



Enhancing Safety for Maran Tankers Management – A Global Crude Shipping Powerhouse

August 2024

74%

Reduction in # of close encounter events

22%

Increase in minimum average distance from other vessels

3.6M+

Nautical miles sailed

120+

Voyages

2200+

Days of sailing

*Analysis of voyages conducted in Q1 2023–Q2 2024

The customer

Maran Tankers Management: A ‘Safety First’ Crude Shipping Company

Maran Tankers Management Inc. (MTM) is the crude oil transportation arm of veteran group shipping corporation. Angelicoussis Group, which operates nearly 150 wholly owned vessels. As a leading operator, MTM provides services for some of the world’s largest oil producers. The company is known for its emphasis on service, safety, operational excellence, minimal environmental impact, and highly cost-effective management. The company’s mission and strategic goals include “zero accidents, oil spills, loss of process, or lapses in security.”

The challenge

Always on the Lookout for Safety Innovation

Since its inception, MTM has been dedicated to creating a safety culture on board and shore. The company sought a solution that would enhance fleet safety and manage risk by:

- Enhancing Situational Awareness**
 Improving the crew’s understanding of vessel surroundings and adapting to low visibility conditions such as fog, night, and rain for heightened operational safety.
- Target Identification in High-Density Areas**
 Assisting crews with identifying high-risk targets in high-density areas like Singapore Port, where both moving and anchored vessels are present, and in congested waters with fishing vessels lacking AIS, such as the China Sea.
- Monitoring Navigation Trends**
 Identifying fleet-wide navigation trends to inform data-driven actions and enhance overall operational efficiency.
- Refining Safety Policies**
 Fine-tuning the company’s safety policies based on actual navigation performance data to continuously improve safety protocols and ensure best practices are upheld across operations.

“

Maritime crude oil transport is a highly complex business. Our safety-first approach together with our openness to technological innovation drives us to be on a constant lookout for cutting-edge solutions to lower safety risks. With Orca AI, MTM fleet crews now have an additional highly advanced navigational system to use which allows data driven, real time decisions to be made.”

Mr. Mark Pearson Managing Director, Maran Tankers Management

Orca AI for crews Enhancing Situational Awareness with Orca AI

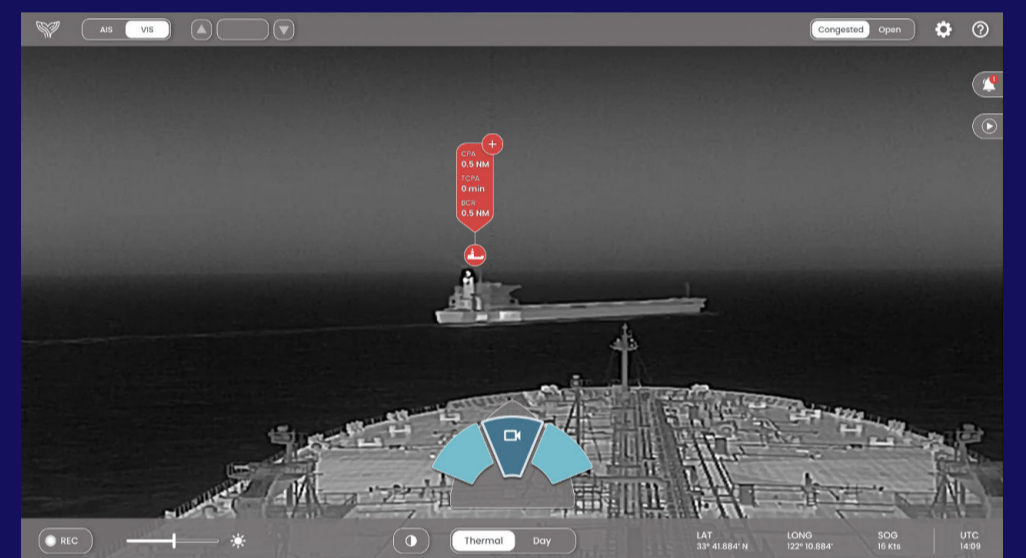
MTM has chosen Orca AI's SeaPod to provide onboard crews with an enhanced, real-time understanding of the vessel's surroundings throughout voyages, regardless of weather conditions or time of day. Equipped with 8 day and night thermal cameras for visual target detection, the platform seamlessly integrates ship sensors such as AIS and GPS, consolidating all data into a unified bridge display.

This integration significantly enhances situational awareness, which is critical for navigating congested waters and handling low visibility scenarios where traditional radar systems may struggle with clutter or fail to detect small vessels amidst wave-generated noise or light rain. The SeaPod empowers MTM navigation officers to swiftly identify potential hazards, including vessels without AIS, enabling them to take proactive measures to ensure safety and improve operational efficiency in challenging maritime environments.



Orca AI's thermal cameras are essential in congested waterways and open seas, especially in low visibility like night and fog. Mounted above our bridge's line of sight, they extend our view day and night, enhancing safety

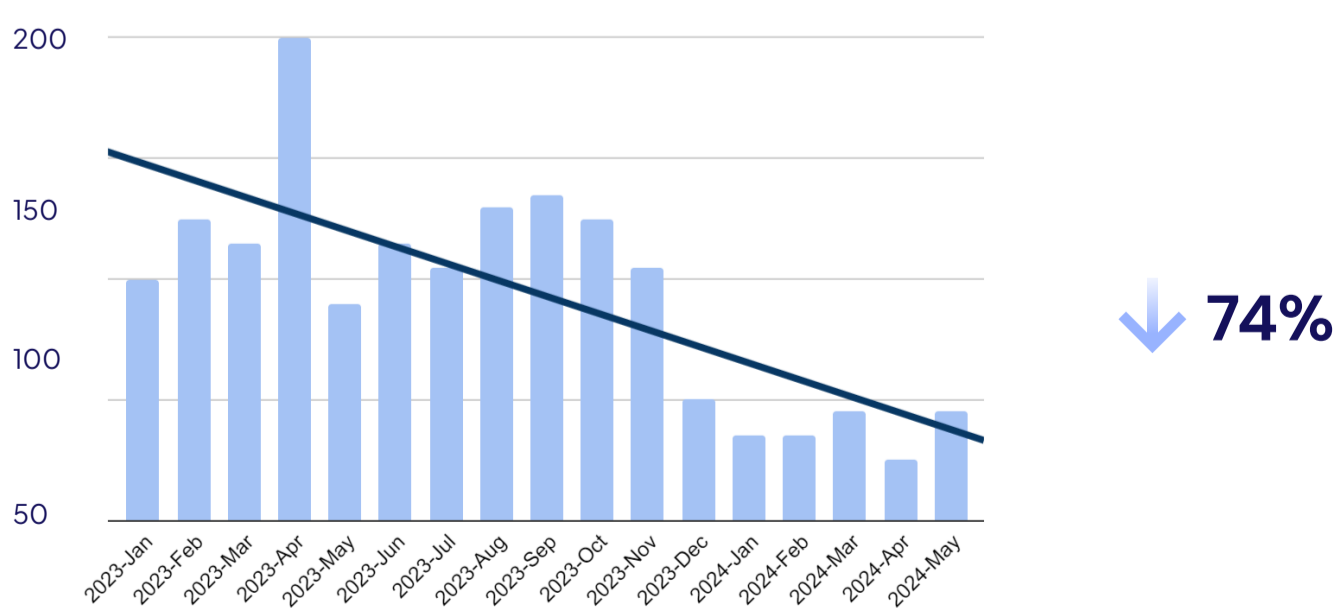
Captain Konstantinou Sotirios, Maran Ares



In the foggy China Sea, Maran VLCC navigates behind a cargo vessel's stern. The upper image shows the bridge view, while the lower reveals enhanced visibility from Orca AI's thermal cameras for the crew.

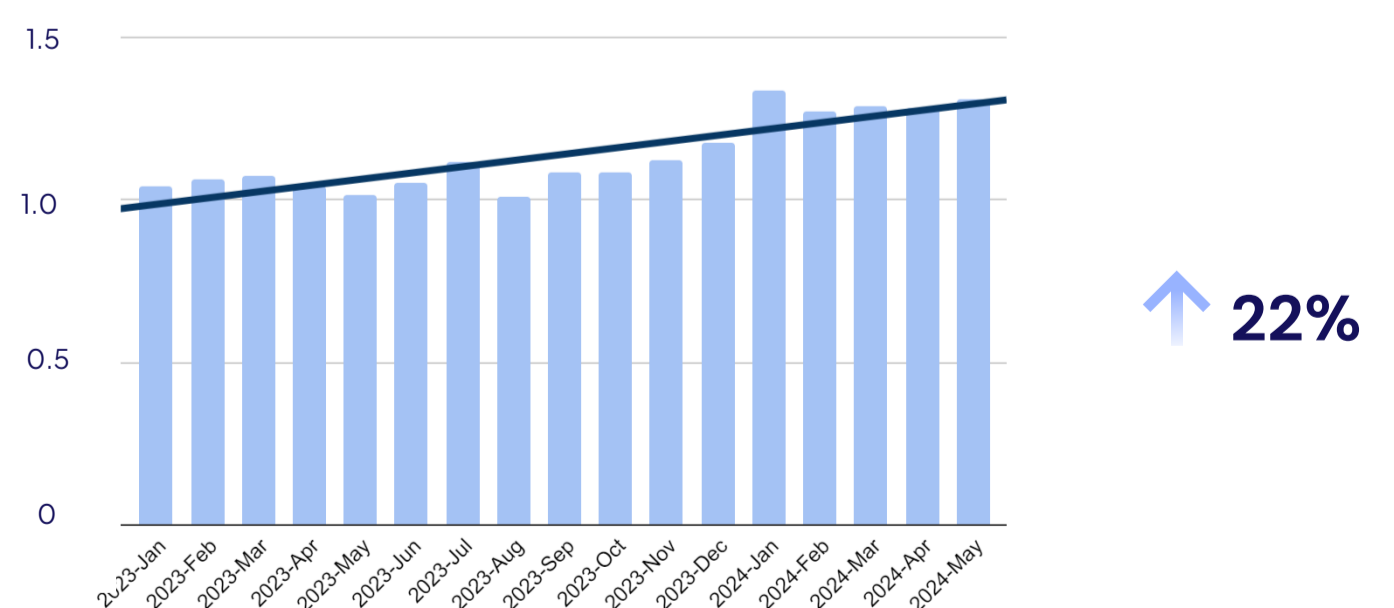
A comprehensive analysis of MTM's 42-vessel fleet from Q1 2023 to Q2 2024 showed significant improvements in key safety indicators, suggesting an overall increase in navigational safety.

Average number of events per vessel



The graph shows a decline in open water close encounters over time, indicating reduced risk of vessels approaching hazardous proximity (based on MTM SMS thresholds for average minimum distances in congested/open waters).

Average minimum distance



The graph shows an increase in the average minimum distance in open waters, suggesting that vessels are maintaining safer buffer zones, allowing crews more time to react and adjust course as necessary, reducing the risk of collisions.

Orca AI for the office and masters

Full visibility into fleet operations

Actionable insights for the office

Orca AI's FleetView dashboard gives MTM's shore-based office detailed insights into fleet operations, covering safety trends, efficiency, and areas for improvement. Analyzing millions of voyage data points, the FleetView offers actionable insights for real-time monitoring and quick response to critical events across MTM's fleet.

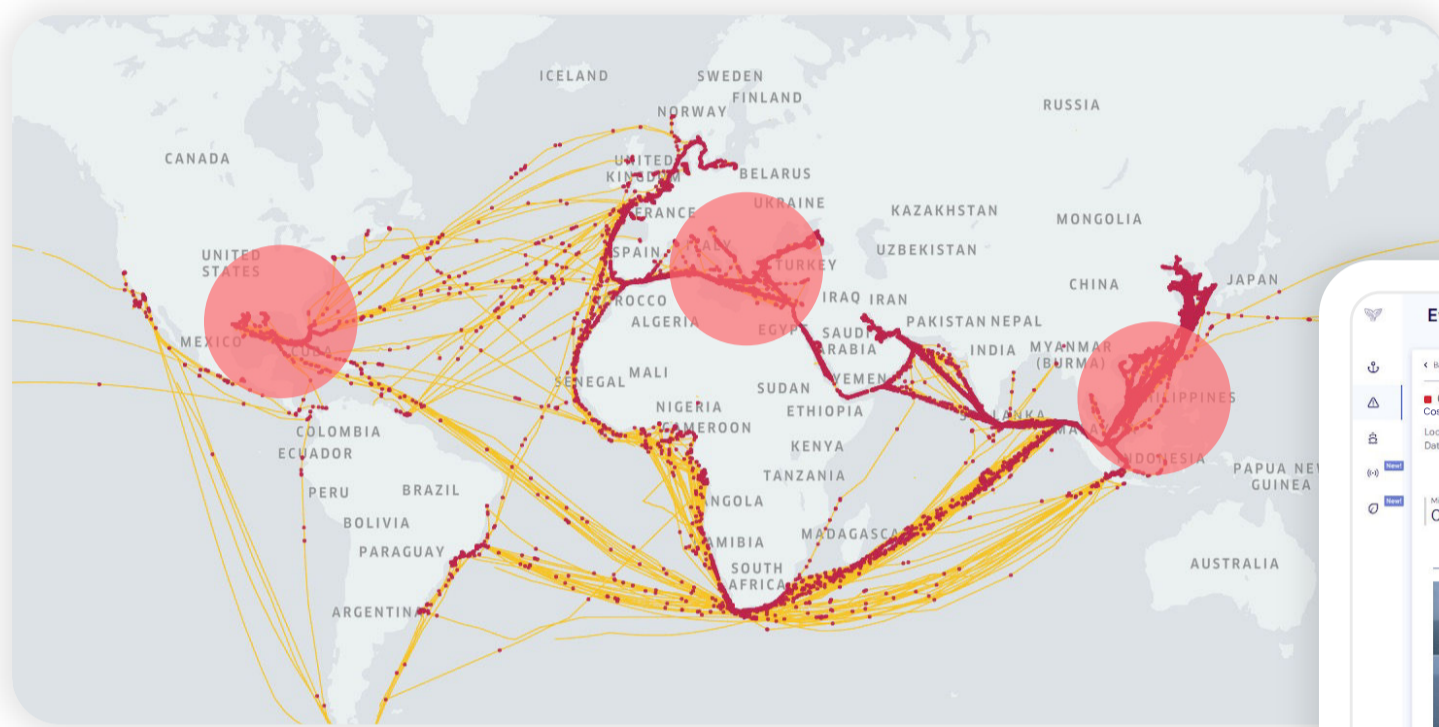
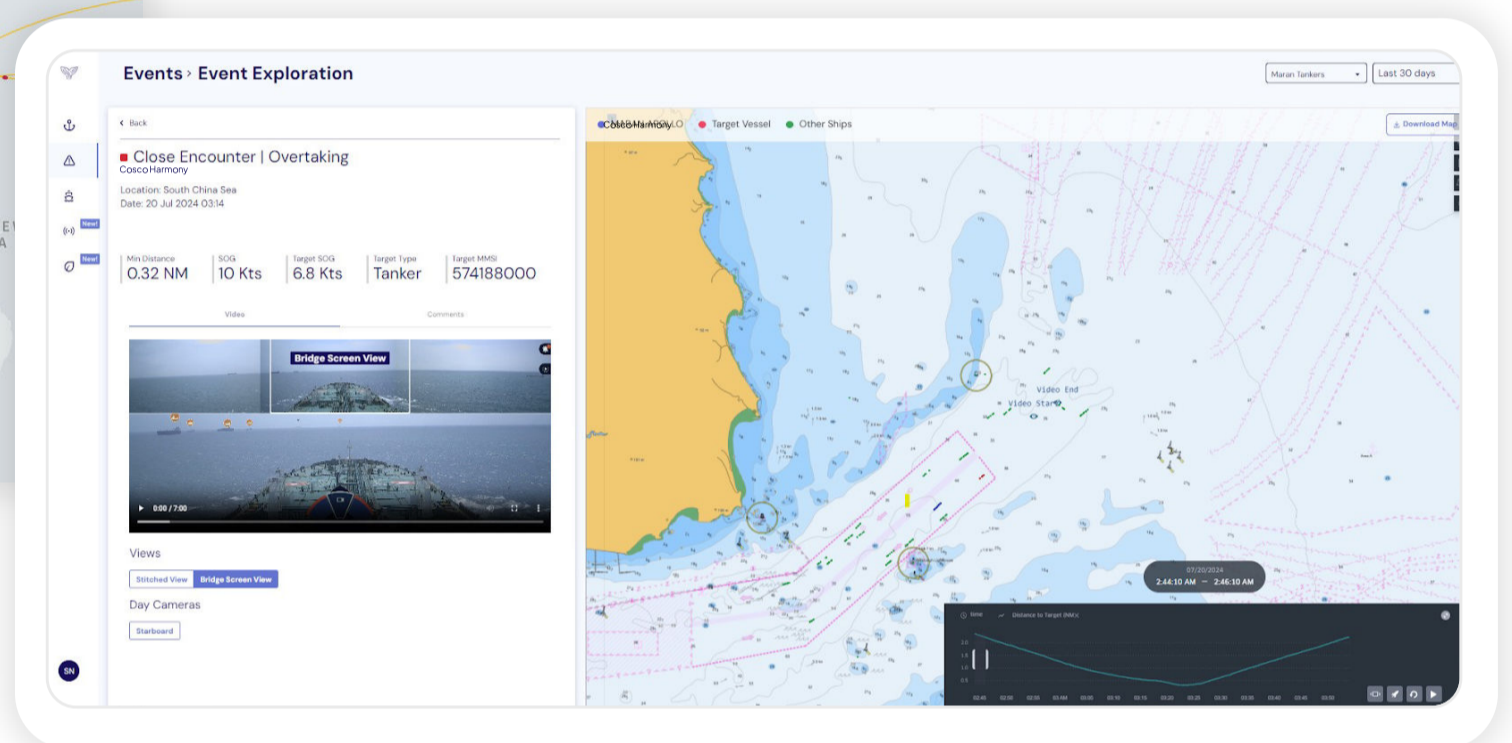


Image showing the typical nautical routes of the MTM fleet. The red dots show areas with a high number of events.

Fostering an improved safety culture

Orca AI's FleetView enhances safety transparency for MTM by identifying unsafe behaviors and promoting a strong safety culture. It enables real-time monitoring of COLREGs and company policies, providing continuous support to crews for safety improvement across vessels.



The FleetView provides real-time notifications of maritime events for MTM's operations teams, offering live-stream views and nautical maps to enhance understanding of vessel context and surroundings.

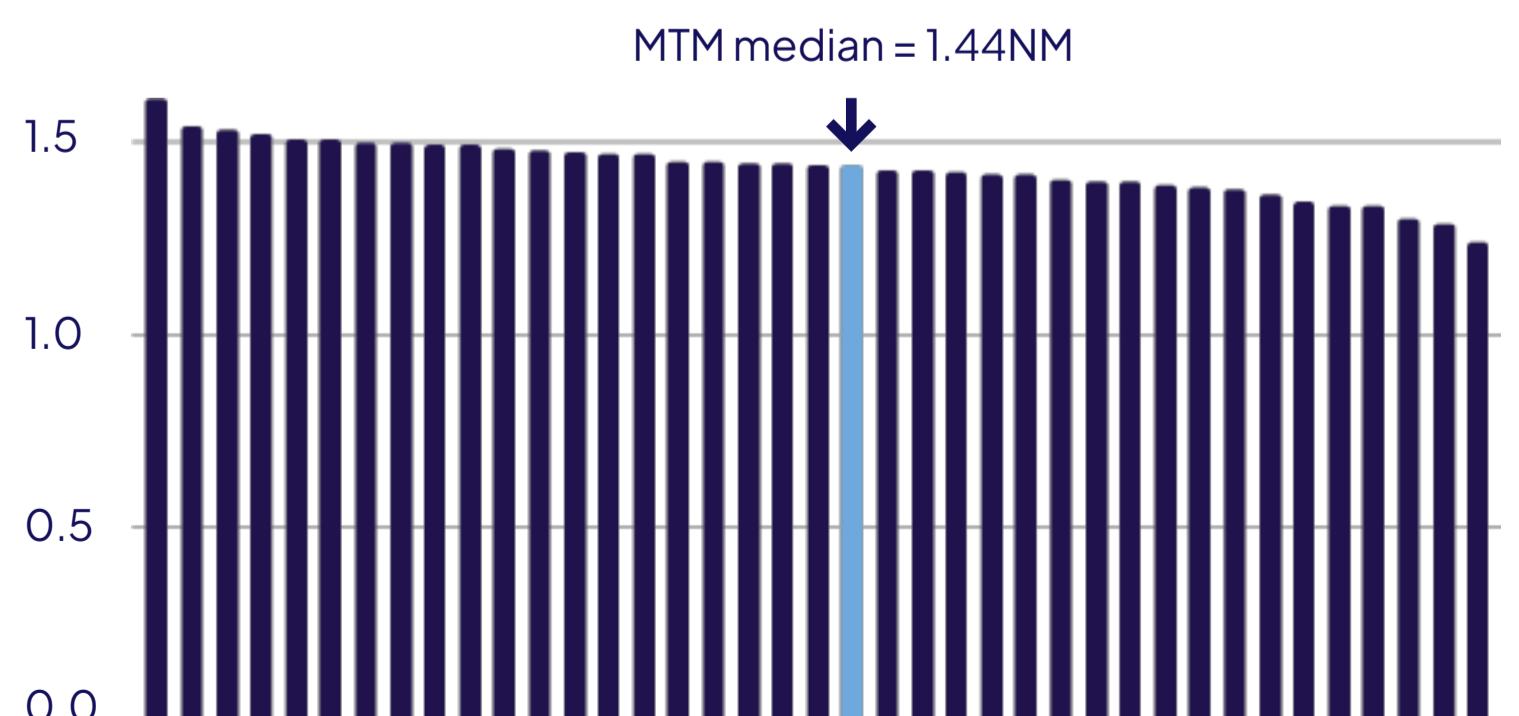


In an era where complexity and regulations are constantly increasing, charterers are constantly striving to improve industry safety standards. We are complying and aiming to achieve the highest standards to surpass competition. Orca AI's situational awareness platform helps me improve navigational safety and enhance SMS guidance and monitoring."

Captain Georgios Asteros, Operations Director, Maran Tankers Management.

Data insights as a driver to safety policy adjustments

Based on Orca AI's data insights, Maran Tankers changed the company's SMS thresholds from 2 NM to 1.4–1.6 NM in open waters, further strengthening the company's safety culture.



ABOUT ORCA AI

Orca AI brings pioneering AI technologies to the maritime industry to tackle some of the most demanding tasks of operations at sea. While serving in the navy, co-founders Yarden Gross (CEO) and Dor Raviv (CTO) experienced first-hand some of the most challenging aspects of ocean navigation. The two founded Orca AI in 2018, leveraging their business and technological expertise with far-reaching maritime industry knowledge.

Join us in safeguarding the world's oceans and maritime interests for generations to come.