





Time for class to shine

The narrow view of classification societies as mere rule-makers is a misunderstanding of their role. So says American Bureau of Shipping (ABS) vice president and chief engineer James Gaughan. We met him in New York City, where he told us about the glittering role class really plays.

“People need to take a step back and look at what we do,” says Gaughan, who took up the reins as chief engineer at ABS in April of last year. He adds that, like ex-mayor of New York City Ed Koch, who was buried the previous day, he’s not afraid to speak his mind.

“Because you have a number of organizations and IMO issuing requirements, a lot of people have been downplaying the role of the classification society. And if you look at the history of the maritime community, the role that class has provided in terms of maritime safety is not always fully recognized.



If there's a grounding, stranding, flooding or any distress situation at sea, it's the class society everyone will look to for a solution

"Class requirements have evolved over many years and many have been incorporated into SOLAS (Safety of Life at Sea). But long before there was a SOLAS, there was ABS, Lloyds, Bureau Veritas, DNV – major class societies doing their jobs.

"People are not necessarily aware of how often a surveyor is in a dry dock on a Sunday morning to tell someone a ship does not meet class or statutory requirements, that they must do a proper repair," says Gaughan.

"If there's a grounding, stranding, flooding or any distress situation at sea, it's the class society everyone will look to for a solution, be it a refloating or an evacuation."

"We have people working around the clock," says Gaughan, who recounts how ABS chairman Robert Somerville flew half way across the world to explain to a valued customer why his vessel could not proceed without necessary repairs being carried out.

"In some cases our decisions are contentious. You have a client who you hope will give you class on the next new order they build, who wants to get the ship on its way to making money and you have to tell them it's not in the best interests of the crew, the vessel or maritime safety."

But besides having to sometimes make unpopular decisions, Gaughan says another aspect of class that is often overlooked is its research and development role.

The organization has more than 600 engineers around the world, many dedicated to research. At any given time it will be running at least 100 to 150 research projects in conjunction with leading technology players or academic institutions.

An interesting relationship it has recently entered into is a "cooperative agreement" with ABB. Gaughan explains the background behind this association:

"As the industry changes, new developments come along and it's our job to keep abreast and be cognizant of evolving technologies.

"Because before too long somebody is going to tell us they want to do some activity that we don't have rules for and it's our responsibility to assess proposed approaches so that the activity can be done safely.

"In the past, a lot of the work at ABS had been directed on structure, but our focus started to expand some time ago to safety in terms of control systems, instrumentation, communications and understanding the operation of vessels."

More recently, says Gaughan, operability performance and environmental concerns have come under the spotlight.

"We've formed a new group with in-house people and recruited industry experts in energy efficiency. Of course, a lot of this has to do with power generation, control systems and alternative forms of propulsion."

Gaughan says that when ABB approached ABS about forming a cooperative partnership in this area, they jumped at the opportunity.

"We always develop new requirements working with industry and, typically, we will hear about something after being asked by a client if this is a structure or system we could class. We will do some internal research ourselves and then we'll start contacting industry experts. Very often we'll organize a committee of experts that we work with as we develop a new guide or rules.

"Our relationship with ABB is unusual in that it's a strategic arrangement, not a commercial one. While this arrangement is progressive, it's not new – we've done it before with shipyards and other organizations.

"Working with ABB, a world leader in this technology, not in one area, or just on one project or component but on a number of evolving technologies is a tremendous opportunity for ABS.

"Where this is going is towards developing what we call approval in principle on a number of designs or features. We are not meeting ABB after a contract has been placed with a shipyard, we're meeting them a few years before the product gets to the shipyard.

"Once the Approval in Principle (AIP) is issued, ABB can work with shipyards or designers. So they can approach a shipbuilder and say 'If you're building a hybrid tug to ABS class, this power distribution system has already received AIP from ABS.'"

Another benefit of this relationship for ABB is what Gaughan calls "keeping them on their toes."

American Bureau of Shipping (ABS)

- International ship classification society, established in 1862
- Headquarters in Houston, Texas
- Offices in 70 countries
- Mission: to promote the protection of life, property and the natural environment
- Technology centers around the world that liaise with leading universities
- Currently running 200 research projects worldwide

Technology focus areas for 2013

- Environmental issues
- Extreme environments
- Offshore energy
- Alternative fuels
- Propulsion
- Performance enhancement

"ABB has an excellent reputation so it's important to them that they not put a product into service that hasn't been properly documented, tested and justified, so they want to work with a classification society that will challenge them.

"We force them to answer questions because everyone has a good idea but it has to be tested, run through a certain level of scrutiny. That unbiased third party review is really what class provides."

Whether it's teaming up with major players on R&D projects or helping to get new technology onto the market, it seems that, far from being a bit-player in the shipping industry, class is one of its leading lights.

Text: Helen Karlsen