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Analysis of the Causative Factors of Mt. Marisa N Crashed Mt. Victory

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ABSTRACT

The purpose of this study is to analyze collisions between MT ships. MARISA N and MT. VICTORIA which occurred on April 13, 2023 at 03.00 WIB during a Ship-to-Ship (STS) transfer operation in open waters. The incident, which was investigated through observations, interviews, and analysis of ship documents at MT. MARISA N from January 2023 to January 2024, was caused by a combination of extreme weather (high waves and strong winds), miscommunication between the platform and the bow, and suboptimal maneuvers. The study concludes that to prevent similar accidents in the future, effective crew communication training, rigorous weather readiness evaluation, and consistent safety briefing are required.
Keywords: *Bad weather, Communication, Ship to Ship*

ABSTRAK

Tujuan Penelitian ini menganalisis tubrukan antara kapal MT. MARISA N dan MT. VICTORIA yang terjadi pada 13 April 2023 pukul 03.00 WIB selama operasi Ship-to-Ship (STS) transfer di perairan terbuka. Insiden tersebut, yang diselidiki melalui observasi, wawancara, dan analisis dokumen kapal di MT. MARISA N dari Januari 2023 hingga Januari 2024, disebabkan oleh kombinasi cuaca ekstrem (gelombang tinggi dan angin kencang), miskomunikasi antara anjungan dan haluan, serta manuver yang tidak optimal. Penelitian menyimpulkan bahwa untuk mencegah kecelakaan serupa di masa depan, diperlukan pelatihan komunikasi kru yang efektif, evaluasi kesiapan cuaca yang ketat, dan pelaksanaan safety briefing yang konsisten.
Kata kunci: Cuaca buruk, Komunikasi, Ship to Ship

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1. INTRODUCTION

Shipping safety, particularly *Ship-to-Ship (STS) transfer operations* regulated by guidelines such as ISGOTT, is a vital aspect in the maritime industry because it requires precise maneuvering and high coordination to move cargo between ships at sea. Although it is strictly regulated, STS is particularly vulnerable to accidents, especially when carried out in difficult marine conditions such as high waves and strong currents, where failure to maintain a safe distance can trigger serious incidents. One of these incidents occurred on April 13, 2023, at 03.00, when the MT. MARISA N hit MT's right stomach. VICTORIA during STS; This incident occurred due to a mistake in distance observation by the MT bow crew. MARISA N in the midst of choppy sea conditions, which led to a collision. This incident confirms that accidents can still occur in the field and cause consequences of material loss, marine pollution, and life dangers, thus encouraging the writing of a scientific paper entitled "Analysis of Causative Factors of MT. MARISA N Crash MT. VICTORY."

2. METHOD

This study uses a qualitative method with a case study approach to analyze in depth the incidence of collisions between MTs. MARISA N and MT. VICTORIA on 13 April 2023 during the Ship-to-Ship (STS) transfer operation, focusing on the factors of Communication Errors (miscommunication of the bow regarding distance and instructions) and Environmental Conditions (the influence of waves, currents, wind, and visibility), as well as compliance with the STS Transfer Procedure. Data was collected through three main techniques: Direct Observation (the researcher experienced firsthand the incident on the bow), Interview (to the Captain and Chief Officer on the platform and bow), and Documentation (through logbooks, incident reports, and STS SOPs). The data was then analyzed using qualitative descriptive techniques through the stages of Data Reduction (filtering based on the focus of the research), Data Presentation (chronological narrative and interview excerpts), and Drawing Conclusions to formulate prevention recommendations.

3. RESULTS AND DISCUSSION

3.1 Research Results

MT. The research was conducted on board the MT ship. MARISA N (Oil Tanker, IMO 8004090, built 1980/reconstruction 2008) from January 17, 2023 to January 23, 2024, focused on a collision incident that occurred on April 13, 2023 at 03.00 WIB in open waters during a Ship-to-Ship (STS) operation with MT. VICTORIA, where the sea conditions at that time were characterized by high waves (1.5-2.5 meters), strong currents, and winds (15-20 knots) that made maneuvering difficult. Data collection (direct observation, interviews, and documentation) revealed that the collision occurred when MT. MARISA N approached at an uncontrolled speed, and at 03:05 WIB the direction of MT. MARISA N hit MT's right stomach. VICTORIA, causing cracks and dent damage. Responsibilities when docking are divided: The skipper leads the maneuver strategy, and Mualim 1 in the bow is in charge of monitoring the visual distance and reporting it.

Position	Duties and Responsibilities
Nakhoda (Captain)	Lead and supervise the entire ship's docking operations.
	Makes strategic decisions related to *ship maneuvering*.
	Coordinate with other officers to ensure safety and efficiency of operations.
Mualim 1 (*Chief Officer*) – Direction	Supervise and control activities in the bow of the ship.
	Operate the mooring tool and handle the rope.
	Provide information to the Captain regarding the position and condition of the bow.
	Ensure safety procedures in the bow area are followed.
Mualim 2 (*Second Officer*) – Buritan	Responsible for operations at the stern of the ship.
	Handle the mooring rope and related equipment.
	Convey the condition and position of the stern to the Captain.
	Ensure the stern area is safe and equipment ready for operation.

Table 1. Mualim's Duties during STS

The analysis showed the collision was caused by a combination of two main factors. First, Extreme Weather Conditions in the form of high waves, strong sea currents, strong winds, and limited visibility (early morning operations) that complicate the stability and control of the ship. Second, the lack of effective communication between crews is a fatal trigger, as evidenced by the interviews of

the Captain and Mualim 1. The captain (Jafaron Shamsir) admitted that he did not carry out the safety briefing because of the urgency of the schedule and considered the crew to be used to it, which resulted in communication that did not use the close-loop system and delays in distance reporting. Mualim 1 (Rosa Usmadi) confirmed the difficulty of estimating the distance in the midst of bad weather and the inhibition of communication with the platform.

Figure 1. Collision Damage

These miscommunication included funnel-miscommunication, delays in information of changing conditions, and unclear instructions, which ultimately resulted in errors in decision-making and maneuver execution, reinforcing the finding that a lack of coordination and optimal risk mitigation was at the root of the incident.

3.2 Discussion

The MT collision incident. MARISA N on April 13, 2023 was caused by a failure rooted in two main factors: Extreme Bad Weather and Lack of Effective Communication Between Crews. Weather factors (winds of 15-20 knots, waves of 1.5-2.5 meters, unstable currents, and low visibility at 03.00 WIB) exceeded operational safe limits, which were exacerbated by the absence of adjustment of maneuver strategies. Meanwhile, the communication factor is characterized by the non-implementation of Safety Briefing, errors in the delivery of information distance

from the bow, delayed warnings, and failure to implement *a closed-loop communication* system. The SOP evaluation corroborates that vital procedures, such as briefings and *close-loop communication,* are ignored or not optimally implemented, even when extreme weather is known. As a preventive measure, it is recommended: (1) Weather Mitigation through periodic monitoring, delay of operations when conditions are unsafe, selection of protected locations, and the use of modern navigation tools (Radar, AIS); and (2) Improving Communication through the implementation of mandatory *Safety Briefing*, strict implementation of *closed-loop communication*, appointment of Special Communications Officers, routine training, and *Master-to-Master written agreements* before STS operations.

4. CONCLUSION

The collision incident between MT. MARISA N and MT. VICTORIA on 13 April 2023 was caused by two main factors: poor weather conditions (strong winds, strong currents and low visibility) and poor communication between crews (absence of safety briefings and non-use of *closed-loop* communication methods), which collectively led to maneuver errors. Therefore, it is recommended that *Ship-to-Ship* (STS) operations are only conducted when sea conditions are safe and supported by adequate risk assessments. Crews are required to undergo maneuver training in extreme weather, conduct consistent "*safety briefings*" prior to operations, and ensure communication using closed-loop methods and VHF devices in a professional manner to improve the operational safety of STS in the future.

5. REFERENCES

A.P, B. W. (2021). Implementation of marine guard duties at Mt. Pegaden/P.1024 in accordance with Stcw 1978 Manila Amendment 2010. Pip Makassar, 75(17), 399–405.

Arguelles, R. P., Maza, J. A. G., Martín, F. M., & Bartolomé, M. (2021). Ship-To-Ship Dialogues And Agreements For Collision Risk Reduction. Journal Of Navigation, 74(5), 1039–1056.

Hardyanto, I. R. (2022). Analysis of the Implementation of the Anchorage Guard Service in Preventing Ship Collisions (Mt. Sele). In Pip Makassar (Number 8.5.2017).

International Maritime Organization. (1978). International Convention For The Prevention Of Pollution From Ships, 1973 And Protocol Of 1978 Relating Thereto (Marpol 73/78). Imo.

International Maritime Organization (Imo). (2020). International Safety Management (Ism) Code And Guidelines On Implementation. London: Imo Publishing.

Isgott, & Witherby. (2006). International Safety Guide For Oil Tankers & Terminals. Witherby & London Co. Ltd., 1–422.

Jonathan Lengkoan, Wahju Wibowo, A. S. (2022). Optimization of the Guard Service to prevent the danger of collisions on ships. 3(1), 20–24.