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Review of Safety Equipment in Shipping (Case Study: Tools Birth of Float) in The KMP. Tanjung Burang, on Track Ulee Lheue – Balohan

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Abstract

The Ulee Lheue Ferry Port is managed by the Department of Transportation port city of Banda Aceh. The crossing port serves two tracks with 3 Ro-Ro ship operating and ship jetfoil 2. One important component in ferry transport is safety. Safety is not only to the service user but also to the crew. On ships operating in the Ulee Lheue Ferry Port there are many safety devices such damaged lifejacket, lifebuoy, lifeboat and the number of safety devices that do not fit the needs of the vessel based on the Safety Of Life At Sea (SOLAS).The conditions and the amount of safety equipment must be considered in terms of both the feasibility of tools and appropriate equipment so that in the event of emergency safety tools that exist can be used with either as a form of implementation of aspects of the safety of passengers on board. The number and condition of safety equipment that does not comply with the requirements could endanger the safety of lives of the passengers in case of accident. The number of safety devices must be able to accommodate the number of passengers and crew on board.

Keywords: Maritime Safety; Lifejacket; lifebuoy; lifeboat; liferaft.

1. Introduction

One important part of the marine transport is increasingly strategic role forward in the development of a maritime country is Ferry transport. The Ulee Lheue Port, which the Netherlands was written by By Leh, in the early 1900s was a strategic port in the region. This port is used as the location of landings, as well as berthing of ships from various neighboring countries like Malaysia and Singapore as well as the Dutch ships. Around the harbor, the Dutch built a military camp and shops Chinese traders. No wonder if the port of Ulee Lheue and its surroundings into one area that is quite busy at the time. Existing ferry transport activities are intended to support the needs of trade, to shop, to work, to school, to travel to the island weh (Kota Sabang), for it takes a mode of transportation that can accommodate all the needs of transport services in the field of water. Ships operating in the Ulee Lheue Ferry Port is the type ship Ro / Ro as KMP. BRR, KMP. Tanjung Burang, and ship types jetfoil (fast) as KMC. Express Cantika 89, KMC. Marine Express airport trajectory 8B waders Ulee Lheue - Balohan.

At the Port of Ulee Lheue track Ulee Lheue - Balohan vessel to operate 2 to 3 trip times crossing each day, ship Jetfoil (fast) which operates the private ownership of the vessel, namely PT. Sakti Inti Makmur, whereas type vessel Ro / Ro KMP. Tanjung Burang particularly PT.ASDP owned by Indonesia Ferry (Persero) branch of Banda Aceh, as well as the type of ship Ro / Ro KMP. BRR owned by the Ministry of Transportation Directorate General of Land Transportation submitted to the Department of Transportation Aceh province handed over to the management and maintenance PT.ASDP Indonesia Ferry (Persero) branch Banda Aceh with a system of rental boats per year. However on the type of ship Ro / Ro KMP. Tanjung Burang

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operating in the Ulee Lheue Ferry Port - a ship belonging Balohan old where shipbuilding in 1991 and an estimated life of 28-year-old ship in 2019 at this time. This vessel is produced by PT. Dumas Tanjung Perak Shipyard air-type Surabaya Ship Passenger / Ro-Ro in 1991 with a GRT of 540 GT which can carry 400 passengers and 12 vehicles mix.

In 1996, exactly on 19 January in the waters of Ujung Seukeui, Sabang ferry KMP. Octopus sink, causing the sinking of KMP. Octopus no other in karnakan ships should carry about 200 passengers, carrying nearly more than 400 passengers and vehicles are transported on board. Not only that, KMP. This octopus is a relatively old ship that operates on the track as well as the safety equipment that can not guarantee the safety of passengers on board.

To support the level of safety of passengers on board then provide passenger safety tools in particular aid to the buoy. As for aid to float on the vessel is divided into two functions: individual occupant safety apparatus such as, jackets helper (lifejackets), buoy helper (Lifebuoy) as well as tools such as the safety of passengers per group, Lifeboat helper, and the helper Raft (Inflatable Liferaft).

2. Research Method

In this study used multiple methods of data collection as a reference and comparison, the data collection according to the conditions and the location or place where the object is located. In the process of data collection used several survey methods to obtain data that is;

a.Primary data

Primary data is data obtained by conducting research and direct observation research location. The method used in the collection of primary data:

Observation method In doing this, surveyor observe the conditions of the object from the ground up research on things that can be used as data that can be analyzed in accordance with the existing problems which saw safety equipment present or does not exist and the condition of equipment available as well as counting the number of vehicles and passengers departing and arriving in the port of Ulee Lheue.

b.Secondary data

Secondary data is data obtained indirectly, but having been there at all related authorities. The methods used in obtaining this data is as follows:

Methods of literature which attempts to collect data and information based on the reference book as well as the existing regulations relating to the research conducted. In this method the object of the survey in the form of an institution or a person who has a document created by the institution may be books or do their own research results. This method deals with data collected from:

1) Road Transport Hall of business the first region of Aceh Province
2) Transportation Department Banda Aceh
3) PT. ASDP Indonesia Ferry (Persero) branch Banda Aceh
4) UPTD Ulee Lheue Ferry Port
5) Aceh Provincial Transport Department
6) The Central Bureau of Statistics Banda Aceh

3. Results and Discussion

a. Present condition

1) Lifeboat

At KMP. Tanjung Burang number of lifeboats provided two units equipped machine with a capacity of 10 people as well as tools such as cranes simple launcher that is not guaranteed safety.

2) Liferaft

At KMP. Tanjung Burang has 17 units liferaft with a capacity of 25 people where each is located on each side on the boat.

3) Lifejacket

At KMP. Tanjung Burang have a lifejacket for adults 427 pieces and 109 pieces of lifejacket for children in which the condition is not maintained, the color faded,

4) Lifebuoy

At KMP. Tanjung Burang have 12 pieces lifebouys ordinary (not using the lights) in poorly-maintained condition and placement positions difficult to reach.

b. Should Conditions Rescuers

1) Lifeboat

Based on the Safety Of Life At Sea (SOLAS) 1974 amendments to the 2014 Chapter III Regulation 21 passenger ships of 500 gross tonnage and over must carry at least one rescue boat side of the ship.

Table 1

Rescue Lifeboat needs

GT Ship	Minimum amount Lifeboat Rescue
<500 GT	1
> 500 GT	2

Source: SOLAS, 2014

2) buoys Helper

Based on the Safety of Life at Sea (SOLAS) 1974 2014 amendments to Chapter III, lifebuoy must be distributed to make available on both sides of the ship and lifebuoy requisite amount listed in the chart.

Table 2

The buoy needs Helper

long Ships	Minimum number Buoy Rescue
L <60 m	8
60 m> L <120 m	12

120 m> L <180 m	18
180 m> L <240 m	24
L> 240 m	30

Source: SOLAS, 2014

In addition, for passenger ships of less than 60 m in length must carry a minimum of six buoys equipped with lights that can light up themselves and at each buoy should be marked with the name of the ship.

3) jackets Helper

Based on the Safety Of Life At Sea (SOLAS) 1974 amendments to the 2014 Chapter III In Section II regulation 22, in addition to every passenger ship shall carry lifejackets no less than 5% of the total number of people on the boat and lifejackets must be stored in places that attract attention gathering place. Lifejackets to the passengers must be stored either in a public space, gathering station, or at the direct route between them so that the distribution and use does not impede the movement. Lifejackets are also equipped with lights and manner of use. On the Safety Of Life At Sea (SOLAS) 1974 2014 amendments to Regulation 7 of Chapter III, in addition to every passenger ship shall carry lifejackets for not less than 10% of children or as large as may be necessary to provide lifejackets for each child.

4) Life raft

Based on the Safety of Life at Sea (SOLAS) 1974 2014 amendments in Chapter III Section II lifesaving equipment (Passenger Ship), Raft Helper holds the overall capacity that will accommodate at least 25% of the total number of people at the top must be used in ship. Helper at least one piece of equipment at the launch of each side.

c. Plan conditions

As mentioned in the previous discussion regarding the existing problems, the author tries to analyze the problem so that it can take the conclusion that can later be used as a solution or problem-solving for the ship. To this author discusses:

1) lifeboat Rescue

Based on the Safety Of Life At Sea (SOLAS) 1974 amendments to 2014 in Chapter III, section II regulation 21 passenger ships of 500 gross tonnage and over must carry at least one rescue boat, in the respective sides with an overall capacity that accommodates no less than 50% of the total number of people on board.

Picture 1

Lifeboat Rescue

From the analysis above it can be seen that the vessel does not meet the requirement of completeness to the lifeboats, the Safety Of Life At Sea (SOLAS) 1974, amendment in 2014 clearly set to ship with GT above 500 are required to bring each - each one lifeboat on each side, but in It was carrying 2 lifeboats with a capacity of 10 people. And also Lifeboat Rescue Rescue Lifeboat provided not supposed to.

Picture 2

Conditions That Lifeboat Should be

Lifeboat conditions provided is not recommended to sloop ship, the conditions that must be provided is a lifeboat that has a launcher in the form of the goddess - Dewi on each - each side of the ship as well as a rooftop air. A motor lifeboat shall meet the following requirements:

a) should equipped with an engine with compression ignition and arranged so that at any time in the state ready for use; must be turned on immediately in any circumstances; must be provided enough fuel for 24 hours continuous operation at speeds that are detailed.

b) Machine and equipment must be closed properly to ensure operations in bad weather conditions, and the lids machines should be fireproof. The retreat should be done.

c) speed in calm water when fully loaded with the number of people allowed and equipment shall:

   [1] inside the things helper motor lifeboats to be carried on passenger ships, tankers, ships that are used as vessels whale factory ships as processing or canning of fish and ships used to transport people who are employed in the whaling, fish processing industries or canning fish, at least 6 miles per hour (knots).

   [2] inside the case of any other motor lifeboat at least 4 miles per hour (knots).

Volume tools of buoyancy in of the lifeboat motor must be increased above the volume required by the amount, if any, by which the volume of the means of buoyancy in is required to support the machines and furniture, and if equipped with spotlights and installation telegarafradio and tools equipment, exceeding the volume of the tools required buoyancy, with the average value of 0,083m3 (1ft3) per person, to support additional people who can ditampungoleh lifeboat if the motor and the equipment and if equipped with floodlights and installations telegrafradio and complementary tools, eliminated.

Normal supplies for each lifeboat shall consist of:

a) paddle floating every sengkar (bench latitude), two spare buoyant oars, and a buoyant steering oar, a paddle or a half kelit buffering device, installed in the lifeboat with ropes or chains, a lifeboat.

b) two stopper for each hull plugs (plugs are not required when the valves are fitted with an automatic right), tied to the lifeboats helper with ropes or chains; a dewatering apparatus and two buckets of approved material.

c) A rudder attached lifeboat with a tiller.

d) two fruit axes, one at each end of the lifeboat.

e) an oil lamp enough for 12 hours; 2 boxes of cigarette lighter in a waterproof container.

f) a pole or over-the rigging with rigging following zinc coated wire screens (orange);

g) a guidelines efficiently in house guidelines illuminated or equipped for adequate lighting.

h) rope safety tied outside circumference lifeboat.

i) a sea anchor (anchor floating) with an approved size.

j) two fishing ropes, one tied at the front end of the lifeboat with a noose and latitude stake so that it can be removed and the other should be fastened tightly in front Linggi lifeboat and ready to use

k) a vessel liters (1 gallon) of vegetable oil, fish oil or animal oil. The vessel must be constructed so that the oil can spread through the water with ease, and laid out so that the vessel can dipautkan on sea anchor (anchor floating).

l) food, determined by the Administration, for each person is justified by the lifeboat. These food-ration ration should be stored in airtight areas that should be included in a watertight container.

m) a water-tight container containing 3 liters (6 pints) of fresh water for each person shall be transported by lifeboat, or places watertight which contains 2 liters (4 pints) for each person with the appliance approved bidders sea water which can produce 1 liter (2 pints) of drinking water per person; a canting stainless with straps; a cup rust resistant.

n) for fruit parachute flare of type approved, can produce bright red light at a high altitude; six hand torch of the type approved to produce light of red.

o) two smoke fruit gesture of type approved (to be used during the day) to deploy a number of orange smoke.

p) approved to allow people to hold on to the boat if the boat upside down, in the form of side hull or keel rails together hold ropes tied from the canopy to canopy through the bottom of the keel, or other approved arrangements are.

q) approved first accident in a watertight box.

r) watertight flashlight that can be used for member cue in morse code along with a spare battery and a spare bulb in a waterproof container.

s) mirror for cues during the day members of the type approved.

t) folding knife fitted with a tin opener to be bound in a lifeboat with straps.

u) two fruit slingshot (discharge strap) is lightweight and can float.

v) hand pump of the type approved.

w) decent box for storing small items of equipment.

x) distilled or equivalent sound signals.

y) fishing hook.

z) cap approved with very striking colors which can protect the occupants of the lifeboat to the pain because of the openness.

aa) Sheet pictorial list of cues rescue.

All goods supplies lifeboats, except lifeboats to be prepared for the purposes of deterrence, must be tied properly in lifeboats, the bond must be such so as to ensure the safety of equipment and does not interfere with lifting hooks or impede the readiness of embarkation. All lifeboat equipment items should be small and light as possible and must be packed in decent shape and concise.

2) The buoy Helper (Lifebuoy)

Based on the Safety Of Life At Sea (SOLAS) 1974 2014 amendments to Chapter III, lifebuoy must be distributed so provided on both sides of the ship and lifebuoy required amount listed in the following table.

Table 3

Conditions Rescue Buoy

Number	Ship name	Boat Length (m)	Available	SOLAS	Information
1	KMP. Tanjung Burang	45.35	12 Units	8 Units	Only the usual buoys

In addition, for passenger ships of less than 60 m in length must carry a minimum of 8 buoys with details of six buoys equipped with lights that can light itself and two buoys usual. at every buoy shall be marked with the name of the ship. Lifebuoy ring size in 400mm, 800mm outer circumference. Lifebuoy clearly written on the name of the vessel, where the registration of the ship, lines that glow. In there Lifebuoy light and smoke signal (MOB), with the specification; 3-year battery life, strap 1 meter, connected in lifebuoy, there is a junction point for MOB, MOB is equipped with flashing lights to signal people fell into the sea at night and contain orange smoke to signal people fell into the sea at noon.

From the analysis above the number of buoys helper in KMP. Tanjung Burang currently numbering 12 units float ordinary (not using the lights), laying less strategic (Picture 14) and did not qualify for a number of buoys that must be provided under the rules of the Safety Of Life At Sea (SOLAS) 1974 amendments to the 2014 sexy regulations 21 that the ship has a length of less than 60 meters has a minimum of 8 units where the auxiliary buoy 2 units and 6 units of regular buoy buoys with lights that can light yourself, then didapatlah conclusion that the number of buoys rescuers should be provided at KMP. Tanjung Burang ie 8 Unit buoy in a state Good with unusual details Unit 2 and 6 Units buoy buoys with lights and laying that is easily reached.

Picture 3

The buoy conditions (Lifebuoy) Available

To buoy Helper with lights, the ship must provide at least 6 Self igniting light to eventually mounted on buoys and Self light are stored in the box on the shelf upside down head down, when throwing into the sea the lights will be floating heads up then the light will flammability.

Picture 4

Lifebuoy and Self igniting Light For lifebuoy

3) Jackets Helper (lifejackets)

Helper Jackets Adult

Based on the Safety Of Life At Sea (SOLAS) 1974 2014 amendments to Chapter III Section II regulation 22, in addition to every passenger ship shall carry lifejackets no less than 5% of the total number of people on board.

Picture 5

Adult lifejacket

Availability Jackets Helper Adult obtained from Number of Passengers and Crew multiplied by 5% and added Total Capacity Passenger and Crew.

Table 4
Analysis of Availability Jackets helper (lifejackets) for adults

No.	Ship name	passenger capacity	Total ABK + Master	Number Jackets Helper Must Supplied
1	KMP. Tanjung Burang	385 people	19 people	(404x5%) + 404 org = 424 units

Table 5
Comparison Availability Jackets helper Adults

No.	Ship name	SOLAS	Available	Information
1	KMP. Tanjung Burang	424 Units	427 Units	Poorly maintained (broken), the colors are less bright, the non-strategic, life is running out

Here is a comparison Jackets Adult Helper Helper provided with a jacket that must be provided. From the above analysis result number helper Jackets (lifejackets) for adults in KMP. Tanjung Burang 427 units, while based on the rules by the Safety Of Life At Sea (SOLAS) 1974 amendments to the 2014 Chapter III Section II regulation 22, in addition to every passenger ship shall carry lifejackets no less than 5% of the total number of people on board, as well as stored in a place easily visible, strategically, so as not rescue processes passengers. Helper Jackets Children – Child On the Safety Of Life At Sea (SOLAS) 1974 2014 amendments to Chapter III of regulation 7, in addition to every passenger ship shall carry lifejackets not less than 10% for children - children. Availability lifejacket child - Child Passenger derived from the total capacity multiplied by 10%, then we got was the amount that must be provided.

Table 6
Analysis of Availability Jackets helper (lifejackets) for Children

No.	Ship name	passenger capacity	Total ABK + Master	Number Jackets Helper Must Supplied
1	KMP. Tanjung Burang	385 people	19 people	395x10% = 40 units

· Analysis Report, 2019

From the analysis above it can be seen the comparison condition with the condition are supposed Table Below.

Table 7

Comparison Availability Jackets Rescue Children

No	Ship name	SOLAS	Available	Information
1	KMP. Tanjung Burang	40 units	109 units	-

Source: Survey Results PKL team in Aceh, 2019

From the above analysis result number helper Jackets (lifejackets) for children in KMP. Tanjung Burang 109 units, while for clothing helper (lifejackets) children of at least 10% of the total number of existing passenger ship. So the conclusion that the number of helper Jackets (lifejackets) for children to be provided KMP. Tanjung Burang are in accordance with the number of passengers on board. And lifejackets must be stored in places that attract digeladak or gathering place, lifejackets to the passengers should be kept well diruang public, gathering stations, or dirute directly between them so that the distribution and use does not impede the movement. Lifejackets are also equipped with lights and manner of use. Additional sailing vessel less than 24 hours should provide special lifejacket for infants 2.5% of the total number of passengers on board.

4) Inflatable Liferaft

Based on the Safety Of Life At Sea (SOLAS) 1974 2014 amendments in Chapter III Section II lifesaving equipment (Passenger Ship), life raft to accommodate the overall capacity that will accommodate at least 25% of the total number of people on board. The life raft should be served with at - least one launcher equipment on every side. Liferaft Placed on the cradle, in such a way that the lashing fastened through HRU become one with the body of the ship. HRU lashing connected and tied to the cradle, launched the liferaft by turning the handle and dragging it so that the arm brace the open ocean side of the liferaft and liferaft slid into the sea. Lowering the liferaft by means of a mechanism; Make sure the painter line attached to the body of the ship, open lashing, turn the handle to the right, pull handle, arm brace liferaft ocean side will open and be the cornerstone of the launcher, liferaft will slide by itself, painter line will be snapped and result in tube 02 open air in the system buoyancy, opens into a liferaft canopy

Picture 6

Conditions Rescue Raft (Inflatable Liferaft)

From the analysis, it can be concluded that the amount that must be provided to qualify the completeness of the safety equipment on board ship by SOLAS ie, 4 units of ILR, obtained from 25% of the total number of passengers and then divided by the capacity of the liferaft, and it can be concluded that the number of the liferaft provided sufficient to qualify completeness. On the equipment liferaft there are emergency pack equipment that some equipment has a period to expire should be replaced annually (Parachute, redhand flares, smoke signals, dringking water ration, food ration, anti-sea sickness, first aid kits), then from the ILR (Inflatable liferaft) should be in service, maintenace and re recertification every year to ensure that the liferaft suitable to be used for the safety of the crew or passengers.

d.What's New Electoral System

An analysis has been conducted found that there is still a safety tool that is lacking, then selected was a new system for each - each Safety Equipment namely:

1) lifeboat Helper
   KMP. Tanjung Burang will replace the old Lifeboat Helper that leverage Dewi - Dewi as launchers, and will be supplied 2 units distributed in each - each side of the boat with the complete equipment.
2) lifebuoy Helper (Lifebuoy)
   Tanjung Burang ship, will provide 8 units lifebuoys with details of at least 2 units and 6 units regular lifebuoys lifebuoys with lights, and will be distributed to be provided on both sides of the ship.
3) Jaket Helper (lifejackets)
   Tanjung Burang ship will provide 464 units of new helper jacket with details Jackets Rescue 424 Unit 40 Adult and Child Rescue Unit Jacket - children. As well as the Helper Jackets should have lamps, otherwise eligible to use, and has a striking color.
4) Raft helper (Inflatable Liferaft)
   Helper raft will be checked regularly at intervals of no more than 12 months.

e.Comparison and Benefits Between Systems Available With Conditions Who is planned

1) From the analysis of existing ship Burang KMP.Tanjung have two lifeboats on the two sides of the ship. And the lifeboat was deemed not eligible for the lifeboats Rescue wear because they do not have a good launchers are in place, as well as a small capacity.

a) lifebuoy Helper (Lifebuoy)
   Currently buoy helper (Lifebuoy) which is onboard KMP.Tanjung Burang has 12 units of which 12 units of auxiliary buoy floats only regular without self igniting light and less well maintained condition.
b) Jaket Helper (lifejackets)
   Jackets helper (lifejackets) which is onboard KMP.Tanjung Burang totaled 536 units with 427 units helper jacket (lifejackets) for adults and 109 units helper jacket (lifejackets) for children, that amount sufficient to passengers transported and crew onboard ,
   At KMP. Tanjung Burang circumstances helper jacket storage cabinets locked, and broken.
   Jacket condition that less well maintained, and the colors are faded.
c) Raft Helper (Inflatable Liferaft)

Current conditions helper Raft (Inflatable Liferaft) which is onboard KMP.Tanjung Burang has 17 units with a capacity of 25 persons / units, such amounts in accordance with a payload capacity (passengers and crew) on board, but must still do a routine inspection, according the date of the examination.

conditions plans

2) Results analysis shows that KMP.Tanjung Burang should replace Rescue Lifeboat Lifeboat Rescue with a new one, which has a launcher in the form of the goddess - the goddess-worthy and large capacity.

a) Lifebuoy Helper

On Burang KMP.Tanjung should add 8 units buoy with details of 6 buoys with lights that can light up when it is submerged in water and 2 buoys usual. Conditions helper planned float made of good quality material, has a construction and a good buoyancy, given striking colors as well as pass a trial production.

b) Jacket Helper (lifejackets)

From the analysis of onboard KMP.Tanjung Burang should have 536 units helper jacket (lifejackets), 427 units to 109 units for adults and children. Each jacket helper (lifejackets) should be placed in a place easily accessible by passengers and crew who were on board, a lockable storage space if need their emergency kits to open or damage the storage area in an emergency. Each jacket Helper must have lights and flashy colors.

c) Raft Helper (Inflatable Liferaft)

In the analysis of Burang KMP.Tanjung still perform regular audits of life raft.

e.Proposed Troubleshooting

From the analysis, the KMP. Tanjung Burang must replace it with a new Rescue lifeboat, which has a davit (davist) and large capacity.

Lifeboats must be maintained and must be always in ready to use and includes the name of the ship.

1)Lifebuoy Helper

From the analysis, the KMP. Tanjung Burang should add 8 units Buoy helper with details of 6 units helper buoys with lights and 2 units of ordinary float.

Conditions should buoy helper in good shape, have constructs and good buoyancy, and has passed the colors prominently and trial production.

2)Jacket Helper

From the analysis, the KMP. Tanjung Burang Jackets helper prepare a number of 427 units for adults and 109 units for child - friendly, and Must be eligible Jackets Rescue with disposable lamp. Helper jacket should be put in place which is easily accessible by passengers and crew.

Jackets auxiliary storage area should not be locked, if forced in the key must be provided opener forced to emergencies.

3)Rakit Helper

Helper rafts must always be checked regularly to avoid raft Helper expired and can not be used.

4. Closing

a. Conclusion

Based on the analysis and discussion obtained from the author of this mandatory working paper addresses the issue of passenger safety equipment review can be concluded among other things:

1) From the analysis results can be seen that there are some safety equipment that does not comply with the regulations of Safety Of Life At Sea (SOLAS) 1974 amendments to the 2014, the equipment has not been completed, such as:
   a) Lifeboat
   b) Jackets Helper (lifejackets)
   c) The buoy Helper (Lifebuoy)
   d) Raft Helper (Inflatable Liferaft)
2) From the analysis results can be inferred from the conditions of safety equipment on KMP. Tanjung Burang are:
   a) Lifeboat
      At KMP. Tanjung Burang have amounted lifeboat 2 unit is not equipped with a davit and a small capacity and does not meet the applicable requirements, the set should be.
   b) Jackets Helper (lifejackets)
      [1] In the KMP. Tanjung Burang helper jacket amount available to meet the requirements.
      [2] Place the helper jacket storage in a locked state, and the door difficult to open or jammed.
      [3] Conditions unmaintained.
   c) The buoy Helper (Lifebuoy)
      At KMP. Tanjung Burang there are 12 units of regular auxiliary buoy, which supposedly should have 8 Buoy helper with details of 6 buoy helper with lights and 2 regular auxiliary buoy.
   d. Raft Helper (Inflatable Liferaft)
      At KMP. Tanjung Burang, for liferaft needs are met, and still have to be checked regularly.

b. Suggestion

Based on the conclusions in the paper work required to author a review tool neighbor passenger safety above KMP. Tanjung Burang above authors give suggestions as follows:

1) From the above conclusions, the authors suggested that the particular service provider PT. ASDP Indonesia Ferry (Persero) Banda Aceh branch that manages the safety equipment's Performance of passengers on KMP. Tanjung Burang on track Ulee Lheue - Balohan follow the regulations in the Safety Of Life At Sea (SOLAS) 1974 2014 amendment for the salvation of the souls of the passengers and crew of the ship.
2) In efforts to control the condition and the number of passenger safety tool above KMP. Tanjung Burang on track Ulee Lheue - Balohan is as follows:
   a) Lifeboat

Replacing the gig with a larger capacity, with davit as a launcher, as well as taking care of the lifeboat both the outside and inside the lifeboat and davit are to be checked regularly.

b) Jackets Helper (lifejackets)
Lifejackets replace damaged with new ones, which use light and durable materials in accordance with the standards based on the Safety Of Life At Sea (SOLAS) 1974 amendments to the 2014, as well as the placement that is easily reached in case of an emergency.

c) The buoy Helper (Lifebuoy)
Replacing buoys yamg broken with a new one that has lights at least 6 units buoys have lights and 2 units do not use the lights, put a buoy in an accessible place and in view in order to facilitate the rescue process using buoys, maintain and ensure the buoy in the circumstances worthy wear, given a name sign board, and the recording of the mark boats in production / registered.

d) Raft Helper (Inflatable Liferaft)
Perform regular maintenance within 6 months to 1 year, checked 1-2 months, make sure Inflatable liferaft ready for immediate use. Then make sure the cradle does not rust if rust immediately replaced with new ones, as well as the HRU (Hydraustatic Release Unit) that can be operated properly and also regular maintenance, when it reaches 2 years of the HRU (Hydraustatic Release Unit) must be replaced in order at the time of the operation liferaft is not hampered by damage to the HRU (Hydraustatic Release Unit).

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