability to easily acquire it. Some will struggle with the concepts and never truly rise to a comfort level of performance, either for themselves or their officers in charge. They are recognized and usually switched to a duty they can become accomplished in or simply leave the sea.

- Were the lookouts on that fateful night, in fact attentive?
- What was their experience level?
- Were the lookouts being used properly by the Officers on watch?
- Were there alternatives to the traditions?
  - Number of lookouts.
  - Posting location.

- Reporting procedures.
  
- What role did the infamous lack of “night glasses” play?

After exploring these questions I intend to offer some conclusions and “what might have been” scenario.

**Lookouts**

(Alphabetical)

Evans, Alfred F.

Fleet, Frederick

Hogg, George A.

Jewell, Archie

Lee, Reginald R.

Symons, George T. M.

<b>Name</b>	<b>Age in 1912</b>	<b>Years at Sea</b>	<b>Prior Experience</b>
Evans, A.	24	?	Transferred from “Oceanic”
Fleet, F.	24	12	4 years as Cadet 4 years at sea Deck Boy to AB 4 years “Oceanic”
Hogg, G.	29	13	QM on 6 ships Bos’n for White Star Line Lookout for White Star Line
Jewell, A.	23	8	1 year in Sail 7 years “Oceanic”
Lee, R.	42	15- 16	Sailed Mail Steamers
Symons, G.	24	?	?

? There is a definite lack of information available about Mr. Symons.

From the above it can be assumed that the lookouts that night had experience and in fact would be considered “qualified”.

### **Watch Groups and Watches**

The watch groups made up of the six lookouts engaged for the voyage were as follows:

Alfred Evans	and	George Hogg
Archie Jewell	and	George Symons
Frederick Fleet	and	Reginald Lee

The assigned watches were as follows:

Evans	Hogg	1800-2000 hours (0000-0200)
Jewell	Symons	2000-2200 hours (0200-0400)
Fleet	Lee	2200-2400 hours (0400-0600)

All lookout watches, as far as is known, were stood in the Crows Nest on Titanic.

### **Tradition**

From the start of days of voyaging on the seas, seamen have been “looking out” to insure their well being aboard their craft. Be it raft, sail or steamer the need for a

“lookout” is apparent and integral to safety at sea. It appears that most ships with suitable weather would position a lookout on a mast at a crosstree, in the bows or in some sort of protective “nest”. This immediately brings to mind that if the lookout was tired and was positioned in the crosstree and dozed off...kerplunk, down to the deck he would go. The advent of the crows nest by nature of its protective structure would certainly protect a dozing lookout, or at least retard his sudden appearance on the deck below.

Almost invariably in text relating to sailing vessels the lookout reports a sighting and almost immediately an officer races up a mast for a view. It is certainly the right thing to do given that the higher one is the further the line of sight to the horizon. Go up and see further!

The advent of fast passenger steamers led to the doubling of lookouts simultaneously on duty.

The International consensus regarding ship safety sparked by the Titanic sinking resulted in the Safety Of Life At Sea (SOLAS) of 1914, the agreements contained therein being adopted in 1933. Later the International Maritime Organization (IMO) eventually persuaded member nations to UNIFORMLY adopt Collision Regulations (COLREGS), finally superceding individual member nation’s regulations in 1960.

Did the fast passenger steamers ever post the lookout(s) in the bow? I suspect that the answer would be “in those days it would depend on the vessel or the practice of the officers aboard a certain vessel”. Even in times before Internationally recognized rules, it would be the practice of prudent seamen to do everything in their power to protect their ship and altering lookout positions would not be out of the realm of a probability. If an officer had served on a vessel

without a crows nest or convenient cross tree, I am sure the bow would be used as the lookout station.

### **Discussion**

Were the lookouts that fateful night, attentive?

I can only think not! How could a lookout (never mind that there were two) not see the looming dark void dead ahead of them until the ship was right on top of the iceberg? Any seaman knows that a shape ahead will block what is in the background. It is very similar to a well lit large vessel today, passing in front of a well lit city harbor behind. The lights of the city may well mask the ships lights, but there is no mistaking the ship blocking the shore lights over a considerable area. The lack of stars along a straight horizon should have been easily recognizable by the lookouts on the Titanic.

What was their experience level?

Probably pretty good considering all were being transferred to the newest ship of the fleet. Also the fact that all had been in multiple ships and were experienced seamen to boot.

Were the lookouts being used properly by the Officers on watch?

There is no evidence that there was any serious interaction between the officers on watch and the rest of their watch “team” prior to their going on watch at 2200 or at any time prior to the collision with the berg. There was no phoning the crows nest with instructions or cautions from the “ice alerts”. This differs

from the 2000 to 2200 watch team in that at 2130 the watch officer of that watch notified his lookouts to watch out for small ice and bergs. A reinforcing, by the later watch, of the possible dangers might just have raised the level of awareness of this team.

Were there alternatives to the traditions?

- Number of lookouts.

There is some evidence that on certain steamers an additional lookout would be posted should conditions warrant. On Titanic there were already two lookouts on watch and given a calm clear night I doubt any consideration was given to adding any additional lookouts. This is probably accurate given that the officers on the 2200-2400 watch never even deem it prudent to “alert” the lookouts they had.

- Posting location.

There is some evidence that splitting the lookouts with one in the “bows” would have been the prudent thing to do. When a large object blocks a star lit horizon it would certainly be more apparent from down lower, that is more of the stars would have been blocked.

- Reporting procedures.

No interaction occurred between the bridge and lookouts prior to the report of the iceberg dead ahead and subsequent “hard a starboard” command to turn the ship to port. In fact, there appears to have been very little time between the sighting, reporting and collision. When you consider that the phone call between lookout and bridge was still in progress or “just” completed when the command “Hard a

starboard” was given it makes one wonder about the alertness of the entire team.

What role did the infamous lack of “night glasses” play?

The interchange about “night glasses” in the inquiry was very interesting. At one point the glasses that were inquired about were the personal property of the second officer and were never available to any of the lookouts. A discussion ensued about Opera, Marine and Field embossed on these glasses for what reason it is hard to imagine. The crux of the matter is that occasional scanning of the horizon with a pair of glasses with sufficient light gathering capabilities might have meant that the lookouts would have noticed the lack of stars in the area ahead of the ship as they scanned. It would be the practice of lookouts to identify the relative level of the horizon when looking through glasses by looking for the star line along the horizon. This normal procedure and the swapping back and forth of glasses by the two lookouts could possibly have raised or maintained a higher level of awareness.

### **The Technical Aspect**

Height of Eye Forecastle Deck Above Water:	50 feet
Height of Eye Bridge above Water:	70 feet
Height of Eye Crow’s nest above water:	92 feet (approximate)
Height from Keel to Funnel Top:	157 Feet
Draft of Ship:	34 Feet

Distance to the Horizon:		
From Forecastle	8.3	N. Miles
From Bridge	9.8	N. Miles
From Crows Nest	11.2	N. Miles

Estimated height of Iceberg above Water	60 feet
Distance to Horizon from top	9.1 N. Miles

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## THE HUMAN PERSPECTIVE: LOOKOUTS

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Theoretical sighting distance of top of iceberg in clear daylight:

From Forecastle	17.4 N. Miles
From Bridge	18.9 N. Miles
From Crows Nest	20.3 N. Miles

From the above it can be seen that the iceberg seen at night as a BLACK area, lacking the stars right down to the horizon that the rest of the horizon is showing, should have become increasingly dominant as the ship steamed toward it that fateful night.

At a speed of 21.5 knots the berg should have been visible for the better part of an hour (56 minutes) prior to the collision.

Given that the collision took place at 2340 hours the lookouts should have been well adjusted to the darkness and as the berg got increasingly closer, they should have had an increasing large area devoid of background stars that clear, calm night. (A totally calm night would even reflect the stars in the sky on the water ahead, something that the iceberg certainly would have blocked)

### **What if?**

The lookouts had been split with one on the bow?

The bridge watch had been more attentive?

The watch officers and or lookouts were distracted by passengers on deck?

The ship had not turned...no sighting alarm was given?

*An alteration in any of the questions posed above could have changed the course of history!*

### **Conclusions**

The lack of caution in an area of known ice, whether reported or not, should have indicated a much greater level of caution on the part of the officers of the Titanic.

Simple DR projections should have shown the inherent danger. With the telegraphic warnings received the danger was known. Failure by Captain Smith to instill a level of urgency in his watch officers was the start of an error chain

that remained unbroken. Had the officers paid closer attention, had they communicated with their lookouts and perhaps, even better, split them up with one on the bow, the added minute or two of warning could well have made the difference that night. Remember that 22 knots equates to over 2228 feet every minute. It doesn't take too much imagination to picture an earlier turn and totally missing the iceberg. The size of the berg, the clear night, the stars... all were favorable to an earlier detection. Failure on the part of the Titanic lookouts and Watch Officers to sense the black mass, blocking the star line across the horizon ahead is, in my opinion, key to the disaster that unfolded.

A few interesting pieces are added below which in fact because of the Titanic, have made the seas safer for all who followed.

### SOLAS

#### **Introduction and history**

The SOLAS Convention in its successive forms is generally regarded as the most important of all international treaties concerning the safety of merchant ships. The first version was adopted in 1914, in response to the **Titanic** disaster, the second in 1929, the third in 1948 and the fourth in 1960.

The **1960** Convention - which was adopted on 17 June 1960 and entered into force on 26 May 1965 - was the first major task for IMO after the Organization's creation and it represented a considerable step forward in modernizing regulations and in keeping pace with technical developments in the shipping industry.

The intention was to keep the Convention up to date by periodic amendments but in practice the amendments procedure incorporated proved to be very slow. It became clear that it would be impossible to secure the entry into force of amendments within a reasonable period of time.

As a result, a completely new Convention was adopted in 1974 which included not only the amendments agreed up until that date but a new amendment procedure - the tacit acceptance procedure - designed to ensure that changes could be made within a specified (and acceptably short) period of time.

Instead of requiring that an amendment shall enter into force after being accepted by, for example, two thirds of the Parties, the tacit acceptance procedure provides that an amendment shall enter into force on a specified date unless, before that date, objections to the amendment are received from an agreed number of Parties.

As a result the 1974 Convention has been updated and amended on numerous occasions. The Convention in force today is sometimes referred to as SOLAS, 1974, as amended.

### IMO

The reaction of IMO to major emergencies certainly compares favourably to the international response to the **Titanic** disaster of 1912. Although an international conference convened by the United Kingdom met in 1914 and adopted the first SOLAS Convention, this did not enter into force because of the outbreak of World War I and the second SOLAS Convention was not adopted until 1929. It entered into force in 1933, more than twenty years after the accident that brought it about.

### COLREGS (Collision regulations) today

#### Rule 5 Look-out

Every vessel shall at all times maintain a proper look-out by sight as well as by hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

## Ship Statistics

Built by  
Harland and Wolff, Belfast, Ireland

Hull Number  
401

British Board of Trade Registry Number  
131,428

Length  
882'

Width  
92'

Height from keel to bridge  
104'

Gross Tonnage  
46,328 tons

Number of Decks  
9 - Boat Deck, A, B, C, D, E, F, G, Orlop Deck

Watertight Compartments  
16

Number of Engines  
3 - Two reciprocating 4-cylinder, triple expansion, direct action, inverted engines and one Parsons (low pressure) turbine

Horsepower  
Reciprocating - 30,000 hp at 75 rpm  
Parsons turbine - 16,000 hp at 165 rpm

Number of Boilers  
29

Number of Propellers  
3 - Center: 16' and Left/Right Wings: 23'

Lifeboats  
20 Total  
2 "Emergency Boats", Capacity 40  
14 Regular Wooden, Capacity 65  
4 Collapsible, Capacity 47

Total Lifeboat Capacity  
1,178

People Rescued from Titanic Lifeboats  
705

Ship Capacity (passengers and crew)  
Over 3,000

Souls On-Board April 14, 1912  
Approximately 2,228

Captain  
Edward J. Smith

Chief Officer  
Henry F. Wilde

First Officer  
William M. Murdoch

Second Officer  
Charles H. Lightoller

Third Officer  
Herbert J. Pitman

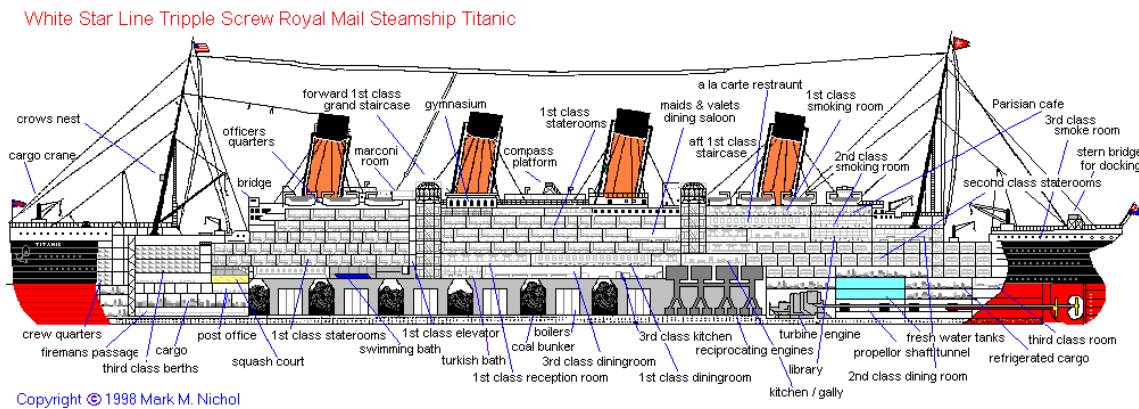
Fourth Officer  
Joseph G. Boxhall

Fifth Officer  
Harold G. Lowe

Sixth Officer  
James P. Moody

## Appendix A

### Titanic layout



The above shows the relationship between

- I. Forecastle (where the cargo crane is shown)
- II. Crows Nest on the forward mast where the lookouts were stationed
- III. Bridge where the Watch Officers were conning the vessel

## References

1. U.S. Senate Subcommittee of the Committee on Commerce, Titanic Inquiry, 1912
2. Mersey, Report on the loss of The Titanic, 1912
3. SOLAS Convention of 1914
4. IMO,History of IMO, Website [www.imo.org](http://www.imo.org)
5. Encyclopedia Titanica,Website [www.encyclopedia-titanica.org](http://www.encyclopedia-titanica.org)
6. Garzke, Jr., William H. and Woodward, John, Titanic Ships Titanic Disasters, SNAME; 2002
7. Marine Forensic Panel (SD-7) Titanic, Anatomy of a Disaster, 1997
8. Lord, Walter, A Night To Remember, 1956
9. Titanic Inquiry Project, [www.titanicinquiry.org](http://www.titanicinquiry.org)
10. Gittins, D. <http://users.senet.com.au/~sources.html>
11. Brown, David G., Chronology – Sinking of S.S. Titanic
12. Bowditch, The American Practical Navigator, 1995