Embedding safety at the heart of operations

Subchapter M will add to the data shipowners have to track, record and report, creating a need to plan and implement an IT solution, says Stephen Schwarz, vice president and COO, ABS Nautical Systems

The long-awaited Subchapter M (Sub M) rules may be the most important legislation in the history of the US tug, tow and barge industry. At the core of Subchapter M is the promotion of a framework to support sound safety cultures and creation of the means to demonstrate safety management capabilities.

These US Coast Guard rules are designed to raise safety standards throughout the barge, towboat and tugboat industry; however, integrating safety risk management and safety assurance concepts into repeatable, practical systems will be new to many in the inland waterways.

In addition to the steep learning curve to understanding, developing and implementing a safety management system (SMS), for many there will be a large amount of additional data to be collected and reported. With the publication of the final Subchapter M regulation on 20 July, shipowners who have not done so already must quickly educate themselves on how to work with an SMS and adopt a sustainable solution.

A proactive safety culture embodied by an SMS is critical to protect passengers, ships, crew and the marine environment. Underlying this are four strong pillars:

● Safety policy, which establishes senior management's commitment to continually improve safety and defines the methods, processes and organisational structure needed to meet the safety goals;
● Safety risk management, a formal process within the SMS which describes the system, identifies hazards, assesses and analyses risks, and defines procedures to control them;
● Safety assurance, which employs audits and inspections to evaluate the continued effectiveness of the SMS as well as compliance with standards and regulations to provide insight for improvements;
● Safety promotion, which applies training and communication in creating a solid safety culture within all levels of the company.

The level of success of an SMS is determined by the level of buy-in from management and employees. When upper management practises and insists on better risk management, others will follow.

To be successful, the procedures in the SMS must become the way to do the job right, not just add-on tasks to day-to-day business. Strong leadership and a solid SMS with built-

▲ *A robust safety management system (SMS) relies on four strong supporting pillars*

in checks and balances can accomplish this. To do this properly and allow for efficient communication and reporting, shipowners will need to apply a robust digital solution.

Accurate and accessible documentation is the key to creating, maintaining, tracking and improving an accurate and accessible SMS. Some ship operators choose to manage their system using a combination of traditional tools, like spreadsheets and hard-copy books and files.

> *"A proactive safety culture embodied by an SMS is critical to protect passengers, ships, crew and the maritime environment"*
> **Stephen Schwarz, ABS Nautical Systems**

Others need more robust tracking options and system integration to reduce the management burden. Information technology (IT) solutions that integrate maintenance, crewing, HSQE operations, and documentation provide owners and operators with a better business focus. Additionally, system integration reduces data errors and downtime, simplifies processes and reduces duplication of formal systems.

There are many opportunities for brownwater operators to adopt robust IT systems, but a robust, well-documented SMS does not happen overnight. Sometimes, it takes years to develop and deploy an SMS and to train employees to use it, but it is worth the investment.

Shipowners that are still on the fence should consider evaluating a solution that offers results for the long term. An integrated business software solution should include:
● 'Wizards' to help make tasks/data entry easier for crewmembers;
● Subscription-based pricing to ease up-front costs;

▶ *Stephen Schwarz, vice president and COO of ABS Nautical Systems*

● Options for cloud-based and/or enterprise-based solutions;
● Customer support during and after implementation;
● User training programs;
● An easy way to produce required reports from the system.

For long-term compliance, shipowners should think in terms of implementing holistic management systems that link multiple activities to reduce the complications of complying with Sub M. Shipowners will benefit from integrated systems that reduce data errors and allow better management of their complete business processes and risks as well as reduced costs from using multiple IT tools. A solution that meets these criteria will be more competitive and efficient.

With the right integrated system deployed on board vessels and shore-side, shipowners will find themselves more resilient to industry changes and will be more competitive going forward.

To support US shipowners with compliance with Sub M requirements in US inland waterways, ABS released the *Guide for Building and Classing Subchapter M Towing Vessels* in September 2016.

The guide addresses practical requirements for lifesaving appliances, fire protection, machinery, piping, electrical, structure and stability/load line. Using the guide, along with ABS Nautical Systems' integrated software solution to facilitate data capture and reporting requirements, shipowners will have the tools they need to understand and meet the requirements of Subchapter M.