RSF Conference Proceeding Series: Engineering and Technology, Vol. 3 No. 1 (2023) https://doi.org/10.31098/cset.v3i1.772

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Research Paper

Analysis of Crew Work Performance in Relation to Overtime Working Hours on MV. Manalagi Tisya

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Abstract

Overtime work refers to working hours that exceed the normal working hours set by company regulations. Overtime work is often necessary to address urgent operational needs or keadaan darurats. The limits of working hours have been established under the MLC 2006, which ensures that each crew member has working hours and rest periods in accordance with applicable regulations. The implementation of structured working hours is crucial to prevent undesirable circumstances. The research method used in this study is a qualitative descriptive method. Data sources were obtained through primary and secondary data. Data collection techniques involved observation, interviews, and documentation conducted by the researcher during sea practice on MV. Manalagi Tisya. The data analysis technique employed in this research is data reduction, data collection, and drawing conclusions. Factors causing overtime include a lack of worker skills, poor work planning, weather conditions, and frequent vessel malfunctions. Efforts to prevent overtime work on MV. Manalagi Tisya involves effective work scheduling, providing job training to enhance the crew's skills, and monitoring working hours to ensure efficient completion of tasks and avoid time wastage.

Keywords: Overtime Work; Work Performance; Ship Crew

INTRODUCTION

Working on a ship requires a great deal of concentration to avoid unwanted incidents. Workers onboard often get involved in industrial accidents due to lack of attention or concentration, necessitating safety equipment to minimize accident-related injuries. Besides safety gear, workers must manage their working hours in such a way that they have sufficient rest time while on the ship.

When working on a ship, crews often encounter emergencies that need immediate handling to prevent further operational impacts. Emergency situations experienced by crews are unpredictable, requiring ship crews to be ready at all times to respond promptly. All parties involved can experience losses due to emergencies on the ship, including ship owners, crews, and even potential damage to sensitive marine environments and ecosystems. Therefore, it's crucial for ship crews or prospective crew members to understand these emergency conditions. Before working on a ship, they should have a basic understanding of how to recognize signs of emergencies.

Working excessive hours has adverse effects on ship crews; fatigue becomes a major factor when working long hours. Fatigue is also a significant factor in causing accidents, as it impairs crew focus and leads to mistakes, resulting in workplace accidents. Fatigue also makes the working environment uncomfortable, as it can heighten emotions and cause uncontrollable outbursts.

Due to the aforementioned issues, the researcher was motivated to conduct a study titled "Analysis of the Relationship Between Overtime Working Hours and Crew Work Performance on MV. Manalagi Tisya." In this study, the researcher aims to minimize overtime, enhance the performance of all crew members, understand the applicable working hour standards on the ship,



and comprehend the factors influencing crew performance.

Based on the aforementioned background, the research problems can be formulated as follows:

- 1. What are the factors influencing overtime on MV. Manalagi Tisya?
- 2. What are the impacts caused by overtime working hours on MV. Manalagi Tisya?
- 3. What efforts can be made to prevent overtime working hours on MV. Manalagi Tisya?

LITERATURE REVIEW Theoretical Description

Definition of Work

Westwood (2008) defines work in the context of social culture and the economic-political context. In the social-cultural context, work is essentially a strong moral obligation for everyone to influence the well-being of their family. Conversely, in the economic-political context, work is more about promotion as it represents status and high income. Based on the above definition of work, it can be concluded that work is an activity involving skills to earn rewards and plays a role in maintaining one's position and family well-being.

Aspects of Work Readiness

According to Robbins and Judge (2007), ability refers to the extent to which a person has the capacity, skills, competencies, and abilities to perform assigned tasks, achieve results, and accomplish given job objectives. Meanwhile, willingness refers to psychological maturity or soft skills involving responsibility, dedication, integrity, and motivation to complete tasks well. Each individual has a different level of work readiness. According to Brady (2010), there are six aspects of work readiness, including:

- 1. Responsibility
- 2. Flexibility
- 3. Skills
- 4. Communication
- 5. Self-view
- 6. Health and Safety

Maritime Labour Convention (MLC)

The Maritime Labour Convention (MLC) 2006, held in Geneva, Switzerland in 2006, is a congress aimed at globally protecting the rights of seafarers and providing guidelines to countries and shipowners to create a safe and comfortable working environment for sailors. As sailors work in different countries, there is a need for international labor standards that regulate their working conditions. The MLC 2006 ensures that seafarers' rights are guaranteed and protects their interests worldwide. The Maritime Labour Convention (MLC) addresses five themes or clauses to protect seafarers' rights. These five themes or topics are:

- 1. Minimum requirements for seafarers to work on ships age, medical certificates, and training.
- 2. Wages, working hours, rest, and leave; career development.
- 3. Accommodation for seafarers, recreational facilities, and catering standards on board.
- 4. Health and safety, medical care, and access to shore-based welfare facilities.
- 5. Grievances, inspection, flag, and port state responsibilities.

Definition of Overtime Working Hours

Based on Article 1, paragraph 1 of Ministerial Regulation No.102/MEN/VI/2004, overtime working hours are defined as working hours that exceed the normal working hours, which are 7

hours per day for six working days and 40 hours per week, or 8 hours per day for seven working days and 40 hours per week. This also includes working hours on the weekly rest day and/or official holidays determined by the Government. According to Feri Harianto and M. Syafiudin (2008:3), overtime work is a type of work performed outside regular working hours, and the wages received for overtime work differ from the official wages received for regular work.

Rest Hours

Rest hours are the period of time an individual needs to rest after completing work, and it's a requirement that every worker must fulfill. This is closely related to work conditions and awareness, which can influence work efficiency, effectiveness, and safety. Rest hours have maximum and minimum limits. In general, the human body requires a minimum of 10 hours of rest time within every 24-hour period.

Research Framework

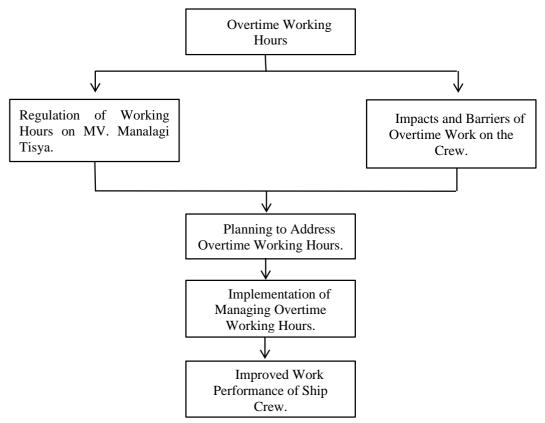


Figure 1. Research Framework

RESEARCH METHOD

Time and Place of Research

The research was conducted from August 30, 2021, to August 31, 2022, on the ship MV. Manalagi Tisya owned by PT. Salam Pacific Indonesia Lines, located at Jl. Perak Barat No. 9 Surabaya 60177, Indonesia. The ship is known by its call sign "YBTL2" and has a total cargo capacity of 52,201.9 tons.

Source of Research Data

The research data sources consist of primary and secondary data. Primary data was obtained through direct observation and interviews with the chief officer, third officer, and boatswain.

Secondary data was collected from books, work hours, and rest reports, as well as the ship's daily logbook.

Data Analysis Techniques

Data analysis is a systematic process of finding and organizing data obtained from interviews, field notes, and documentation. This involves organizing data into relevant categories, breaking it down into separate units, synthesizing, identifying patterns, selecting significant and relevant information to study, and making conclusions that can be understood by oneself and others. In this study, three methods of data analysis were used:

- 1. Data Reduction
- 2. Data Presentation
- 3. Drawing Conclusions

Data Validity Testing

The data validity technique used was triangulation of data sources. The researcher confirmed the results of direct observations during practice and interviews with deck officers and supported them with documentary studies obtained from ship files to ensure the purity and validity of the data.

FINDINGS AND DISCUSSION Research Context Overview

In this research, the researcher utilizes the MV. Manalagi Tisya ship is the object of study. This ship is used for transporting bulk cargo. MV. Manalagi Tisya is a tramp-type vessel, which means it has different routes.

The description of data in this thesis aims to depict the actual situation that occurs on the MV. Manalagi Tisya ship, in accordance with the title "Analysis of the Relationship Between Overtime Working Hours and Crew Work Performance on MV. Manalagi Tisya." Through this description, the researcher hopes readers can sense and understand everything that transpired during the research.

Data Description

PT Salam Pacific Indonesia Lines is a container shipping company headquartered in Surabaya, Indonesia. PT Salam Pacific Indonesia Lines has 37 branches spread throughout Indonesia. Its fleet includes over 60 container ships with capacities ranging from 288 to 3,500 TEUs. In 1996, PT SPIL began expanding its business as a container carrier. Innovation continued with the launch of the industry's first digital logistics platform named, mySPIL in 2017. In 2018, PT SPIL partnered with TOLL Group (a member of Japan Post) to establish PT SPIL TOLL Indonesia, aimed at international shipping services.



Figure 2. SPIL Company Logo

MV. Manalagi Tisya is a bulk-type ship built in 2002 with IMO Number 9250139. The ship is named MV. Manalagi Tisya and has the call sign YBTL2 with Port Registry Surabaya. MV. Manalagi Tisya has a Length Over All (L.O.A) of 191.56 meters, a Breadth (Moulded) of 32.26 meters, and a Depth (Moulded) of 17.00 meters. MV. Manalagi Tisya has a Gross Tonnage (GT) of 30374 and a Net Tonnage of 18290.



Figure 3. MV. Manalagi Tisya

Discussion of Research Findings

From interviews with the Chief Officer, Third Officer, and Boatswain, it can be concluded that the ship's condition, the crew's abilities, and the inadequacy of the equipment used for work can lead to overtime hours on MV Manalagi Tisya. Moreover, the overtime work hours have a negative impact on the crew due to the fatigue they experience.

What are the factors that influence overtime on the ship?

Several important factors influencing the need for overtime on the ship include vessel conditions, crew skills, scheduling and planning, operational needs, and external factors. A clear understanding of these factors will assist shipping companies in managing overtime more effectively, improving operational efficiency, and ensuring the well-being of the ship's crew.

1. Work Skills

In the maritime industry, especially on ships, physical strength alone is not sufficient for the job. Work skills are crucial for completing tasks onboard. High work skills can significantly impact overtime hours on the ship. Completing tasks efficiently and on time can reduce the need for overtime.

2. Weather Conditions (External Factors)

Weather conditions are a significant external factor that affects overtime hours on the ship. Poor weather can create situations where the ship's crew needs to work longer than regular working hours. Adverse weather conditions can also affect the overall ship's operations. For instance, in conditions of strong winds or high waves, loading and unloading cargo at the port may not be done safely or efficiently.

3. Scheduling and Planning

Lack of effective scheduling and planning can lead to workload congestion or unrealistic schedules. This can result in overtime when tasks cannot be completed within the designated time.

When developing scheduling plans, shipping companies need to balance operational needs and the well-being of the crew. Prioritizing compliance with existing labor regulations, providing adequate rest time, and optimizing human resource utilization can help reduce excessive overtime requirements on the ship.

4. Vessel Conditions

Technical issues or vessel malfunctions, such as operational equipment breakdowns or engine failures, may require additional repair time. This can lead to overtime to ensure the proper operation of the ship. Poor vessel conditions or frequently malfunctioning equipment can influence overtime hours. If the ship experiences damage or equipment malfunctions, the crew may need to work overtime to resolve the issues. In situations like this, inadequate maintenance or a lack of available backup equipment can result in undesirable increases in overtime hours.



Figure 4. Overtime Cleaning Palka

What are the impacts of overtime working hours?

Excessive overtime working hours can have an impact on the overall well-being and quality of life of the ship's crew. The lack of time for rest, relaxation, or personal activities can lead to stress, chronic fatigue, and conflicts in personal relationships. These impacts can affect the crew's quality of life and increase the risk of mental and emotional well-being disruptions.

1. Decreased Employee Performance

The implementation of reasonable working hours and regulation of overtime by the government is based on clear principles. When overtime hours are exceeded, it might provide short-term benefits. However, if applied continuously, employee performance may actually decline. This can affect the company's overall work effectiveness.

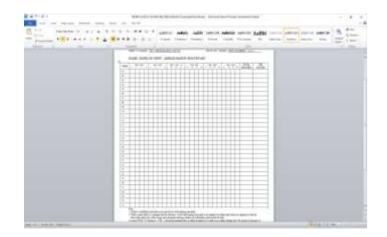


Figure 5. Work & Rest Hours Record

2. Poor Physical Health

Extended overtime working hours can increase the risk of specific health issues. Crew members who work excessively are more likely to experience high blood pressure, heart diseases, digestive disorders, obesity, musculoskeletal problems, and other health concerns. Inadequate rest and recovery time can impact the immune system and worsen pre-existing health conditions. When facing the impact of overtime working hours on physical health, it's important for shipping companies to ensure policies that protect the health and well-being of the crew.

3. Crew Well-being

Prolonged overtime working hours on a ship have a negative impact on the well-being of the crew. Physical and mental fatigue from long working hours and lack of rest time can lead to increased stress levels, chronic fatigue, and sleep disturbances. This can result in a decreased quality of life, mental health issues, and decreased motivation and job satisfaction. The imbalance between work and personal life, insufficient time for recreation and relaxation, and high work pressure can lead to mental health problems such as anxiety, depression, and emotional exhaustion.



Figure 6. Overtime Repair Grab

4. Safety Risks

Fatigue caused by prolonged overtime working hours can increase the risk of accidents on the ship. When crew members are fatigued, their reactions can slow down, their perception of situations can be distorted, and their risk assessment may be compromised. This can lead to human errors, such as navigation mistakes, negligence in following safety protocols, or poor judgment in emergency situations. Extended overtime working hours can result in physical and mental fatigue among workers. This fatigue can lead to decreased alertness, cognitive impairment, and slower reactions.

What efforts can be made to avoid overtime working hours?

Overtime working hours on ships are an important issue in the maritime industry. Ship crew members often face demands for working hours that exceed the normal limits, which can negatively impact their health and well-being. Therefore, effective efforts are needed to address this issue. With appropriate measures, it's hoped that a balanced, productive, and sustainable work environment can be established on board. Some efforts that can be undertaken to address overtime working hours on ships include:

1. Effective Planning and Scheduling

It is crucial to carefully plan crew schedules. Shipping companies should consider the operational needs of the ship, safety standards, and crew well-being. Well-designed schedules should account for adequate rest periods to prevent fatigue and allow sufficient recovery for the crew.

2. Training and Skill Development

Providing appropriate training and skill development to the crew can enhance their work efficiency. By improving the crew's skills and knowledge, they can perform tasks more efficiently and avoid mistakes that might require additional time for correction. This can reduce the need for overtime working hours to complete tasks that should be accomplished quickly.



Figure 7. Overtime Blank Pipe Ballast

3. Effective Supervision and Management

Effective management is crucial to avoiding excessive overtime working hours. Managers should ensure that work schedules are adhered to, rest periods are respected, and the well-being of the crew is prioritized. Good supervision is also necessary to ensure that tasks are completed efficiently and time is not wasted.

CONCLUSIONS

Conclusion

Based on the findings and discussions obtained from observations, interviews, and documentation conducted during the study on MV. Manalagi Tisya to determine the impact of overtime work on crew performance, it can be concluded that:

- 1. Factors contributing to overtime work on MV. Manalagi Tisya include: Limited skills, work planning, frequent vessel troubles, and adverse weather conditions. Limited skills affect task completion; crew with good skills can prioritize tasks, manage time, complete tasks quickly, and prevent damage on vessels frequently experiencing troubles.
- 2. The repercussions resulting from overtime work include decreased crew performance due to excessive fatigue, suboptimal work outcomes, deteriorating health, and an increased risk of work-related accidents.
- 3. Efforts that can be undertaken to prevent crew overtime work involve proper work scheduling and planning to avoid or limit overtime providing training to enhance each crew member's working skills for efficient and effective tasks. Monitoring work hours is crucial, ensuring the crew adheres to agreed-upon working hours and rest breaks.

Suggestion

Based on the conclusions drawn by the researcher, the following suggestions are offered to minimize the impact of overtime work on crew performance:

- 1. Overtime work limitations: It is essential to establish clear boundaries concerning overtime work hours. This approach will help prevent excessive fatigue and ensure that the crew has adequate time for rest.
- 2. Regular checks on operational vessel equipment: Performing routine inspections of equipment that supports vessel operations will allow prompt repairs if any issues are detected.
- 3. Providing education on workplace safety and promoting a healthy lifestyle aboard the vessel.
- 4. Engaging in planning, supervision, and record-keeping of crew work hours to ascertain the duration each crew member has worked.

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