

Class act under the spotlight

The performance of classification societies, like that of every other link in the tanker chain of responsibility, has come under even greater scrutiny following the loss of Prestige. A measured response is needed

Because all physical evidence was lost when Prestige sank, it may never be possible to pinpoint the precise cause of why the 1976-built, single-hull tanker suffered the original structural damage which led to her breaking up and sinking six days later. This was pointed out by ABS, the ship's classification society, in its technical analysis of the likely causes of the damage published last month. According to the report, the most likely cause of the flooding of the starboard ballast tanks was a weakened section of the ship's structure in combination with severe wave impact.

It was also pointed out that the ship was loaded properly on her final voyage, had more than adequate hull strength for the reported conditions and should not have been damaged by the breaking waves.

The ship was extensively used as a lightering tanker for the 15 months prior to her fateful voyage, and ABS suggests that structural weakness in the hull behind the lightering fenders could well have led to permanent deformations in that structure. Much was made of the fact that the ballast tanks where the damage occurred had not been surveyed by the society at the ship's last annual inspection. Although the rules call for ballast tanks adjacent to heated cargo tanks to undergo such inspections, the ABS surveyor had been told by the ship's master that the cargo tank heating coils in question were "not operational".

Backlash and fallout

In the heat of the moment, following the loss of Prestige, allegations about the substandard performance of the ship's flag, owner, charterer class and insurer, not to mention the port state control authorities which should have spotted the potential weak spot, were flying in all directions.

The International Association of Classification Societies (IACS) published an ad hoc audit into the work of ABS relating to Prestige in early February 2003, less than three months after the accident occurred.

Although the audit essentially concluded that ABS carried out surveys on the vessels correctly, and that there are no "loopholes" in IACS rules that would compromise the effectiveness of a field survey, the Association nevertheless recommended that its own Council revise certain unified requirements (URs) "to ensure clarity" for all class societies. Also, amongst eight recommendations, again for all member societies, the Council should consider a requirement for internal inspection of dual-purpose cargo/ballast tanks at the annual survey, regardless of condition.

New role for class

In addition to its own in-house review, class has been having to respond to calls for action from other quarters. Towards the end of 2002 Greece and the Bahamas made a joint submission to the International Maritime Organization's Council suggesting that IMO take over from classification societies the development of standards for ship construction. The recommendation was part of a paper which also dealt with the provision of permanent means of access for new ships to facilitate survey work.

The proposal for a complete revision of the traditional role of class stirred up a strong response, not least from IACS itself. The Association pointed out that such a proposal was "difficult to comprehend", as the sole business of class societies is to secure "the safety of life and property at sea and the natural environment".

Class societies are organised, managed and audited with this goal in mind and have in their possession an unparalleled body of knowledge, experience and manpower.

This expertise is utilised in the societies' research and development programmes, which have a combined annual expenditure of approximately \$90 million.

Closer IMO links

The call for IMO to become involved in rule development for ship structures has also brought the relationship between class and flag states into focus. Currently, class societies act as recognised organisations on behalf of flag states and, as such, flag states have the power to impose control or oversight over class.

If IMO was to take on the traditional role of class societies, flag states would then have the responsibility of providing the same level of skills and an R&D commitment as that which class societies maintain.

While pointing out the folly of such a realignment, IACS agrees that there is room for a closer integration of classification society rules and IMO safety objectives. The best way to do this would be for IMO to set overall safety objectives based on risk acceptance criteria while IACS seeks to develop a common basis for developing ship structural requirements.

Stronger ships

Prior to the Prestige sinking IACS members had already embarked upon a project to develop new unified requirements (URs) for stronger, more robust vessels. The initiative, which is comprised of many technical sub-projects, represents a proactive response to the demand from shipowners and regulators for the construction of stronger, more robust vessels. The aim is to introduce more uniform scantling requirements and wastage limits for bulk carriers, oil tankers and, eventually, other ship types.

The IACS programme envisages that the first of the new, higher strength scantling URs will be ready for consideration by the IACS Council by mid-2004. The scope of the technical development work entails considerable challenges, but IACS reports that progress is being made.

Currently, each IACS class society member applies its own structural evaluation criteria to determine scantling requirements. While URs governing longitudinal strength are already applied by all IACS members, there are sufficient variations to allow some shipyards to seek approval of ever lower steel weights. The new URs will largely remove the scope for undesirable competition on steel weights.

Commercial pressures

The initiative for the new URs has been prompted by competitive pressures that have taken hold in the shipping industry over the past two decades, more specifically the competitive pressures on shipyards and shipowners to minimise fabrication costs.

The competition between class societies has contributed to this trend, as each society seeks to offer the most cost-effective design solution. Simpler detail designs and a reduction of quality hand work in the ship fabrication process have been two occasional outcomes of the drive to cut costs.

Although materials and technologies utilised in the construction of new ships have evolved and ship designers can wheel out a considerable armoury of computer power in the development of the optimum ship, the predominant incentives now prevailing are to cut corners rather than to build ships of better quality.

If nothing else, Prestige and the earlier Erika sinking have prompted a realisation that adding on new layers of prescriptive regulations to an already substantial body of rules only adds to the confusion and can be counterproductive to the effort to secure continuous improvement in safety levels.

What is needed, not least from class societies, is uniform higher standards and industrywide support and cooperation for their development. Furthermore, higher standards do not necessarily mean the creation of a new level of controls. They can

simply be a more rigorous implementation of existing requirements, an insistence on quality and a willingness to learn from experience and past mistakes.

Flag state assistance

The role of flag states as recognised organisations acting on behalf of flag states is another issue that has surfaced in recent months, not least in the context of new ship registers that have been created by nations with little or no maritime tradition and precious little in the way of the necessary infrastructure.

Most of the class societies are refusing to have anything to do with the new registers until they have made the commitments required of a responsible flag state, including submitting to the IACS flag state initiative on improving their performance.

The initiative has been launched by the Association to assist those flags which have been blacklisted by the Paris Memorandum of Understanding on Port State Control (Paris MOU) countries but wish to work with IACS in order to improve their capabilities as ship registers.

Blacklisted flags deemed to be acceptable candidates for the initiative are visited by an IACS delegation comprising experts from at least three member societies. The flag state is then provided with a proposed programme of technical assistance designed to bring its administration up to the required performance standard.

The initiative has been launched on the basis that it is better for class to assist flags seeking to improve the quality of their services rather than simply refuse to act on their behalf. A pilot project has been carried out and the results have been encouraging.

IACS hopes that the initiative will be recognised by the European Commission which has expressed its concerns about poorly performing flags in the aftermath of the recent high-profile tanker accidents.