

# Marine insurers sailing into uncharted waters

Marine insurers are displaying distinct feelings of trepidation as they witness another milestone in the evolution of the containership. They see the decision of Maersk Line to order 10 18,000 TEU vessels, with options for a further 20, as a leap into a dangerous and unknown area of risk and are watching anxiously to see if other shipping lines follow the mantra that "bigger is better". Early indications suggest this will be the case.

According to a report by Braemar Seascope Research in April, the 250,000+ TEU of containership deliveries in the opening quarter of 2011 included 10 ships in excess of 10,000 TEU, all of which have been deployed in the Asia-Europe trades. The largest new arrival was the 14,074 TEU CSCL STAR, built by Samsung Heavy Industries for China Shipping.

In the 10,000-12,499 TEU category, 29 vessels are scheduled for delivery between now and 2015, while in the 12,500+ TEU size bracket, another 119 ships will be commissioned over the next five years. The number of ships of that size already in service stands at 43 units.

## Risks posed

Underwriters' fears about the risks posed by these mega containerships were never far from the surface at the *TradeWinds Marine Risk Forum* held in London this month. Hull and machinery underwriter Simon Stonehouse of Brit Insurance at Lloyd's condemned speculative ordering of newbuildings and seemed to have had mega boxships specifically in his sights, particularly when another negative factor going forward, in his view, was the lack of quality seafarers.

Talking about the underwriting cycle, the future stability of the market and its potential volatility and profitability - with or without economic revival - Stonehouse said the new century started with excellent fundamentals in place, but dramatic changes had taken place since then. Now, the dry bulk and tanker markets are really struggling and the party for containerships is coming to a rather abrupt end.

"Against this background it has been reported by a number of maintenance providers that shipowners are delaying all but the most important work in order to seek a positive bottom line in the weak markets," Stonehouse said. "Owners are facing the risk that class certificates may expire if the ship is not maintained to class society requirements. The outcome of lack of maintenance to insurers is obvious to us all."

He suggested that owners would become more demanding in the future, so underwriters would have to be far more selective in terms of risk selection in order to get the required return, rather than relying on the next upturn in the market, which might not happen.

Another speaker at the forum, George Tsavlis of Greece's Tsavlis Salvage Group, said he was frankly very worried over the emergence of mega ships of whatever hue, but particularly containerships and cruise vessels. If one got into trouble, or there was a disastrous collision, the salvage problems would be enormous.

## Very wary

Earlier this year at a press briefing in London, the International Union of Marine Insurance (IUMI) said that the growing size of vessels now on order has sparked fears over the values each vessel carries, in terms of hull, cargo and crew and, in the case of cruise ships, passengers. IUMI said the sheer size and scale of vessels and the potential for insurance accumulations has made marine insurers "wary of the implications."

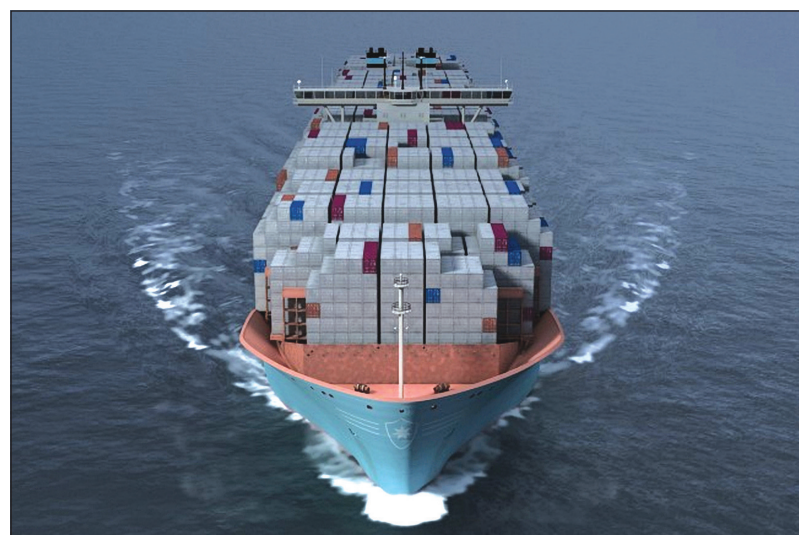
In a later comment, Oslo-based IUMI president Ole Wikborg said he saw three main issues concerning mega containerships: Operational challenges (ie terminal size, infrastructure etc); cargo handling

loading/discharging/stacking); and accumulation of values/risk.

On the question of salvage, David Duffield, a leading casualty surveyor and master mariner, says that mounting an operation like the one which recovered millions of dollars' worth of consumer and industrial goods from the wreck of the MSC NAPOLI in the English Channel would pose a massive challenge in relation to any

of the new generation of larger containerships. The 18,000 TEU ships ordered by Maersk will be four times the size of the 4,419 TEU MSC NAPOLI, which suffered hull failure in heavy weather in January 2007.

*Underwriters are very wary of the potential for insurance accumulations from large vessels like Maersk's 18,000 TEU Triple E class*



The vessel was intentionally beached in Branscombe Bay, Dorset, when fears deepened that she might sink while under tow. The efficiency and environmental aspects of the recovery operation won widespread praise.

The maritime industry now questions, however, whether such an operation could be performed successfully in the event of one of the larger ships already in service, and others shortly to come on stream, getting into similar difficulties. These ships will carry substantially more cargo, worth well over US\$1B a time.

### Tricky job

Duffield, of BMT Marine & Offshore Surveys, now part of the Braemar Shipping Group, acted on behalf of the London P&I Club, the main liability insurer

in the MSC NAPOLI case. He oversaw the tricky job of recovering lost, sunken and beached containers, including their disposal, and of boxes removed by salvors from the stricken vessel.

He said that the angle of the stack of boxes on a listing ship involved in a casualty made operations very difficult and loss of boxes upside more probable. "With a bigger, broader ship that is listing, there will be a greater height of boxes from the sea surface and recovery operations will have to commence with boxes from the top. Because of the mechanisms for locking the containers and the array of lashings so they do not shift while at sea, you have to work with gravity," he said.

To cope with the 20deg list during the MSC NAPOLI operation, salvors had to

abseil from the top of the container stack to release the twistlocks and securing bars.

Ships have to comply with IMO regulations for visibility from the bridge, meaning that during quayside operations, boxes have to be loaded in step formation forward so there is a clear view ahead for navigation. Usually the stack is at most eight to nine boxes high due to the maximum stacking load of the boxes, so the latest vessel designs, raising cargo capacity, have to have increased length and breadth. But the greater the width of the ship, the higher the block of containers would reach in the event of listing.

Cranes hired for salvage operations in such circumstances would, therefore, have to be taller and the higher the jib is from the base, the greater the outreach and the less weight can be put on the lifting hook.



"In such an instance," said Duffield, "really big cranes would be required, but currently those used for salvage purposes do not have the capability to reach over the full profile of these larger vessels."

"I do not think it would be practical

*The new generation of mega containerships are four times or more the size of the 4,419 TEU MSC NAPOLI, which suffered hull failure in heavy weather in January 2007*

to have that kind of crane design to be used in the open sea," he added.

### Considerable resources

Duffield referred to the considerable resources that have to be assembled for a major operation. Even with the extensive forces deployed to ward off physical and environmental damage at Branscombe Bay, it took until October 2008 before this and many other beaches could be restored to a satisfactory condition.

To ensure the right gear was on standby for an accident involving a ship any larger than the MSC NAPOLI, the capital expenditure would be truly enormous and, over time, its designed future usage negligible. Idle time therefore would probably be considerable. One answer, Duffield thought, may be for someone to build a modular crane that could be scaled in size up and down, enabling it to be put to general use when not attending casualties.

Units could be stationed at strategic points close to container trade lanes in Europe, the Atlantic basin, the Far East, east coast of the US, Australia and India. "I would think that would be as far as anybody - salvage companies, with or without help from marine insurers, and government bodies - would be prepared to go in that kind of investment," he said.

Factors that will affect a mega containership are not limited to the hull and machinery, however. In order to achieve the desired cargo capacity of mega ships, current proposals are to stack boxes up to 10 high, rather than the maximum of nine that is currently used.

According to another surveying expert, Jeroen de Haas, managing director of BMT De Beer in Rotterdam, the updated design criteria have ensured that all new containers fabricated post-2005 are suitable for stacking 10 high. However, there are still millions of boxes in service that were built pre-2005 which do not meet these criteria and are, therefore, unusable within the proposed scheme.

This is an issue which will have to be resolved. Even if the containers comply with the 2005 standard, stacking 10 high will exacerbate existing stacking and lashing issues. □

## Big demand for boxes

Details of the earthquake and tsunami in Japan in March continue to surface to illustrate the magnitude of the losses. The World Shipping Council said this month that preliminary estimates meant that the disaster could eventually generate demand for up to 1M TEU of replacement containers over two years.

At the same time it warned that equipment supply for the global container industry will be tight this year, especially during the peak season, and urged carriers and shippers to improve planning and forecasting techniques in order to better manage supply constraints.

Demand for boxes remains strong, it reported, despite record prices of close to US\$3,000 per TEU.

Among measures the WSC said could improve utilisation efficiency would be a reduction in the time shippers held boxes and more accurate planning and forecasting by carriers and shippers. □

# A new focus on operational efficiency

Leading classification society Bureau Veritas says continuing pressure on environmental emissions, coupled with rising oil prices, puts a new focus on operational efficiency, not just for containerships but for all vessel types.

In its Marine Business Review 2011, Bernard Anne, managing director of BV's Marine Division, states, "Efficiency has to take on a new meaning. To be efficient means more than optimising a ship to burn less fuel when loaded and at its design service speed. It must burn less fuel and cleaner fuel across a wide range of loading conditions and a wide range of speeds.

"To be efficient means operating the ship in the optimum way for every environmental condition and that means in turn having crew with the right training, the right support and the right feedback on operating conditions to make the right judgements.

"And to be efficient above all means operating without incident, without pollution, without breakdown and without loss of life," Anne said.

Class can help with the quest for new levels of efficiency, he claimed. "It is easy to build an underpowered, slow and fuel-efficient ship, but much more difficult to build a safe and fuel-efficient ship and that is the role of class at its most basic - to keep things safe," he said.

During 2010, the French society's classed fleet grew strongly to over 9,400 ships totalling over 76.46M gross tons. Last year, BV devised and published *Guidelines for Ultra Large Containerships*, and also took

leadership of key projects investigating whipping and springing in very large open ship structures.

On the P&I scene, the UK Club can no longer claim to be the largest by tonnage among the 13 members of the International Group (IG) - that accolade now belongs to Norway's Gard Club. However, the Club has concentrated on quality membership and reports that nearly 65% of ships entered are less than 10 years old and one-third are less than five years old, indicating a significant weeding out of low quality tonnage. At the February 2011 renewal, it declined to quote terms on more than 5M gross

tons of shipping which did not meet its standards.

For existing entries, the Gard Club continues to work with members, identifying best practices and sharing loss prevention experience. Its ship inspectors directly implemented that policy by visiting 350 entered ships during the course of the year.

The Club says there is now strong evidence of a link between the performance of the shipping markets and the volume of P&I claims, particularly the attritional or lower level claims. The number of non-pool claims - ie those settled directly by the Club - in 2009 was 25% lower than in

2007. However, the average value of claims continues to rise. In the last 10 years the average cost increased from US\$17,806 in 2000 to US\$29,069 in 2010.

Meanwhile, the Gard Club, along with its peers in the IG, is up against the Brussels bureaucrats as the EC competition authorities have launched a third investigation into the IG and its members. At the *TradeWinds Marine Risk Forum* this month, Silke Obst, the acting head of the EC antitrust unit that is investigating the Clubs, stressed that the action is ongoing and it will be towards the end of this year at the earliest before even an internal review is reached. She warned the Clubs

not to draw too much comfort from the two previous clearances by the EC - the procedures of the commission have moved on significantly.

She said the investigators are particularly interested in the Clubs' quotation procedure, the agreement between the IG Clubs that bans one Club undercutting another's premium quotation at renewal.

A further key focus of the investigation is release calls - the payment ship-owner members are charged for leaving a Club or switching to another. The basic principle is not an issue, said Obst. The question is whether the release call system is functioning as it should, with charges being proportionate, or whether it is preventing or hampering owners switching between Clubs or moving to commercial (fixed-price) insurers. □

## Casualties stay high

Major casualties at sea continue at a disturbing level, the International Union of Marine Insurance (IUMI) warned the underwriting community in April after the number of incidents reported in 2010 followed the negative trend of the previous four years.

According to IUMI's annual statistical survey covering vessels over 500 gross tons, there were 623 serious losses reported for 2010 up to April this year. This means that 2010 joins the five worst vessel loss years in the last 17.

This pattern seems to dash hopes raised a year ago of a reversal in casualty experience when shipping activity in many loading nations was still slow in the wake of the global financial crisis.

Patrizia Kern, a senior underwriting director at Swiss Re and chair of IUMI's facts and figures committee, said that even ahead of a full picture of the year from claims reports, there was no doubt that the failure to stem the high level of casualties was of great concern to insurers. "The 2010 figures for total losses and serious, or partial, losses will undoubtedly move up in due course, illustrating the longtail nature of hull and machinery claims," she said.

The total loss figure for 2010 stands at 63, similar to the figure reported by IUMI 12 months ago for 2009. Since last year's report, the outcomes for 2008 and 2009 have deteriorated. The number of reported total losses has increased for 2008 from 89 to 96, and for 2009 from 67 to 86. This would suggest that 2010 will be similar to the preceding two years. At this early stage of development of the book, nearly 600,000 gt has already been reported as lost in 2010, against nearly 645,000 gt in 2009. Weather continues to be the major cause of total losses, followed by groundings.

Worryingly, the number of major incidents remains consistent with the trend over the previous four years, and the back year figures continue to deteriorate.

Incidents involving the machinery and engine room, which accounted for 35.7% of cases over the last five years, remain the leading cause of serious or partial losses. Half of all such losses occurred to vessels over 20 years of age. □