Procedures to Launch Collapsible Lifeboats on *Titanic's* Officers' Quarters Roof

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Introduction

The two Engelhardt collapsible lifeboats which were stowed on *Titanic's* officers' quarters roof outboard of funnel #1 were never successfully launched from davits the night of the *Titanic* disaster. On her sister ship *Olympic* these two boats were stowed along with the other two Engelhardt collapsible boats atop one another inboard the bulwark where the davits were located to service the port and starboard emergency cutters at lifeboat stations #1 and #2. This was changed on *Titanic* and two of the Engelhardt collapsible boats were moved to the roof of the officers' quarters. The reasons behind this move and the evidence for how these boats were intended to be launched will be discussed in this article.

Stowage of collapsible boats

On *Titanic* the four collapsible boats were given letter identifications rather than the number identifications of the wooden lifeboats. The collapsible boats were designated A, B, C and D. Figure 1 shows where these four collapsible boats were stowed.

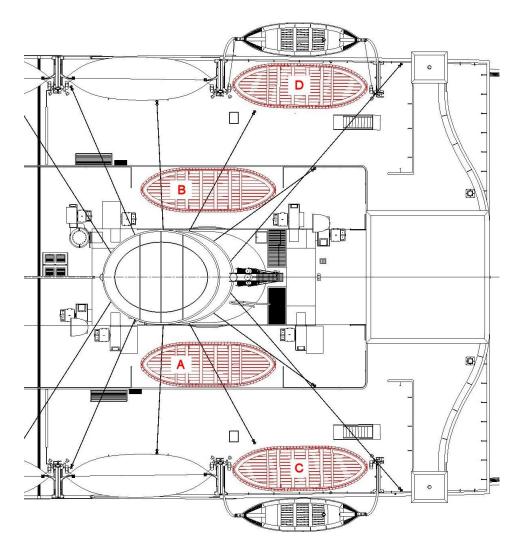
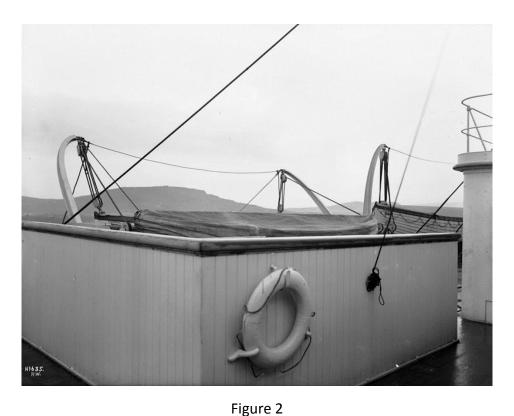


Figure 1

Stowage of collapsible boats

Where *Titanic's* collapsible boats were stowed was different than early *Olympic's*. *Olympic* had boat A stowed atop boat C and boat B stowed atop boat D. In Figure 2 we see how the starboard boats A & C were stowed on *Olympic*.



Starboard collapsible boats stowed on early *Olympic*

What we can see in Figure 2 is that by stowing two collapsible boats atop each other that the two of them are higher than the 4 ft. bulwark by the #1 emergency cutter. The emergency cutters had to be ready and accessible on a moment's notice in case of a man overboard. With the collapsible boats stacked like this on *Olympic*, crew would have to climb over them in order to board the emergency cutter in its outboard position. It is therefore understandable why it was decided to move collapsible boats A and B to a location on the roof of the officers' quarters.

Figure 3 shows collapsible boat A on the roof of Olympic's officers' quarters.

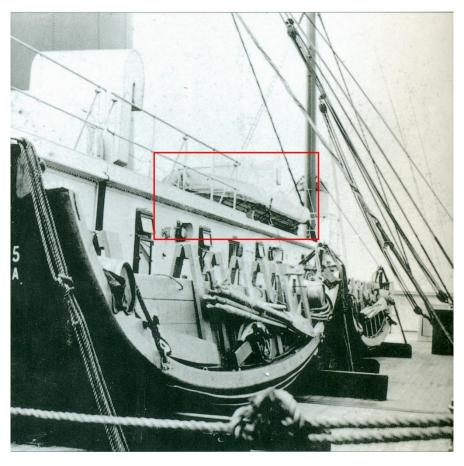


Figure 3

Collapsible boat A on roof of *Olympic's* officers' quarters

Procedures for Launch

Moving the collapsible boats A and B to *Titanic's* officers' quarters roof required providing some means for lowering the boats to the boat deck. The means which was provided on *Titanic* was the incorporation of round links in shrouds #3 and #4 (as numbered from the forwardmost shroud of funnel #1). These links provided a purchase point for hooks on blocks to be put through the links. Figure 4 shows the port shroud links on *Titanic*.

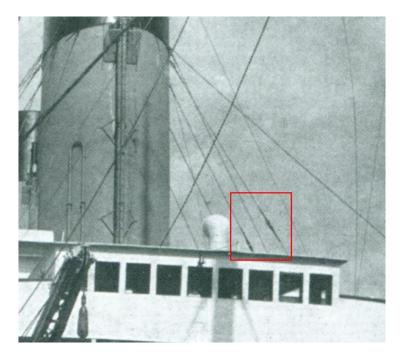


Figure 4
Port shroud links on *Titanic*

Figure 5 shows the placement of the shroud links on the *Titanic* Rigging Plan.

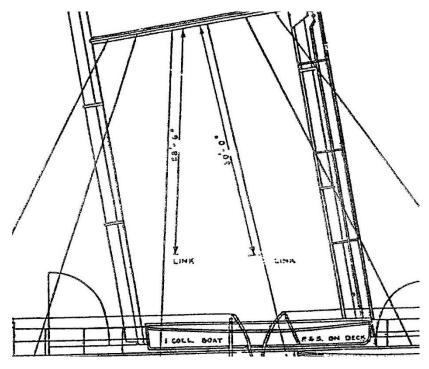


Figure 5
Shroud links on *Titanic* rigging plan

Figures 6 and 7 are drawings showing the location of the shroud links.

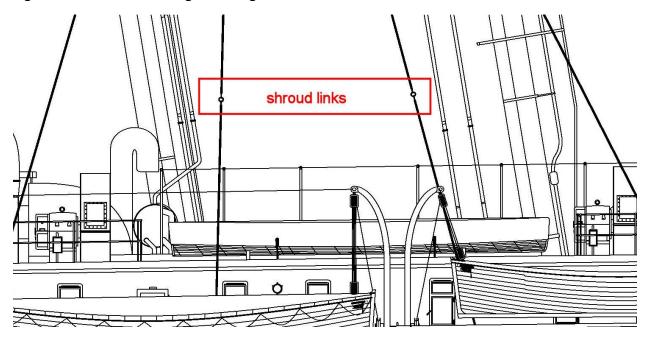
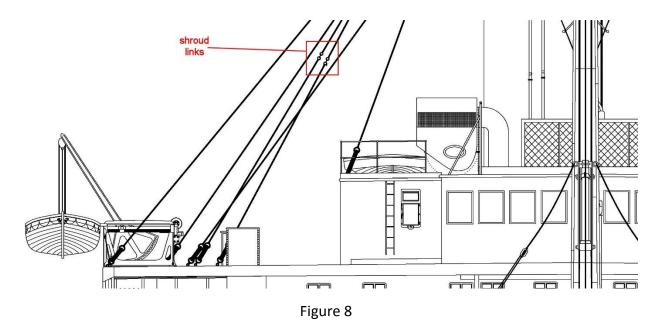


Figure 6

Starboard shroud links on Titanic



Starboard shroud links on Titanic

The first task to be accomplished in launching the collapsible boats atop the *Titanic's* officers' quarters is to rig the falls for the boats. This is done by placing treble blocks with hooks through

the eyes of the shroud links. Since there is a 50/50 probability of this needing to be done at night, about the only practical way to do this is for a crewman to climb the shrouds and place the block hook through the link manually. This procedure is shown in Figure 7. In this and other drawings from this perspective, intervening structures have been removed for clarity.

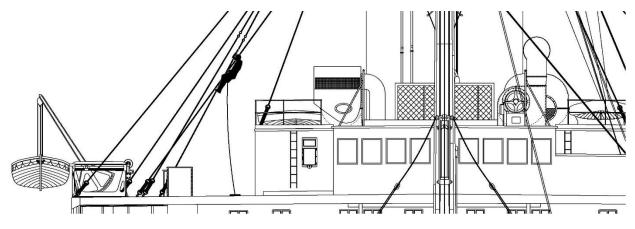


Figure 7

Crewman climbing shroud to rig falls in shroud link

Figure 8 shows the falls rigged to the shroud link and to the collapsible boat.

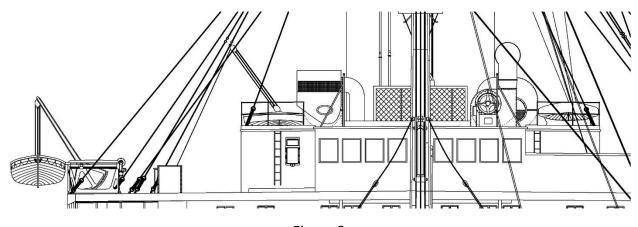
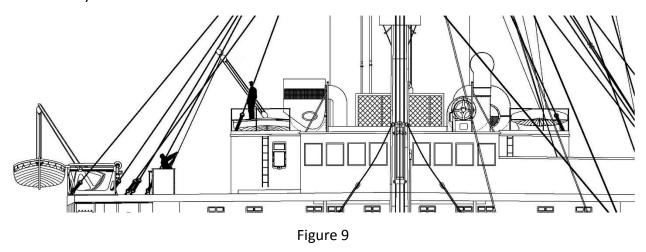


Figure 8

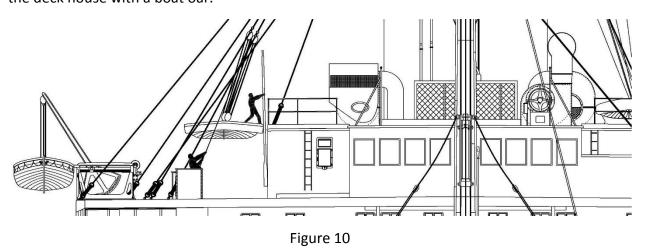
Falls rigged to collapsible boat

Figure 9 shows crew beginning to hoist the collapsible boat with one crew member in boat to fend it away from the deckhouse with a boat oar.



Crew beginning to hoist collapsible boat

Figure 10 shows boat being cleared of the deck house and a crew member fending it away from the deck house with a boat oar.



Collapsible boat clearing deck house

Figure 11 shows the collapsible boat lowered to the deck. In this drawing four obstacles to moving the boat to either the first or second starboard davits are shown. Obstacle #1 is the crew stairway surround. Obstacle #2 is the #3 starboard shroud of the first funnel. Obstacle #3 is the Kelvin sounding machine. Obstacle #4 is the #4 starboard shroud of the first funnel. To move the boat to the first davit would require dealing with obstacles #1, #2 and #3. To move the boat to the second davit would only require dealing with obstacle #4 so this would be the most logical destination for the collapsible boat. There is evidence because of the vertical forward davit arm of lifeboat station #1 on the Titanic wreck that they tried to move collapsible

boat A to this davit position. It may have been possible that the sounding machine was not bolted to the deck but rather had pins which were placed in sockets like the boat chocks. In that case, it would be just as easy to cut the lanyards of shroud #3 and move the boat to the lifeboat station #1. However, we do not know the precise method of securing the sounding machine.

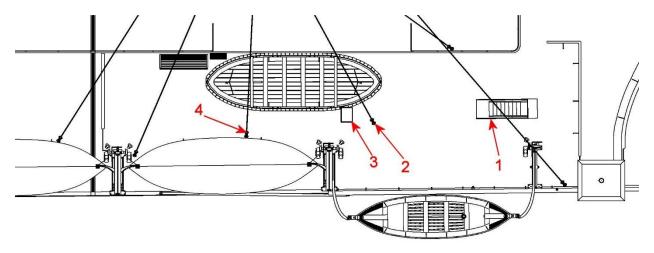


Figure 11

Obstacles to moving the collapsible to a davit pair

To eliminate obstacle #4, the hemp lanyards between the thimble eyes must be cut with a knife. In the event that the roof top collapsible boats would be needed, the sinking of the ship would be a certainty. Removing one shroud attachment would introduce no undue stability to funnel #1. Figure 12 shows the hemp lanyards at the deck level which would be cut.



Figure 12

Hemp lanyards to be cut to clear shroud from path of collapsible boat

Once the obstacle of the shroud was eliminated the aft davit falls could be attached to the collapsible boat and four crew members could haul it under the davit where the forward falls could be attached. The chocks for the 30 ft. boat would also be removed from the deck. Once under the davits with falls attached, the boat could be made ready for launch and loaded with passengers. After loading, the boat could be launched. Figure 13 shows the boat being hauled into position under the second davits.

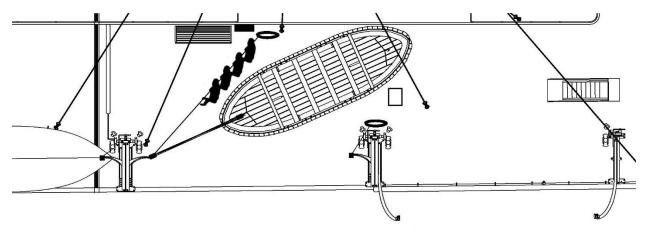


Figure 13

Collapsible boat hauled into position for launch under davits

Analysis

In looking at the addition of the collapsible boats aboard *Titanic*, a basic question arises as to why they were added to the lifeboat complement at all. Both early *Olympic* and *Titanic* satisfied the statutory lifeboat requirements with their 16 wooden lifeboats. The stowage of the collapsible boats illustrates that it is doubtful that the designers ever really thought that there was much possibility that they would ever be used. For that reason, their stowage is less than optimal for them to be used effectively.

In the case of *Titanic*, there was no problem with the stowage of boats C and D on the boat deck. They could easily be attached to the falls of the emergency boat davits which had no chocks on deck where these boats were stowed. The stowage of boats A and B atop the officers' quarters is another matter. These two boats were never able to be launched from davits during the disaster. As the procedures I previously outlined show, launching collapsible boats A and B from davits was highly improbable. If the ship had sunk much more slowly as happened during the RMS *Republic* sinking, there would have been time for rescue vessels to arrive and all the passengers could have been ferried from *Titanic* to the rescue vessels by multiple trips of the wooden boats. A more rapid sinking like that which happened with *Titanic* showed that there was insufficient time or crew training for lifeboats A and B to be successfully launched from davits. Some of the reasons are:

- 1. Complex procedures to rig falls to lower the boats to the boat deck.
- 2. Lowering the boats to the boat deck required more crew than it should have.
- 3. There was no training or drills carried out to launch collapsible boats A and B. As a consequence, none of the officers appeared to know where the falls were located to rig them onto the shroud links.
- 4. There was no clear path for the collapsible boat from where it was lowered to the boat deck to any particular davit pair.
- 5. If a path could be cleared to a particular davit pair, the boat would have to be pulled across the deck by the davit falls. This would be no easy task because Engelhardt collapsible boats of the size used on *Titanic* weighed approximately 1200 lbs.

With the need for crew to attend to the launch of the main wooden lifeboats, it is easy to understand why the A and B collapsible boats would have considered a "last resort". Neither of these boats were able to make it to the rescue ship RMS *Carpathia*. All their passengers had to be transferred to main wooden lifeboats before the collapsible boats were cast adrift.

Conclusion

This article has examined what reasonable procedures would be required to be able to launch the two Engelhardt collapsible boats which were stowed atop *Titanic's* officers' quarters. From

this examination it is not difficult to see why this exercise was destined to fail on the night of the *Titanic* disaster. After the disaster during *Olympic's* 1913 refit, more thought was given to how to stow multiple collapsible boats which could be easily launched from davits. The inability to successfully launch *Titanic's* lifeboats A and B was almost certainly guaranteed when it was decided to stow them atop the officers' quarters.