Panamax Vessel Time Charter Disputes – Case Study

F. STANLO NITHIK
MBA, School of Management Studies
Vels Institute of Science Technologies and Advanced Studies (VISTAS), Chennai

Dr. S. VASANTHA
Professor, School of Management Studies
Vels Institute of Science Technologies and Advanced Studies (VISTAS), Chennai

Abstract

This case study aims to increase the operational efficiency of the Panamax vessel through its voyage operation from Bin Quasim, Pakistan to Cagayan De Oro, Philippines. The study's main purpose is to know more about the challenges faced by the vessel, charter, and ship owner. The research design used in the study isa descriptive method of analysis and the methodology used is the case study method. The major problems addressed in thecase study are during the loading process at Bin Quasim, the master (captain of the vessel) observed issues with improper stowage of cargo in the holds. stevedores engaged in improper practices such as securing the sling instead of properly discharging the cargo from it during operations. the No. 3 derrick operator experienced a malfunction, leading to the breakdown of Derrick No. 3. damaged cargo due to stevedore handling. The management strategies of the master include issuing letters of protest to document issues with cargo handling and operations, The master and crew maintain clear and timely communication with relevant parties, supervise cargo operations closely, ensure proper stowage and handling practices, vessel ensuring safety and compliance through holds inspection and Dunnage work before commencing loading.

Keywords: *Case Study, Panamax Vessel, Time Charter, Voyage, Operational Challenges, Management Strategies.*

Introduction

Maritime transportation plays a critical role in global trade, facilitating the movement of goods and commodities across oceans. This case study examines the journey of the Panamax vessel, a cargo vessel under a time charter agreement with multiple stakeholders involved in its operation. The vessel's voyage involved transporting bagged rice from Bin Quasim, Pakistan to Cagayan De Oro, Philippines. The journey was not without complications, as the vessel encountered several operational challenges as follows During the loading operation at Bin Quasim, the master noticed concerns with cargo stowage in the holds this led to damage of cargo and affected the cargo operation and increasedthe cost of equipment and delay in the cargo delivery which affects the shippers market and affects the re-delivery of the vessel to the head owner this affects the charters image in the market. The misaligned cargo had an impact on cargo hold capacity and ventilation, as well as the likelihood of bagged rice being damaged during transportation which leads to loss of cargo quantity it is rice cargo must be properly ventilated due to the negligence of the Stevedoor the operation of the vessel affected and which increases the operation time of the vessel at the port which leads to demurrage to the charters and increases the cargo delivery lead time and which affects the vessels re-delivery on the charter and the head owner side.The master observed stevedores engaging in unsafe practices such as securing the sling rather than properly releasing the cargo during operations this caused cargo damage at the load port which affected the shipper's cargo and caused damage torice bags at the load port. On January 21, 2024, to manage the consequencesthe master issued a letter of protest to the chartererswhich stated that the master or the vessel owner is not responsible for the damage caused by stevedore at the load port.Derrick No. 3 broke down on February 27, 2024, due to a fault by the No. 3 derrick This incident caused unloading operations to be halted for a period.This incident temporarily interrupted unloading operations. During discharge in Cagayan De Oro, the master sent a letter of protest regarding shredded and damaged cargo caused by stevedore handling. Derrick No. 3 broke down,

causing delays for the vessel. The master of the vessel follows management strategies includes The master proactively issuing letters of protest to document problems with cargo handling and operations, and establishing a documented record of occurrences that could affect the vessel and cargo during the voyage. The master and crew communicated clearly and promptly with appropriate parties, including charterers, stevedores, and agents, to handle operational concerns as they arose. The master regularly monitored cargo operations, guaranteeing correct stowage and handling procedures. In the event of an issue, the master took immediate action to reduce potential hazards. The vessel guaranteed safety and compliance by inspecting the holds and doing Dunnage work before loading, and it followed the trip instructions supplied by the disponent owner. K Sasa, C Chen et.al (2021) state that A ship's operation is decided either by the ship master or by the shipping company. Weather forecasting is used to make decisions through intuition and experience. With the advancement of computer technology, the spatiotemporal range of weather forecasts has become more precise The study evaluates the optimal ship routing of a 28,000-DWT-class bulk carrier using speed loss analysis and compares it with the measured data in rough sea voyage conditions in the Pacific Ocean. A modified version of the speed loss analysis algorithm is developed and combined with the isochrone method. The results show that the simulated routes are closer to the measured ship trajectory if higher wave avoidance is considered. However, there are some significant speed drops in the measured results when deliberate speed reduction is considered. The study also discusses factors controlling the reproducibility of ship routing, including in rough sea voyages.Lu, Ruihua Turan et.al (2013) conducted research by comparinga ship's operation with its fuel consumptionthe accuracy of this prediction can be enhanced by using noon report data of a specific vessel Voyage optimization is a technology that predicts ship performance to aid in route selection and energy efficiency. This paper proposes an empirical fuel consumption prediction approach based on Kwon's added resistance modeling for the Suez-Max oil tanker. The model can be created for each loading condition, speed, and relative wave heading, and the accuracy can be enhanced by using noon report data. The model can be used to evaluate ships' courses for minimization of voyage time, safety, and fuel consumption. The study uses the Energy Efficiency of Operation (EEO) as an indicator. Future work will apply the approach to other vessel sizes and commercial ship categories.The model allows the user to investigate the relationship between fuel consumption and various sea states during voyages. The results are collected in a ship operational performance database, which can be used to evaluate the ship’s courses for objectives such as minimization of voyage time, maximization of safety, and minimization of fuel consumption. To address the weather issues Kenji Sasa et.al (2015) a weather routing system uses weather forecasting and evaluation of ship performance to decide the optimal sea route. The development of weather forecasting over recent decades has drawn on improved computer performance The rise in crude oil prices has prompted shipping companies to reduce fuel consumption and reduce carbon dioxide emissions. Weather routing services have become crucial for shipping companies, but accuracy in numerical models is lacking. The development of weather routing models is hindered by insufficient data accumulation on ship motions, navigation, engine, and weather parameters. This study used data from a 20,000 DWT class bulk carrier on worldwide voyages, revealing new relationships regarding ship motions, speed loss, and wave conditions. These relationships were verified through experimental data and numerical simulations.To address the weather issues Taedong Lee et.al (2015) conducted a study that examines the factors that are likely to hinder the commercial sailing of the NSR provides an analytic framework and analyzes the extent to which shipping companies perceive each factor as a barrierto Global climate change presents both risks and opportunities in the North Pole, with melting icebergs and glaciers increasing ecosystem risks. However, the extraction of natural resources and the use of the Northern Sea Route (NSR) seem easier. Countries and companies are competing to develop the region, with some operating test navigation between Russia and Korea through the NSR. This study aims to identify economic, external, and internal drivers and barriers for shipping companies to voyage through the

NSR, focusing on their perceptions of economic opportunities and internal factors. To address the stowage-related issues Stefano Fazi, (2019) provides a mathematical model for optimizing container stowage on barges while taking stability into account. They create a hybrid metaheuristic technique that combines local search and an industrial solver, which is proven using numerical tests on real-world data.Svitlana Onyshchenko, et.al (2021) highlight possible dangers in moving big and heavy cargo, classifying unfavorable events that occur during loading/unloading and transit. It develops a conceptual model and mathematical description of elements influencing vessel operating conditions, assisting in assessing the probability of unfavorable occurrences and changes in ship state during cargo.Nasser Saeidi's (2013) study identifies major causes of halt and lag at the Port of Amirabad, including defects in transportation equipment, incorrect product stowage, and lack of readiness. To reduce delays, regular equipment maintenance, new equipment acquisition, and improved communication with goods owners and shipping agents are recommended. Alper Seyhan et.al (2024) found navigation equipment is crucial for bulk carrier failures, recommending proactive maintenance techniques to improve system reliability and prevent catastrophic accidents. They ab O, et.al (2023) propose a method for scheduling preventive maintenance in complex systems using Failure Modes and Effects Analysis (FMEA). The approach involves modeling the system as a series of subsystems and components, examining failure mechanisms, and minimizing maintenance costs. Ahmad Bahoo Toroody et.al (2022) propose a probabilistic technique for estimating the trustworthy operating duration of autonomous ship mechanical systems, using Bayesian inference and Markov Chain Monte-Carlo simulation to quantify uncertainty in ship operations, improving maritime industry safety.Bayraktar et.al (2022) analyze ship propulsion systems' dependability using failure data from four ships. They identify critical components, with the main engine having the highest dependability. The study aims to improve marine transport efficiency and industry confidence. Samet Bicen, et.al (2020) uses Shipboard Operation Human Reliability Analysis (SOHRA) to analyze a cargo ship's crankshaft overhauling during dry docking. It determines human error probability (HEP) using error-producing circumstances and general task types. The findings highlight the sensitivity of HEP values to ship operating conditions.Dikis, et.al (2015) introduced a Java-based Machinery Risk Analysis (MRA) model for assessing the dependability of maritime machinery components, highlighting its potential for improving strategic planning in the marine sector, emphasizing the importance of maintenance as a strategic operating strategy. Alexander Senss, et.al (2023) introduced a dynamic JIT approach is proposed to address challenges by calculating vessel arrival characteristics based on expected berth and cargo operation availability. Gizem Elidolu a, et.al (2022) The research helps tanker officers, shipowners, and safety and technical inspectors reduce hazards and improve safety on tanker boats.

Operational challenges

The Panamax vessel was chartered under a time charter (TCT) agreement and she is being handover to the present charters from the Cochin Port the vessel arrived at the Cochin Port on 10th Jan 2024 and her first voyage is from Bin Qasim, Pakistan to Cagayan De Oro, Philippines with a cargo of 8800 MT of Bagged rice in bulk. She is bunkered by disponent owner at Cochin on 10th Jan 2024 with a Very Low Surplus Fuel Oil (VLSFO) of 119.541 MT and Marine Deasil Oil (MDO) of 49.945 MT at the beginning of the voyage and departure from the Cochin port on 11th Jan 2024.

Now the vessel has started preparing for arrival at Bin Qasim port Pakistan by submitting the pre-arrival documents to the load port agent on 11th Jan 2024. simultaneously disponent owner sent voyage instructions to the master of the vessel which contained how the master needed to perform the present voyage at the same time the charter appointed a surveyor at Bin Qasim, Pakistan to survey the vessel to ensure the safety of the crew and cargo onboarded. The vessel arrived in Binquasim on 15th Jan 2024 with an arrival draft of forward (FWD) on 3.60M and After deck (AFT) on 5.60M.

On 14th Jan 2024, the charters asked for hold photos for the safety load of bagged rice in her hold to ensure the vessel hold is clean and neat and instructed the master to

clean the hold if anything is uncleaned because during hold survey if anything is the harm in vessels hold it will not be climbed in charters account and it's to the owner's account.

The master of the vessel tendered notice of readiness (NOR) on 15th January 2024 AT 08.06 hours to ensure that she is now ready in all respects to commence loading her cargo of 8,800.0 mt of rice in bags by the terms and conditions of the relevant fixture note or charter party. The Holds Inspection was completed on date 17th Jan 2024 at 15.30 hrs with a result of "empty, dry, free from foreign smell, no sign of living insects and residues of previous(s) cargo and in this respect fit for loading the intended cargo." At the same time, dunnage materials have been delivered on board. Stevedores are making dunnage works and the loading commenced on 20th Jan 2024 at 00.00 hrs with 2 gangs in Shift C and continues with 2 gangs in Shift A.

The master of the vessel noticed an issue on 20th Jan 2024 at 10:41 hrs that there are many places in the cargo hold where cargo is not stowed properly and that may affect the utilization of the cargo hold capacity, affecting the ventilate the cargo holds and cause damage to bags during transportation and request relevant parties to take urgent action so that cargo arrangements can be carried out appropriately and informed that the owner or master of the vessel is not responsible for any consequences caused by the above-mentioned cause because the issue is done by the stevedores and regarding the issue the master of the vessel issued a letter of protest to prevent him and the owner of the vessel from the consequences.

During the 00:00 hrs to 08:00 hrs shift on 21st Jan 2024 while conducting cargo operations, the crew member observed stevedores engaging in the improper act of securing the sling instead of properly discharging the cargo from the sling. Regarding the inappropriate loading of stevedores on January 21st, 2024 the master if the vessel again submits a Letter Of Protest to the charters and on 21st Jan 2024 at 14:09 hrs the master of the vessel releases the pre stowage plan to load 8800 MT of bagged rice into her holds and on 21st Jan 2024 at 00:57 hrs the Original Bill of Lading (OBL) released by the masters agents for the cargo of 8800 MT of bagged rice in bulk and completed loading on 23rd Jan 2024 at 1450 hrs.

The vessel started sailing on 24th Jan 2024 at 0950 hrs towards her next port of Singapore for bunkering and arrival port of Singapore on 06th Feb 2024 at 13.00 hrs with an arrival draft of forward 9.10m and aft: 9.10m and bunker consumption (IFO/MDO): IFO: 0.42 / MDO: 0.05 and departure on 07th Feb 2024 at 03.30 hrs,

She arrived at her discharge port of Cagayan De Oro on 14th Feb 2024 at 02.30 hrs with arrival drafts of Forward: 9.00M and AFT: 9.30M. The Notice of Readiness (NOR) was tender on 14th Feb 2024 at 09:00 Hrs and commenced discharge of cargo Pakistan rice in bags with 3 gangs at 09:50 hrs. On 26th Feb 2024, the master of the vessel sent a letter of protest regarding the torn and damaged cargo at Cagayan De Oro port during the time the vessel discharged cargo. on February 27, 2024, at 03:00 hrs, due to the carelessness of the No. 3 derrick operator or Stevedore due to the incident of derrick crane No. 3 which led to break down Derrick No.3. Unloading by derrick No. 3 was stopped from 03:00 hrs on February 27, 2024 and discharging stopped on 03rd Mar 2024 at 21.30LT simultaneously the vessel is prepared for her next voyage.

Management Strategies

To address the issue and prevent himself and the head owner from losses the master 0f the vessel proactively issued letters of protest to document issues with cargo handling and operations, providing a formal record of events that could impact the vessel and cargo during the voyage.The master and crew maintained clear and timely communication with relevant parties, including charterers, stevedores, and agents, to address operational issues as they arose.The master supervised cargo operations closely, ensuring proper stowage and handling practices. In cases of issues, the master took immediate action to mitigate potential risks.The vessel ensured safety and compliance through holds inspection and Dunnage work before commencing loading, and followed voyage instructions provided by the disponent owner.

Conclusion

The case study of the Panamax vessel demonstrates the importance of vigilant oversight and proactive management in maritime transport. Despite encountering challenges

related to cargo handling, equipment malfunctions, and delays, the vessel completed its voyage from Bin Quasim to Cagayan De Oro. Effective communication, clear documentation, and strict adherence to safety standards contributed to the vessel's ability to navigate and address operational challenges during its journey.

The study of the Panamax vessel emphasizes the crucial significance of watchful oversight and proactive management in marine transit. During its cruise from Bin Quasim to Cagayan De Oro, the vessel had various problems, including cargo handling issues, equipment malfunctions, and delays. Despite these challenges, the vessel finished its cruise safely, thanks to good communication, detailed documentation, and strict adherence to safety rules.

One of the main conclusions from this case study is the importance of efficient communication. Clear and regular communication among the vessel's crew, port officials, and other stakeholders ensured that difficulties were addressed quickly and decisions were made on schedule. Furthermore, the value of clear documentation cannot be emphasized. Proper documentation of cargo and equipment.the study provides valuable lessons and insights that can benefit a wide range of stakeholders involved in the maritime transport industry like ship owners, charters, port authorities, and students who are pursuing the maritime business.

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