Evaluation of Vehicle Transportation Procedures on Board Crossing Ships at Ulee Lheue Port – Balohan, Aceh Province

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Abstract

Ulee Lheue Crossing Port is one of the ports in Aceh Province, which serves the Ulee Lheue – Balohan, Ulee Lheue - Serapung, Ulee Lheue - Lamteng. The stability or balance of the ship is important for the safety and security of the ship. Vessels loaded with excessive vehicles and goods endanger service users. This study aims to: 1) Find out the suitability of vehicle transportation procedures and 2) Know the need for the number of fastening tools. The method of collecting data by direct means of spaciousness is by measuring the distance between vehicles, loading the conditions of vehicle placement. The analysis that will be used is guided by PM Number 115 of 2016 concerning Procedures for Transportation of Vehicles on Ships and PM Number 30 of 2016 concerning Vehicle Binding Obligations on Crossing Transport Ships. The results of the analysis show that: 1) The placement of vehicles on board the ship is not in accordance with applicable regulations 2) The suitability of the distance between the sides of the vehicle on board the ship is not in accordance with the applicable Regulations 3) There is no fastening on board the ship that is in the row of bow, middle, stern 4.) The fastening tools on the ulee Lheue – Balohan track boat were insufficient as analyzed. The advice given by the author is that it is necessary to socialize by related parties regarding the implementation of binding policies and transportation procedures contained in PM 115 of 2016 and PM 30 of 2016 To operators, service providers, and Port supervisory officers.

Keywords: Transportation, Fastening, Vehicles, Ships

1. Introduction

Ulee Lheue port is located in Meuraxa District, Banda Aceh. Ulee Lheue port has a very important role in supporting economic activities and equitable development in Aceh province because water transportation is one of the modes of transport that connects the Ulee Lheue-Balohan, Ulee Lheue-Lamteng and Ulee Lheue-Serapung crossings. At the Ulee Lheue – Balohan crossing Port, there are 2 (two) crossing ships managed by PT ASDP Indonesia Ferry
(Persero) Banda Aceh branch, namely the KMP crossing ship BRR and KMP ACH HEBAT 2. Through this port hundreds of people every day go back and forth to various destinations, the operating hours of Ro-ro ships from Ulee Lheue Port – Balohan port every day starting at 08.00 WIB, at 11.00 WIB, and at 16.30 WIB with an average mileage of 2(two) hours of travel.

Review the events of the KMP shipwreck. Octopus trajectory Balohan Sabang at the time of sailing caused by overload and not binding the vehicle. This event occurred on January 19, 1996 which resulted in 12 (twelve) four-wheeled, 16 (sixteen) two-wheeled, and 378 (three hundred and seventy-eight) people drowned. Based on the data collected 40(forty) people were declared safe, 54 (fifty-four) people were found dead, and 284(two hundred and Eighty-Four) people were declared missing.

The results of observations during conducting research on the ship crossing the track Ulee Lheue-Balohan there are several aspects that are not in accordance with the established rules that found the distance of one vehicle to another vehicle is too tight, the vehicles that enter the ship in position without security rope (lashing), the loading space of the vehicle has not been sterile from passengers, and placement of Class II vehicles placed transversely.

Based on the background described above, it is necessary to “Evaluation of Vehicle Transportation Procedures on Board Crossing Ships at Ulee Lheue Port – Balohan, Aceh Province”

2. Research Method

The type of research used is to use research with descriptive quantitative methods. According to Arikunto (2006) descriptive quantitative research method is a method that aims to create an image or descriptive of a situation objectively using numbers, ranging from data collection, interpretation of the data and the appearance and results.

Descriptive quantitative research using data collection techniques with observation that is by measuring, observing and recording so that this type of research is included in the type of qualitative research.

This study focused on optimizing and evaluating the procedures for transporting vehicles on board the ship and also to determine compliance with the circumstances and applicable legal provisions.

The research method is optional for original research articles. This method is written in In a study, research methods and techniques relate to the quality of the data obtained. Namely by using methods including:

a. Primary Data

According Sugiyono (2016: 225) primary Data is data that can be seen directly. The Data were obtained from observations, measurement results, and interviews with both views on an event or situation that occurred at the research site. The Data obtained as follows:

a. Productivity Data for 14 days.
b. Photo documentation of vehicle maintenance performance on board
c. Vehicle range Data on board

b. Secondary Data
The Data below are data obtained based on observations of other people and the results of the report as a whole, basically the nature is to get credit from primary supporting data and background information for field observations. In processing the data below:

a. PT. ASDP Indonesia Ferry (Persero) Banda Aceh Branch, the data obtained in the form of: ship characteristics Data, organizational structure
b. Transportation Department of Aceh province, the data obtained in the form of: port layout
c. Transportation Management Center Region I Aceh province, the data obtained in the form of: Port productivity Data for the last 5 years.
d. Central Bureau of Statistics of Aceh province, the data obtained in the form of: data overview of the research area.

3. Results and Discussion

Based on the results of the analysis obtained, it is known that the conditions of transportation of vehicles on board based on the Minister of Transportation Regulation No. 115 of 2016 and the Minister of Transportation Regulation No. 30 of 2016 do not match the conditions of transportation of vehicles on board the Ulee Lheue – Balohan crossing. Where there are still many rules that are still not implemented such as the distance between adjacent vehicles, the location of the vehicle is still transversely and The Binding of the vehicle is still not in accordance with the rules and there is even no binding.

The following is the procedure for transporting vehicles as a reference in the next planning, which is as follows:

1. Vehicle Height Limiter
   Vehicle height limiter is done to determine the height dimension of the vehicle. This is an initial scheme before the vehicle enters the ship because the ship's deck has a maximum limit and if this scheme is not carried out, vehicles that exceed the height of the ship's deck will not be able to enter the ship and it is difficult to turn back. At the Port of crossing Ulee Lheue unavailability of portal facilities, it should be at the Port of Ulee Lheue immediately provide portal facilities.

2. Vehicle Weight Scales
   Based on the results of the analysis of existing systems with the planned system obtained, starting with the vehicle to be loaded on board after passing through the vehicle height limiting portal is weighed on the vehicle weighing device then the information on the weight of the load is held by the service user in the form of a ticket containing information on, if the service user does not have Vehicle Weight information, the officer at the toll gate may not serve the service user, then the officer at the toll gate returns the ticket weight information to be forwarded to the operator which is specifically intended for vehicle binding officers in order to arrange vehicle binding. At the Port of Ulee Lheue there is already a weigh bridge facility.

3. Transportation of vehicles on board
   a. Conditions Of The Distance Plan Between Vehicles.
      From the results of the analysis, the placement of a safe distance between vehicles on the ship should be in accordance with the regulation of the Minister of Transportation number 115 of 2016. The specified distance between vehicles is:
      1) Distance between one side of the vehicle 60cm;
      2) the distance between the face and back of each vehicle is 30cm; and
      3) for vehicles whose side is adjacent to the vessel wall, a distance of 60cm is calculated
from the inner wall layer or the outer side of the ivory-ivory.

b. Vehicle Loading Space Conditions

1) cleanliness of vehicle loading space from oil and grease (grease)

The ship operator must maintain the cleanliness of the deck floor from oil and grease. After the completion of the process of loading and unloading the vehicle so that when loading the condition of the loading space is ready and clean

2) sterilization of vehicle loading space from passengers

Control is carried out for passengers directed by the ship operator so that passengers do not sit in the vehicle while sailing, and must wait in a waiting room that has been provided specifically for passengers.

c. Placement of vehicles on board

The placement of all vehicles transported on the ship is required to be longitudinal or elongated in the Bow or stern should not be placed transversely.

d. Fastening of vehicles on board

The types of vehicle fastening tools required for vehicle fastening on ships operating in the Ulee Lheue ferry port, can be seen in the following table:

<table>
<thead>
<tr>
<th>No</th>
<th>Required tools</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chain with ganco</td>
<td>Chain with ganco</td>
</tr>
<tr>
<td>2</td>
<td>Chain with fasteners</td>
<td>Chain with fasteners</td>
</tr>
<tr>
<td>3</td>
<td>Sling fastener with toothed lock model ganco on both ends</td>
<td>Sling fastener with toothed lock model ganco on both ends</td>
</tr>
</tbody>
</table>
e. Binding Procedure
The Binding of the vehicle to the specified bow, middle and stern parts of the vehicle type itself, should correspond as the following example:
1) 3.5 (three point five) tons to 20 (twenty) tons, must use at least 2 (two) fastening tools on each side.
2) 20 (twenty) tons to 30 (thirty) tons, must use at least 3 (three) fastening tools on each side.
3) 30 (thirty) tons to 40 (forty) tons, must use at least 4 (four) fastening tools on each side

f. Provision of the number of fastening means of vehicles on board
The provision of the number of vehicle fastening tools on the Ulee Lheue – Balohan track ship has not been in accordance with applicable rules. Providing enough lashing tools to make the voyage is an obligation for every ship. However, the Ulee Lheue - Balohan track ship has not provided sufficient fastening tools

4. Comparison and benefits between the existing conditions with the planned conditions
Based on the results of the above analysis, it can be concluded that the comparison between the current condition and the planned condition, the comparison can be seen in Table

<table>
<thead>
<tr>
<th>Table 2. Comparison of current conditions with planned conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No</strong></td>
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<tr>
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<tr>
<td>1</td>
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<tr>
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<td>9</td>
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<td>10</td>
</tr>
</tbody>
</table>

4. Closing

a. Conclusion

1) The procedure for transporting vehicles on a crossing ship on the Ulee Lheue – Balohan track is still not in accordance with the transportation of vehicles regulated in the Minister of Transportation regulation number 115 of 2016 concerning procedures for transporting vehicles on board. Namely:
a. Absence of portal. The vehicle to be transported on the ship is not limited by the vehicle gauge allows the occurrence of circumstances in which a vehicle that exceeds the height of the ship's deck will be stuck.
b. Vehicle placement is still present transversely.

2) Every vehicle that is on board either the front (bow), middle (midship), rear (Stern) is not done binding the vehicle.
   a. The ship operator has not maintained the distance between vehicles on board.
   b. The loading space is not sterile from the presence of passengers during the voyage.

3) Fastening tools needed are 36 fastening tools, the number of fastening tool needs is taken from the highest vehicle productivity

4) The availability of fastening tools is not in accordance with applicable regulations because only vehicle straps are available.

b. Suggestion

Based on the conclusions above, then there are some suggestions or enter as follows:

1) Procedures for transporting appropriate vehicles according to Minister of Transportation Regulation No. 115 of 2016
   a. The need to build a portal facility whose height must be adjusted to the height of the ship's deck, so that vehicles can enter the ship without getting stuck on the ship's deck when high waves occur in the dock area.
   b. The ship operator must place the vehicle no longer transversely, but longitudinally placed in the bow or stern of the ship.
   c. The operator must pay attention to the distance between vehicles in accordance with the regulation of the Minister of Transportation number 115 of 2016. The provisions of the distance between vehicles in accordance with applicable regulations can be seen in Table below:

<table>
<thead>
<tr>
<th>Distance on Section</th>
<th>Standard (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front</td>
<td>30</td>
</tr>
<tr>
<td>Rear</td>
<td>30</td>
</tr>
<tr>
<td>Right</td>
<td>60</td>
</tr>
<tr>
<td>Left</td>
<td>60</td>
</tr>
<tr>
<td>Wall</td>
<td>60</td>
</tr>
</tbody>
</table>

d. Control by the ship's officers for passengers is directed to the waiting room so that the loading space is sterile from passengers at the time of sailing.

2) Fastening tools and vehicle wheel clamps must be immediately procured and equipped and vehicle fastening must be carried out in accordance with the provisions of both the number and type of lashing tools used.
5. References