Review Of Life Safety Equipment At Kmp. Brr Operates Across The Ulee Lheue Crossing - The Aceh Provincial Bulk As An Effort To Improve The Aspects Of Shipping Safety

Anuar Tuip¹, Doharman L. Tungkup² & Muhammad Daffa³

ABSTRACT

Safety is on of the important aspects in ferry transportation. safety is shown not only to service users, but also to the ship’s crew. In 1996, to be exact, on January 19 in the waters of Ujung Seukeui, Sabang, the ferry KMP. The octopus drowned, the cause of sinking the KMP. Octopus because the ship which is supposed to carry about 200 passengers, carries nearly more than 400 passengers who are transported on the ship. Then the extreme weather and changing climate from the east caused the ship to roll causing 54 passengers to die, 284 passengers missing and only 40 passengers surviving.

1. Introduction

Figure 1.4 KMP. Octopus

To support passenger safety, the number and condition of safety equipment on board are important benchmarks. The safety tools that I will evaluate in writing the Mandatory Working Paper (KKW) on board the KMP ship. BRR among others:

The individual passenger safety equipment

- Jackets helper (life jacket)
- auxiliary buoy (life buoy)

Tool passenger safety groups

- Lifeboat (life boat)
- Boat helper (Life raft)
At KMP ship. BRR has safety equipment that is damaged and the number of equipment currently available is still less than the regulations stipulated by SOLAS 74, including the color of the life jackets that are faded and damaged, the lifeboats that are not functioning, and the number of rescue clothes is still insufficient if compared to the number of passengers (existing) who boarded the ship plus the number of crew (ABK).

Source: Aceh PKL team documentation (2020)

Figure 1. Conditions of Safety Equipment
In building the safety aspects of service users, the condition of safety equipment and the number of safety equipment must be considered in terms of the appropriateness of the tools and equipment so that in an emergency the existing safety equipment can be used properly as a form of carrying out the safety aspects of passengers on board. On the basis of the above background and also from the results of field surveys that have been carried out during the Field Work Practice (PKL), the author in the Compulsory Work Paper (KKW) takes the title Review of Life Safety Equipment Equipment at KMP. BRR Operates Across the Ulee Lheue Crossing - The Aceh Provincial Bulk As an Effort to Improve the Aspects of Shipping Safety.

2. Research Methods
Based on the background described above, so that the target does not deviate from the problem, a problem formulation is made, namely:
- What is the number of safety equipment for individual and group passengers aboard the KMP Ship. BRR has met the international regulations, Safety Of Life At Sea (SOLAS) ?
- What is the condition of the safety equipment for individual and group passengers on board the KMP ship. BRR complies with international regulations, Safety Of Life At Sea (SOLAS) ?
a. Goals and Benefits

1. Objectives
   a. To find out whether the number of safety equipment has met the requirements in accordance with the standards of the *Safety Of Life at Sea (SOLAS)* 1974 amendment 2014.
   b. To find out the condition of the safety equipment on board the KMP ship. BRR was in good condition so that it could be used properly.

2. Benefits
   a. Benefits for cadets to apply the knowledge that has been gained during their education in the River Lake and Crossing Traffic and River Transportation Diploma III Program as well as, fulfilling one of the final requirements in completing the Diploma III Program for River Lake and Crossing Transportation Traffic.
   b. Benefits for Institutions / Agencies for Educational Institutions / Agencies is as material to add insight to lecturers / teaching staff, cadets and the general public regarding the location where the Field Work Practice takes place.

b. Legal Foundation

The legal basis used in the implementation of this research is as follows:

*Safety Of Life At Sea (SOLAS) 1974 amendment 2014* Chapter III in section 2 of Regulation 21 Point 1 and Point

1. Regarding Rescue Boats and Lifeboats and in Regulation 22 Regarding Personal Life-saving Equipment that forms part of the maritime requirements of passenger ships.
   
   *Regulation 21*
   
   *Point 1*
   
   Equipped with a whistle, *light reflector* and lamp. At the store in a *conspicuous*
   
   Equipped with rope (30m),
   
   Lights> 6,
   
   Equipped with 2signals *smoke*.
   
   The lifeboat goddesses can be operated and in a *condition usable*
   
   Equipped with a *hydrostatic release unit*, easy to *Operate* and in good condition.

2. Law Number 17 of 2008 concerning Shipping
   a. Article 5, paragraph 1, shipping is controlled by the State and the guidance is carried out by the government. Development as intended includes:
   
   1. Regulation
   2. Control
   3. Supervision
a. Article 124 paragraph 2 ship safety is the condition of the ship that meets the requirements for material, construction, building, machinery and electricity, stability, structure and equipment including auxiliary equipment and radio, ship electronics, proven by a certificate after examination and testing.

b. Article 117, paragraph 2, shipworthiness is the condition of the ship that meets the requirements of ship safety, prevention of water pollution from ships, crew, load lines, loading, crew welfare and passenger health, legal status of ships, safety management and prevention of pollution from ships, and security management. ships to sail in certain waters.

3. Government Regulation Number 51 of 2002 concerning Shipping
   a. In article 5, paragraph 1, every ship is obliged to meet the maritime requirements of the ship which include:
      1) ship safety
      2) ship manning
      3) safe operation of the ship and prevention of pollution from the ship
      4) loading and
      5) legal status of the ship
   b. In Article 84 paragraph 1 All equipment, both permanent and movable, must be properly maintained and cared for and can be used at all times.

4. Government Regulation Number 20 of 2010 concerning Transportation in Waters In article 61 paragraph 3 Every ship serving ferry transportation is obliged to:
   a. Fulfill the technical requirements of maritime affairs and minimum service requirements for ferry transportation.
   b. Has technical specifications in accordance with the port facilities used to serve ferry transportation or crossing terminals on the served routes.
   c. Owning and / or employing crew members who meet the qualification requirements needed for a ferry.
   d. Has facilities for the needs of crew members as well as passengers and vehicles and their cargo.
   e. Includes company identity and ship name which is placed on the left and right sides of the ship and includes the necessary information or instructions in Indonesian and English.

5. Regulation of the Minister of Transportation Number 25 of 2015 concerning Safety Standards for River Lake and Ferry Transportation.
   a. Article 1 paragraph 1 Safety is a condition where safety requirements are met with regard to transportation in waters, at ports and in the maritime environment.
   b. Article 1 paragraph 2 The operator of facilities and infrastructure as well as human resources in the field of River, Lake and Crossing Transportation as referred to in paragraph 1 must meet safety standards.
c. Article 1 paragraph 3 The safety standard for River, Lake and Crossing Transportation as referred to in paragraph 2, is a reference for administrators of facilities and infrastructure in the field of River, Lake and Crossing Transportation which includes:

1) Human Resources
2) Facilities and / or Infrastructure
3) Standard Operating Procedure
4) Environment

**c. Theory Base**

1. Transportation
According to Fidel Miro in the book "Transportation Planning" (2010), that transportation is an effort to move, move, transport, or divert an object from one place to another, where in another place the object is more useful or can be useful for certain purposes.

2. Crossing Transportation
Government Regulation Number 20 of 2010 concerning Transportation in the water defines crossing transportation as transportation that functions as a bridge that connects the road network and / or railroad network separated by water to transport passengers and vehicles and their cargo.

3. Ferrying Ships
According to AbuBakar et al in the book "Crossing Transportation" (2010), that ferry is one of the most developed modes of transportation in Indonesia which is part of the National Transportation system which has its own characteristics. Ferry ships based on their functions are divided into 3 (three):

a) Ferry ships containing passengers.
b) Ferry ships containing vehicles.
c) Ferry ships containing passengers and vehicles.

4. Ship Length and Width
According to Bambang Triatmodjo in the book "Port Planning" (2010), the length of the ship is calculated from the tip of the bow to the back of the stern while the width of the ship is the maximum distance between the two sides of the ship.

5. Safety Equipment on Ships
According to Batti's (2000) essay, consisting of a place buoy in such a way as to both sides of the ship and along the side of the deck is open and at least one is placed in a location that is easily visible on the tail of the ship, then the hull armor must be available for everyone present on the ship.

6. Shipworthiness
According to Law Number 17 of 2008 concerning Shipping, Shipworthiness is the condition of the ship that meets the requirements for ship safety, prevention of water pollution from the ship, manning, loading lines, loading, crew welfare and passenger health, legal status of the ship, safety management and prevention of pollution from ships, and management of ship security for sailing certain waters.
d. Flow of Mind

In order for the purpose of this research to be focused and achieve the target, a research thought flow chart was drawn up. The flowchart of this thought can be seen in the following figure:

START
Field Observation
Problem Identification
Inventory

Data Primary

Data Secondary

Data

1. Number and condition of safety equipment on board.
2. Safety equipment documentation
3. Ship particular KMP ship. BRR
4. Inventory of KMP safety equipment. BRR

Data Management
Problem Analysis
Number and condition of safety equipment on board KMP.BRR
Troubleshooting
Recommendations
Completed

a. Helper jacket (Life jacket)
   - Helper jacket (Life jacket) available on KMP ships. BRR totaled 387 units of Life jackets for adults. This number is not in accordance with the carrying capacity (passengers and crew) where the crew must provide another 28 units, to 415 units from the number of adult passengers in order to match the number set by SOLAS
   - Storage location for locked life jackets
b. The buoy Helper (Life buoy)
   - The number of buoys Helper (Life buoy) which is onboard the KMP. BRR has 12 buoys where 2 buoys use Self Igniting Light.
   - There is no rescue buoy with smoke signals
c. Lifeboats (Life boat)
   - Based on the results of the analysis, KMP.BRR has 2 units of lifeboats, both units of lifeboats in KMP. BRR with a capacity of 10 people
   - Dewi-dewi on a lifeboat at KMP. One of the BRR’s was not functioning so the lifeboats could not be operated
d. Helper raft *(Life raft)*
- Based on the results of the analysis that KMP. BRR has 18 units of life raft
- one life raft can accommodate ± 18 gob
- All life raft is equipped with a *hydrostatic release unit*
- Total life raft and lifeboat enough to menanpung everyone aboard

3. Conclusion
Based on the results of the analysis carried out on KMP. Several conclusions can be drawn from BRR, among others:
1. There is still a lack of safety equipment for passengers on board the existing ships such as *life jacket* and *life buoy* at KMP.
2. BRR *Safety Of Life At Sea (SOLAS) 1974 amendments to 2014 Chapter III in section 2 of Regulation 21 Point 1 and Point 1.1 Regarding Rescue Boats and Lifeboats and in Regulation 22 concerning Personal Life-Rescue Equipment which is part of the marine eligibility requirements for passenger ships.
3. Lack of regular maintenance so that each tool is neglected so that there is safety-safety tools in untreated conditions such as the location where the helper jacket *(Life jacket)* are locked in KMP. BRR and one of the lifeboats that are not connected to the goddesses.

4. Suggestion
From the above conclusions, it is the suggestion that the authors can propose in an effort to increase supervision of the condition and number of safety equipment for passengers at KMP. BRR were as follows:
1. So that KMP managers. BRR to complete passenger safety equipment *(Life jacket, Life buoy, Life boat and Life raft)* on board in accordance with the *Safety Of Life at Sea (SOLAS) regulations* to support the safety aspects of service users.
2. The need for those who manage the KMP. BRR to facilitate access to the storage area *Life jacket* so that later on it is easy to apply by passengers and crew members and carry out routine and periodic maintenance (weekly / 2 weeks / monthly / 3 months / 6 months / year) available at KMP. BRR so that if a safety device is found that is in a damaged condition, it must be replaced with new safety equipment so that the safety equipment is always ready for use and the need for regular counseling or inspection from the local syahbandar regarding the completeness of the number of safety equipment and the condition of the safety equipment for passengers at KMP. BRR so as to create transportation safety for active service users.