



Athenian Sea Carriers Ltd.

Tanker Operator Conference – EUROPORT

“ TMSA & FIRST CLASS TANKER OPERATIONS ”

Rotterdam, November 2nd 2005



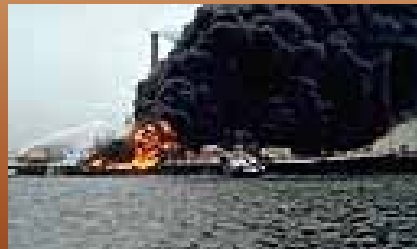
Continuous Improvement And Preventive Maintenance Systems

*Avoiding the
Compliance Trap*

Tanker Shipping Industry

- **Regulation Driven**
- **Re- Active**
- **Accident Driven**
- **Compliance Culture**

T M S A





T M S A

- **Pro-active**
- **Continuous Improvement**
- **Self – assessment**



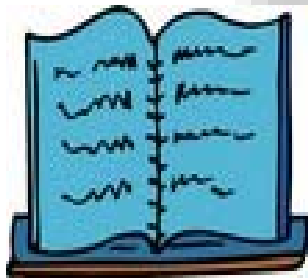
Do You **COMPLY** with TMSA ?



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TMSA

**Shipping
Company SMS**



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H O W.....



How do I act as a prudent Manager?



How do I embrace the continuous improvement culture?



How can I avoid the compliance trap?

BE HONEST

TMSA Element 4

“Reliability and Maintenance Standards”

Key Performance Indicator

“Each vessel in the fleet has a formal maintenance plan and a maintenance and defect reporting system.”

Best Practice Guidance

“The system, which may be computer based, covers all on-board equipment on the bridge, the deck and in the engine room and all electronic equipment.”

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4 C Reliability & Maintenance Standards

(Close-Out Performance)

$$KPI = \frac{\text{No. of outstanding PM tasks}}{\text{Total no. of monthly PM tasks}}$$

STAGE 1	10 % - 15 %
STAGE 2	6 % - 10 %
STAGE 3	2 % - 6 %
STAGE 4	< 2 %

Development of a Preventive Maintenance System

- ✓ **Selection of the software application**
- ✓ **Equipment manufacturers maintenance manuals**
- ✓ **Shipyards Building Specification, drawings & diagrams**
- ✓ **Development of equipment & systems hierarchy tree**
- ✓ **Data population of maintenance Jobs**
- ✓ **Manufacturers Service Bulletins**
- ✓ **Classification Society CSM List**
- ✓ **Advanced set - ups**
- ✓ **Training**



Athenian Sea Carriers Ltd.

THANK YOU!

Rotterdam, November 2nd 2005