



Real-world Adaptation to SIRE 2.0

The Oil Tanker Perspective

MM Marine INC.

Presentation: Cpt. Michael Galanos



SIRE 2.0 Implementation

The Oil Tanker Reality

SIRE 2.0 represents a fundamental shift from static checklists to dynamic, integrated safety conversations.

The Challenge:

- High-pressure operations with tight schedules and continuous turns.

Our Goal:

- Seamlessly integrate safety into the operational workflow without causing disruption.

The Paradigm Shift

Transitioning from "Memorizing Procedures" to "Demonstrating Competence"



The Challenge of the Human Element

Understanding and addressing individual responses to pressure, and integrating psychological factors into assessment.



Managing Crew Stress in Live Vetting Interviews

Strategies for maintaining performance under scrutiny and creating supportive environments for high-stakes evaluations.

Challenges Observed: The Human Element

- **Crew Confidence & Readiness:** Navigating the shift from traditional inspections to live, dynamic vetting interviews where crew members must articulate their actions on the spot.
- **Demonstrating True Competence:** Moving beyond the simple memorization of SMS procedures to actively proving understanding and capability during high-stakes assessments.
- **Our Challenge:** Managing the psychological pressure. Supporting even our most experienced seafarers to overcome interview stress without compromising their operational focus.

Key Factors Leading to Vetting Findings

Root Causes of Vetting Observations



- **The "Workaround" Trap (Procedure vs. Practice):**
Observations occur when crews adopt unofficial shortcuts due to tight schedules. SIRE 2.0 targets deviations between the idealized SMS and actual execution.
- **The Fear of Defect Reporting:**
Reporting broken hardware is mistakenly seen as a failure. A documented, risk-assessed defect demonstrates control, while a hidden issue guarantees a negative finding.
- **Siloed Operations & Communication:**
Under inspection stress, teamwork breaks down. Lack of cross-checking, poor verbal updates, and loss of shared situational awareness trigger Human Element observations.

The MM Marine Success Formula: Proactive Preparation



Early Activation

Initiate the preparation phase a month in advance to ensure the crew is well-informed, organized, and stress-free.



Evidence-Based Remote Monitoring

Utilize customized checklists with photographic evidence for effective remote progress monitoring and targeted support from the office.



Hands-On Superintendent Support

Board the vessel days before the vetting to actively assist in final preparations and conduct comprehensive, practical training for the entire crew.

The MM Marine Success Formula

Culture & Trust

Foundational Pillars



Active Listening & Mutual Learning

Value input from the crew "on the iron." Learn from their daily reality to improve procedures.



Fearless, 24/7 Communication

Break down vessel/office barriers. Encourage open dialogue with accessible superintendents.



Safety Above All Else

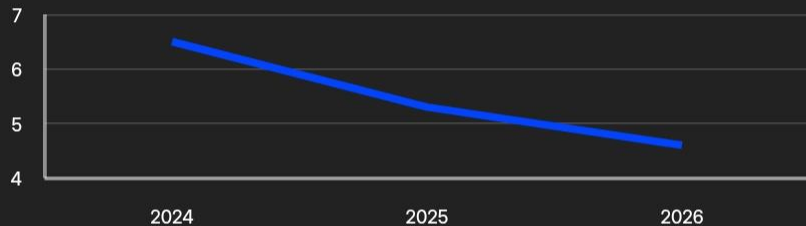
Instill a non-negotiable, fleet-wide mindset where safety guides every operation and decision.

A strong culture of trust and open communication is essential for operational excellence and safety.

Fleet Performance Trend

2024-2026 Projections

Fleet Performance Observations



2025 Observations

5.3

observations

2024 Observations

6.5

observations

2026 Observations

4.6

observations

Observations by Category

Process Findings

25.3%

Significant decrease from 41.7%

Hardware

42.2%

New primary challenge

Performance Overview

MM Marine SIRE 2.0 SMS Performance

MM Marine's crew has successfully adapted to the SIRE 2.0 SMS requirements, demonstrating strong performance in critical operational areas:

- **Human Element:** Findings are growing much slower than anticipated, indicating a proactive approach and an area for continued focus and development.
- **Cargo Operations:** Performance remains consistently strong, showcasing the crew's exceptional proficiency and adherence to core operational tasks.

MM Marine vs. Industry Benchmarking

MM Marine Demonstrates Superior Performance Across Key Areas

Human Element



Process



Human Element (Industry Avg)

37.0%

Process (Industry Avg)

31.0%

The data indicates MM Marine's proactive approach and effective integration of SIRE 2.0 principles, particularly in areas emphasizing crew competency and operational efficiency.

Identifying the Gap



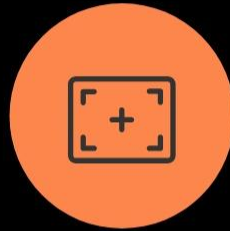
Current Strength: Soft Skills

We excel in Soft Skills.



Area for Improvement: Hardware Findings

We are above the industry average in Hardware findings (42.2% vs 27.0%).



Reason: Focus on Physical Equipment

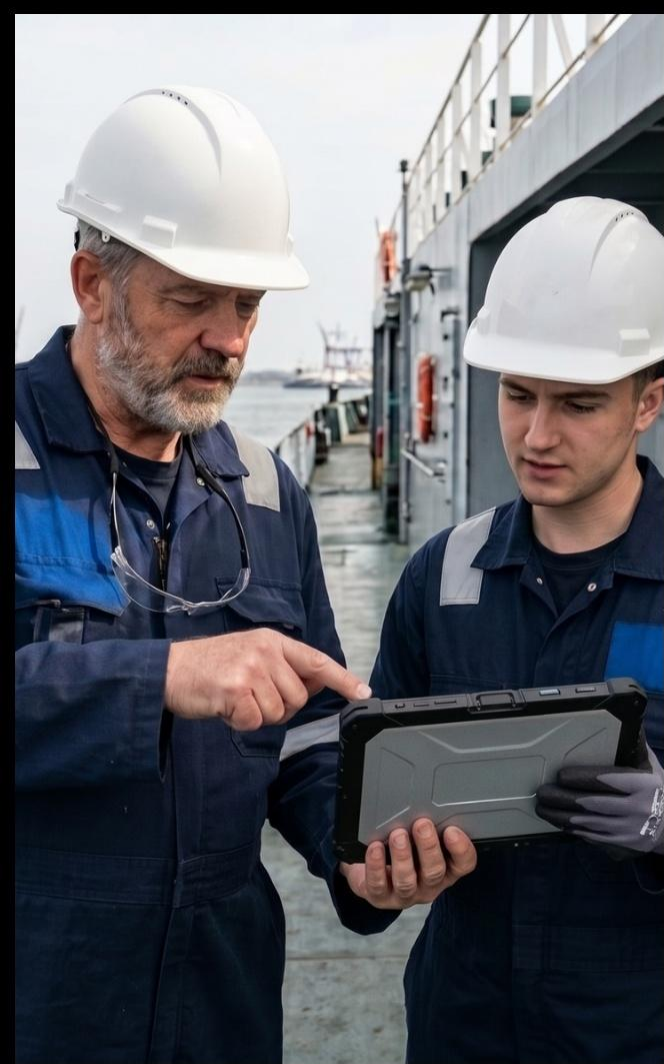
Inspectors are focusing heavily on physical equipment once processes are verified.



Need: Enhanced Physical Maintenance

This highlights a clear need for enhanced physical maintenance.

While we excel in Soft Skills, our focus on physical equipment issues indicates a need for enhanced physical maintenance, as reflected in our higher-than-average Hardware findings.



Key Focus Areas

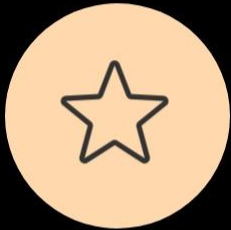
Deep Dive: Safety Management

Chapter 5 remains the most critical area for safety management.

- **Human Element:** Performing stronger than the industry standard.
- **Hardware:** Requires focused attention and improvement.

Inspection Scenario 1: Familiar but Unprepared

The Gap Between Theory and Practice



Scenario Overview

An officer familiar with a topic could not practically demonstrate the required procedure onboard.



The Challenge

Asked to explain the verification of a completed risk assessment, the officer could only provide theoretical steps without a real-time, onboard example.



Outcome

An observation was issued due to weak practical implementation of the procedure.



Key Learning

Theoretical knowledge alone is insufficient for SIRE 2.0 compliance. Practical, demonstrable understanding is critical.

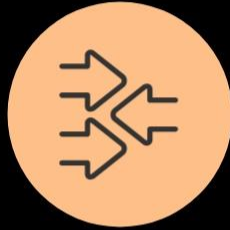
Theoretical knowledge is insufficient; practical, demonstrable understanding is critical for SIRE 2.0 compliance.

Inspection Scenario 2: Breakdown in Communication



The Question Posed

The Inspector questioned the process for ensuring coordination between the deck and engine departments during cargo operations.



Inconsistent Responses

The Chief Officer and the Engineer provided conflicting and unaligned answers regarding their procedures.



Vetting Observation Issued

A Vetting Observation was recorded due to the lack of team alignment and shared situational awareness.

SIRE 2.0 emphasizes the importance of the collective team dynamic and cross-departmental coordination, going beyond individual competence.

Inspection Scenario 3: Confidence Under Pressure



The Question

The Inspector asks, "What actions would you take if a critical alarm fails during operation?"



The Response

The officer hesitates and struggles to articulate the steps, despite knowing the correct procedure.



The Outcome

The inspector raises a serious concern regarding the officer's confidence and decision-making capabilities.

Knowledge alone isn't enough. Confidence, clarity, and decisiveness under pressure are essential for a successful vetting.

The MM Marine "Success Formula" (Part 1)



- **SMS Simplification**

Creating user-centric procedures that work on a busy barge.

- **On-the-go Training**

Utilizing short operational breaks for competency building, moving away from classroom fatigue.

The MM Marine "Success Formula" (Part 2): Hardware Transparency

Goal: Foster an environment where vessel crews are encouraged and empowered to report hardware defects at the earliest possible stage.

Key Shifts & Strategies:

- **From Reactive to Proactive:** Transitioning maintenance strategies from addressing issues after they arise to identifying and reporting potential problems before they escalate.
- **Open Vessel-to-Office Communication:** Establishing and maintaining 24/7 communication channels that facilitate seamless, immediate reporting of any hardware concerns from any vessel to the shore-based office.
- **Building Trust and Accountability:** Creating a culture where reporting defects is seen as a critical contribution to operational safety and efficiency, not a cause for blame.
- **Leveraging Technology:** Utilizing digital platforms and communication tools to ensure real-time updates and rapid response capabilities.



Key Takeaways

Conclusions & The Way Forward

SIRE 2.0 presents a significant opportunity to enhance our safety culture.

- **Key Strength:** The adaptability of our crew is our most valuable asset in this transition.
- **Next Phase Focus:** Bridging the Hardware Gap through the implementation of predictive maintenance strategies.



SIRE 2.0 strengthens our safety culture, emphasizing crew adaptability and predictive maintenance.