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Performance of Safety Sea Transportation

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Abstract

Indonesia is the world's largest archipelago, 2/3 of the country is covered by sea. But due to many factors a lot of ship accidents occurred every year, and claiming a large number of casualties. Efforts have been done to improve the safety of domestic sea transportation, as the result to be fully compliance to the SOLAS regulations, worsen by the varying sea and cargo characteristics, and low educated passengers, they are very vulnerable to accidents. Most of the accidents occur due to the low awareness of the aspects of security and safety of the crew. The figures differ from the manifest of passengers and number of passengers on the ground become commonplace. There are four main issues in maritime transport, it is said, not the individual agencies or Government willing to hold responsibility for the security and safety, pricing policy, the quality of human resources, as well as the implementation and compliance with the rules are not clear.

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Keywords:

1. Introduction

In Indonesia, the department of transportation (Departemen Perhubungan/Dephub) as a party who holds the authority of the application of the IMO (International Maritime Organization) called SOLAS (Safety Of Live At Sea). In terms of administration -- has given construction, an examination of the electricity and the engine of a ship to the Bureau Classifications Indonesia (Biro Klasifikasi Indonesia/BKI). Meanwhile , other aspects , like; radio , installation security at the top of a vessel, means of salvation, etc is exercised directly by Dephub through marine inspector. The condition of such as these things often termed by the ship owner with multiple domestic classification. Initially being classified by BKI then by Dephub . In another country, usually classifications do almost the entire of associated with safety aspect of a ship for administration has been given to them. Closely monitor information the survivor of various accident ship that occurred

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in Indonesia and invention authorities who investigates the cause of the accident, observed that majority of the dead falls because tools safety got onboard insufficient or not functioning duly . In the case of fire Motor Ship (Kapal Motor/KM) Levina, out that sprinklers to spray it does not work . Meanwhile , in a KM Teratai Prima, as revealed by the victim survived, there was no notice of anything from a crew of a state of emergency. Ironically, if seen from the aspect of a certificate for the salvation , the ships certificate was complete . In fact, in the case of KM Teratai Prima, the ship having completed the ship docking.

2. ISM (International Safety Management) Code

ISM Code international safety management is a standard in the operation of ships as well as prevention efforts/controlling environmental pollution. In accordance with the awareness of the importance of the human factor and the need for improved operational management in preventing the occurrence of accidents aboard ship, man, the charge of goods/cargo and property as well as to prevent the occurrence of pollution of the marine environment. IMO issued a regulation on ship safety management & amp; the protection of the marine environment, known as the rules of the International Safety Management (ISM Code) which is also consolidated in the SOLAS Convention. Basically the ISM Code regulating the management of safety as well as ship shipping company including human resources to handle it. For cruise companies, should be designated a-level managers who called DPA (the Designated Person Ashore/designated People on land). He is responsible and perform surveillance of safety (safety) of the shipping company. The Manager in charge of this should be responsible and have direct access to the Commander-in-Chief (President/owner of the ship) of the shipping company. For ships, each ship must have system and countermeasure and prevention procedures to disruption of safety (safety) and in its implementation should appoint an officer responsible for conducting surveillance of safety (safety) of ships and the prevention of pollution from ships. Conditions in the field, especially in the corners of the motherland shows that the rules regarding the reporting of safety management systems (safety management system) is often manipulated. Whereas in order to maintain the safety of the ship and the environment, put in place a system of ISM Code is accompanied by a Designated Person Ashore (DPA) to control the ship and company management periodically. ISM Code does not apply to ships with the size of less than 500 GT. The purpose of ISM Code is to provide an international standard of ship management and operations are safe and prevent pollution. Some components of accidents causing Indonesia cruise at high rates of accidents at sea is linked to the lack of teachers who meet the requirements, especially at private sailor training. Provision of props are also felt to be still lacking, and it ships for sea cadets also practice for very limited, so many of the cadets who hampered its practice. Implementation of the International Ship Port Facility Security Code (ISPS Code) has not yet been integrated thoroughly, while the adequacy and reliability of existing navigation facilities are still relatively low. The pilot boat and the tugboat in some ports did not meet the requirements, both in terms of its technical condition as well. Guard patrol boats and rescue (GAMAT/KPLP) that currently also still lacking, both in terms of quantity and quality.

3. Problems identification

Still relatively low the performance was an image are still many the problems by sub-division sector sea transportation . Some major problems faced in the sea transport is as follows :

For the ocean freight sector found things as follows: a. the perception of equality Yet empowering national cruise industry among related government agencies during this time; b. service of ocean freight activities have yet to reach the standards set out among other things due to the limited port facilities and services that have not been optimized; c. have yet to materialize the partnership between the owner of the goods and the owner of the ship (Indonesia Sea Transportation Incorporated) for the implementation of the long-term transport contract/Long Term Time Charter (LTTC); d. has yet to support banking and non-bank financial institutions that are specific to supporting the development of national commerce fleet (due to the shipping company is considered a slow business yielding and high risk); e. number of foreign ships operating in the Interior and large number of ports open to foreign trade so that the cabotage principle is not workable on a consistent and ongoing; f. fiscal and credit Incentives for national sea transport is relatively not there as given by other countries to national sea transport companies; g. trade terms (Terms of

Trade) less profitable; h. restriction of supply/bunker fuel oil from PT Pertamina for the benefit of the operation cannot meet one round trip. i. Not charge information and forum space ship between relevant agencies in utilizing the space requirements of the national sea transport ship.

For the port sector found things as follows: a. the impact of the implementation of the autonomy area there are several areas wanted to build a port with a local approach that does not match the hierarchy functions based on the order of National Port Harbor, so feared would cause inefficiency in investment and undermine the competitiveness of ports in Indonesia in the face of global competition. In addition some local authorities do levy at the port-(reregulated transaction cost) that give rise to accumulated high cost economy that resulted in investors or service users felt that the existence of imbalance of ports; b. ports in Indonesia even though it has defined its role and function as a port of international, national, regional and local communities are generally not equipped master plan and the work environment/Environmental interests of the port Area as a strong legal basis to guarantee the certainty of land, business and investment certainty; c. number of relevant agencies at the port which still require the alignment of service (one stop service), the conditions of limited infrastructure and service levels are low, resulting in service not yet optimal and port days/turn round time ship in port to be high. In addition, the ability of the host ports in providing funds for investment are increasingly limited due to the prolonged economic crisis, as well as the limitations Government funds for executing development and maintenance of the port. Participation from private to partake in the infrastructure port development perceived still lacking / limited because interested only in a favorable business segment and necessary executing guidance more cooperative as derived from the provisions of legislations which there; d. The construction of port infrastructure expected to be perceived as evenly in the region of the unitary state of the Republic of Indonesia (NKRI), but in certain areas as eastern Indonesia and in the border area, and port facility of which there are still not adequately or even not at all available accessibility to the operational services that led to the port; e. Service port has not yet reached the optimum level of service, among others, is shown with a level Turn Round Time (TRT) ship that high productivity and low loading and unloading the goods at the port (Port Productivity). f. on the location of certain ports ship accidents often occur due to traffic frequency rate of ships has increased rapidly, but not yet arranged and styled expressly Vessel Traffic Control System (VTCS). Accidents that happen often, or drowning due to the limitations of the impacts the device settings for traffic of ships and navigation aids for the cruise line separation entry out of the harbor; g. installed capacity at the port declined due to lack of investment funds for the development of the port in order to meet the standards of service activities the attainment of standards, consequently minimum performance the operational service of the port specified by the Government cannot be achieved.

For the safety of shipping sectors met things as follows: a . still high levels of accidents, piratical (calamity and piracy and armed robbery) ships at sea; b. The low quality of a ship because most of the age of Indonesian's ships flag has old; c. low awareness of ship's owners for investment in safety equipment on board; d. limited docking facilities so many ships that should delay its docking obligations; e. is still the lack of eligible faculty (especially at Sailor Training private); f. provision of props/simulator that is still lacking (especially at Sailor Training private); g. Limited to ships for sea cadets practice, so many of the cadets who delayed/inhibited its practices; h. level of reliability Navigational Aids do not meet the recommendations and the degree of sufficiency Navigational Aids is still low so the waters of Indonesia can potentially still bears the predicate Unreliable Area. i. Speed detection and response to the disorder as well as anticipation of losing the Navigational Aids equipment is still very low making it difficult to maintain and increase the reliability of the Navigational Aids; j. has not fulfilled the number of Radio stations GMDSS Coast as recommended in the IMO GMDSS Handbook can lead to low public confidence will cruise capability of response to the dangerous in the waters off Indonesia. k. the limited facilities, equipment and HUMAN RESOURCES in the field of Telecommunications have not resulted in optimal Cruise service in meeting the needs of Indonesia's traffic cruise; I. Indonesia did not yet have Stations VTMS and enough VTIS, especially on important points and the entrance to the waters of Indonesia in the framework of globalization and the impact of anticipation Groove Sea Islands of Indonesia (ALKI BEACH); m. based on the Resolution of The Conference of Contracting Governments to the International Convention for the Safety of Life at Sea, 1974, adopted in 2002, in accordance with the Annex to Amendments to the International Convention for the Safety of Life at Sea (SOLAS) 1974, has enacted the International Ship and Port facility Security Code (ISPS Code) since July 1,

2004. To support the implementation of the ISPS Code required system and equipment safety on ships and port facilities, which are still very limited.

The condition of the human resources (HR) sub sectors of maritime transport is currently faced with some major problems as follows: a. the quality and professionalism of HR less supported education and skills are adequate; b. HR distribution of sea transport uneven, particularly in remote areas, small islands and the State border; c. the quality of HR in national shipping company less professional; d. low activities of marketing and co-operation between national ports Manager with ports that have more advanced and foreign shipping company; e. low information and socializing are received about the systems and procedures of the port service and the safety of shipping in both the sea and in port; f. the limited number of divers and Sea SAR personnel as the spearhead of the countermeasures of accidents at sea.

Strategic environmental changes have a very significant influence on the Organization of transportation of the sea. As for those changes include things as follows: The global environment, which includes among other: a. Tendency globalization and liberalization trade and investment with the world trade organization WTO (World Trade Organization) and General Agreement on Trade in Services (GATS), would increase needs transport services sea include export and import and needs supporting services sea transportation; b. Shifting central economic activities world of areas the Atlantic to Pacific region. This shift followed by a tendency the rise of the shipping between ports on the coast of America (American west coast ports) and in the Western Pacific (Japan, South Korea, Taiwan, Hong Kong and China) as well as in the Pacific Northwest (especially ASEAN member countries); c. the development of Entrepreneurial Management in the field of ocean freight and port; d. development of settings in the International Maritime Organization (IMO).

4. Unsafe Act Method

From the standard International Convention which regulates the safety of the ship, to reach the goal it was concluded that the safety of persons at sea required improvements 5 (five) sub group/system requirements are:

- 1. Main human resources (requirements).
- 2. The ship as a means (requirements and equipment).
- 3. Operation (operation of the Management Board).
- 4. External factors (infrastructure).
- 5. Management, which is a process of coordination with respect to the four other sub system.

At this moment , many have approach done to fathom accident . First approach from sub systems requirements and supplies , the operation of management and work environment (infrastructure). Approach to search for nonconformity pra-condition namely unsafe condition. According to this approach , for the occurrence of an accident / the incident was misstated in equipment , materials and environment physically that is implied in the condition of unsafe. Therefore, prevention accident also directed at improvement thirdly sub these systems. From the results of the investigation, it turns out that the human factor in the cause of the accident was fault so dominant. According to statistical data from year to year that 80% - 85% of accidents are caused by human error, so that there is an opinion, that was directly or indirectly, all is because the human factor. But directly of the accident can be grouped into two outlines causes, namely: a. unsafe Actions of humans (Unsafe Acts) for example:-Work without any authorize-failed to give a warning — working with the wrong speed and so on. b. A State of insecurity (Unsafe Condition) for example: the safety equipment on board which are damaged or are not usable – environmental and weather on the waters is not good - for malicious items that can ship exploding/burning/easy.

Conclusion

- High sea transportation accidents in Indonesia at that time should be the concern of all parties, not
 only the ship owner but also Governments, relevant agencies and communities to be more active in
 providing information. From the observations, the main causes of marine accidents due to excess
 cargo from the set, whether the carriage of goods and people. Service users often do not even
 forced himself to climb aboard the cruise ship was full, despite the determination of origin may post
 on the Board.
- 2. The quality and professionalism of HR less supported education and skills are adequate, and the distribution of HR sea transport uneven, particularly in remote areas, small islands and border countries.
- 3. Transport ships are mostly created without the use of specific standards in safety. In addition, many fleet ships in Indonesia is the former ship purchased from other countries. The treatment of these ships also substandard ships, age of the former used in cruise in Indonesia are usually very old. So that these ships did not sail laik. The ships of the former, in the country of origin, are not actually being used as a mode of transportation.

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