# A Comprehensive Plan for Evacuation of R.M.S *Olympic* After Her 1913 Refit

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#### Introduction

The lesson taken from the Titanic disaster was that she didn't have enough lifeboats. It is ironic that this would be the conclusion formed since all the lifeboats aboard Titanic were barely able to be launched before she sank. More lifeboats would not have helped on that night. What was lacking was a comprehensive plan for evacuation. If such a plan had existed, an essential component would have been enough lifeboats for all aboard. More importantly though, there would have been a comprehensive plan for all aboard in the event of an emergency which would require evacuation. This article will propose such a plan. Since the Titanic disaster is history and can't be changed, we will put ourselves in the place of planners at the White Star Line in 1913 when Olympic was being refit to address deficiencies uncovered by the Titanic disaster.

#### Strategy

The basis for any comprehensive plan is the strategy from which a plan will be formulated. This part of a plan requires the most thought. After a strategy is developed, the plan is formulated by listing the steps which are needed to carry out the strategy. The basis of any evacuation strategy is the assumptions upon which it is built. The most important assumption in this case is the answer to the question: What type of accident is most likely to occur? There is no strategy or plan which can anticipate all eventualities. The strategy has to predict which is most likely to occur.

Steamship travel in the early years was safe from the standpoint of deaths per passenger miles traveled. The most common types of accidents were collisions and that usually with another vessel. The type of accident which Titanic suffered is exceedingly rare. It would be a mistake for a strategy to be based on the type of accident which she suffered. Collisions at sea could have two most common outcomes. The vessel would either be damaged severely enough that it would inevitably sink or it would remain afloat and would not be able to continue making headway. These being the most likely occurrences, the most prudent strategy would be to concentrate limited resources on mitigating them.

An assumption for the purposes of this article is that White Star Line would commit the necessary resources to insure that this plan would be implemented. In the wake of the Titanic disaster other regulatory measures were taken to address disasters at sea such as ice patrols and the requirement for twenty four hour monitoring of wireless traffic. Increases in the number of lifeboats was also mandated but nothing was done to mandate comprehensive evacuation plans. That is the part that this article will address.

### Strategic Assumption

The strategic assumption which will guide the formulation of this plan is: **The most likely** occurrence at sea which is likely to either disable the vessel or cause it to sink is a collision with another ship or a foreign object and that the vessel will have a minimum of four hours until she sinks.

If a more catastrophic accident occurs as in the case of Titanic or the wartime sinking of Lusitania and Britannic, this plan will not guarantee that everyone would be evacuated but it would probably save more lives than if there were no formal plan at all. This plan anticipates a peacetime incident only.

Another assumption is that there are vessels in the shipping lanes monitoring wireless communications which could arrive to provide assistance within 24 hours.

#### The Plan

The plan for addressing the eventualities of Olympic either sinking or being disabled will be broken into component parts. The first component will be the necessary equipment for implementing the plan. The second component will be the necessary personnel for implementing the plan. The third component will describe procedures to implement the plan.

## Equipment

- Enough lifeboat capacity for all passengers and crew aboard plus 10%.
- Lifebelts for all aboard plus 10%.
- Provisions for all boats.

- Arc lamps to illuminate every two lifeboat launching stations and the two gangway doors (P & S) on E deck. Figure 1 shows a type of arc lamp used for cargo purposes which would be well suited for this application.

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EXCELLO LAMP LIGHTING STEERAGE DECK OF "OLYMPIC."

Figure 1

- Portable Gangways for two (P & S) E deck gangway doors. The type of portable gangway is shown in Figure 2. The locations of the E deck gangway doors are shown in Figure 3.



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Figure 3

- Crew emergency stations signals to be located within crew areas.

- Passenger evacuation signals which can be heard throughout the ship.

- 2 motor boats (1P & 1S) equipped with wireless for signaling and towing. Enough fuel provisions for these boats for a minimum of 24 hours of operation. A similar type of motor boat can be seen in Figure 4. Appropriate davits for launching to be installed.



- Three platform mounted large signal lamps of the naval type to be located (1P & 1S) on the forward promenade of A deck outboard and one signal lamp to be located at the centerline of the aftmost part of A deck. Figure 5 shows a representative type of signal lamp. Figure 6 shows the location of the forward signal lamps on A deck and Figure 7 show the aft signal lamp on A deck.



Figure 5



Figure 6



#### Personnel

- Adequate personnel assigned to every lifeboat station to be able to launch a boat within 15 minutes of arriving on station after the crew emergency stations signal.

- Minimal crew for each boat to be able to maneuver to assigned gangway doors.
- Crew assigned to marshal passengers to their assigned boat loading gangway doors.
- Crew assigned to rig arc lamps at designated positions.
- 3 crew capable of operating signal lamps.
- 2 crew rated to pilot motor boats.

#### Procedures

- In any situation where the Captain is informed that the ship has incurred damage which could possibly result in sinking or is disabled and not able to maneuver, the Captain shall initiate evacuation procedures. If the Captain determines that because of conditions that the emergency procedures plan is not the prudent course, he will give special instructions to his officers. If the emergency procedures plan which follow can be reasonably implemented then the Captain will authorize the following procedures.

- Crew emergency stations signal shall be sounded.

- While the captain is determining the extent of any damage, preliminary evacuation procedures will commence. These will include the opening of gangway doors on E deck, rigging of arc lamps, signal lamps made ready, and the launching of boats.

- Lifeboats will never be covered. Boat drain plugs will be left open until launching procedures commence.

- Boat provisions will be checked and replenished on a regular schedule.

- After launching, boat crews will maneuver boats to their assigned gangway doors.

- Crew will rig portable gangways at each of the six E deck gangway doors.

- At this point if the captain has been informed that the ship is not damaged severely enough to be in danger of sinking, the boats will return to their stations and be recovered upon the Captain's orders.

- If the captain has been informed that the ship is sinking, the Captain will order the sounding of the passenger evacuation sirens.

- Crew assigned to marshal passengers to their evacuation gangways will proceed with haste.

- If the ship is sinking, the officer in charge of loading at each gangway door will begin loading passengers as they arrive.

- Once full, the boats will maneuver abeam of the ship approximately 30 yards and stay in a group on either side of the ship.

-Marconi operators will begin sending distress signals.

- Signalmen at the signal lamps will search for any visible ship and begin sending distress messages.

- When all passengers have been loaded, the Captain will be informed and will order the crew evacuation signal to be sounded.

- All remaining crew will proceed to their assigned evacuation door.
- Crew will be loaded in boats using the same method as with the passengers.
- Marconi operators will be loaded aboard the two motor boats.
- When all crew is loaded, the officers will be the last to leave the ship.
- Boats in each P & S group will tie their boats together for towing if necessary.
- Boats will remain on station until rescue vessels arrive.

- If the ship is not sinking but is disabled and not able to maneuver, no loading of the boats will be done until the method and anticipated time of transfer to rescue vessels has been determined by the Captain.

-During one day of preparations before sailing when all crew is aboard, a comprehensive drill should be performed. All crew members should be able to recognize the emergency stations signal and be able to proceed to their station and demonstrate any tasks they are expected to perform. The crew should also be able to recognize the crew evacuation signal and know where to proceed to be loaded onto boats. It is understood that in order to maintain an edge against competitive passenger lines that requirements for passengers can't be too intrusive or onerous. A minimal drill should be performed for the passengers on the first day at sea. The emergency signal for passengers should be demonstrated. They should be instructed that if they should ever hear this signal that they should immediately proceed to their sleeping quarters where stewards will lead them to their evacuation locations.

#### Conclusion

A plan for evacuation of R.M.S. Olympic after her 1913 refit is proposed in this article. The measure of the value of any plan is how well it anticipates the general nature of a disaster. If the conditions of the disaster are measurably different than those anticipated by this plan, it is incumbent on the Captain to modify this plan or formulate a new one as best he can. Only a general outline has been given. Specifics in the implementation of the plan are left to the Captain and his officers to strategize and improvise as necessary. There is no such thing as a perfect plan when contemplating the unknown or unanticipated. The only thing that can be done is to plan for the most likely occurrence. In this regard, a plan such as the one offered here is better than no plan at all.