

Container Losses

London Branch

The spring technical meeting of the London Branch attracted another large audience to HQS Wellington. The focus of the meeting was to look at some of the issues behind losses and damage in the container trade, in the light of recent incidents and in the wake of the publication of the MAIB report on the *MSC Napoli*. In particular, to look at the issues relating to:

- Collapse of container stacks
- Who is best placed to plan a load
- How much control of the process does the ship's staff have
- Container weight declarations

Chaired by Philip Wake, CE of the Nautical Institute, the panel of speakers comprised Peter Hinchliffe (Marine Director, ICS), Karl Lumbers (Loss and Prevention Director, UK P&I Club) and Mike Compton (Technical Adviser, ICHCA International).

Insurance claims

Karl Lumbers asked us not to demonise the container industry too soon. Over the last 20 years the number of container claims handled by the UK P&I Club represented 10% of the club's total over that period, with a value of 9% of the club's total. To put this into context, the number of container ships entered in the club is about 12% of the total. During that period, the UK P&I Club handled an average of 39 large container cargo claims per year at an annual cost of about \$18.6M. However, claims have trebled since the late 80s and the value has risen sharply over the last 2 years. It is not just ships owners and crews who are to blame – about 1/3 of the claims have nothing to do with the ship and are attributable to shore person errors (wrong temperature, bad stowage of cargo in container, handling damage), wet damage, theft, containers lost overboard, etc.

The majority of containers lost overboard each year are from large container ships, most of which are less than 10 years old, Karl observed. Investigations show that the use of automatic twistlocks is a significant factor in the loss of containers overboard, where the automatic locking system fails and the stack gets dislocated due to the ship's motion. Other contributory factors are failures of the lashing equipment, bad stowage, heavy over light

containers resulting in compression and racking, and wear and tear on the container shoes. Karl posed the question of how the container securing equipment can be properly maintained on larger vessels, where there may be up to 30,000 twistlocks and associated lashing gear. Summing up, he stated that most of the claims could be reduced by accurate declaration of weights and contents, proper securing and stowage of the contents, with packing suitable for sea transport.

Code of Practice

Earlier, Peter Hinchliffe notified the audience of the lessons learned from the *Annabella* and the *MSC Napoli* cases. In the report on the *Annabella*, the MAIB noted that while key industry players attest that safety is of paramount concern, evidence suggests that, in reality, the safety of ships, crews and the environment is being compromised by the overriding desire to maintain established schedules or optimise port turn round times.

The safety issues identified in these investigations identified a compelling need for a Code of Practice for the container shipping industry. The MAIB recommended that the International Chamber of Shipping (ICS) work with industry to develop, then promote adherence to, a best practice safety code.

The Code would serve as a benchmark for ship operators, charterers and port operators providing them with guidance on the minimum standards expected of companies who might wish to operate in this sector. One of the elements to be addressed in the Code should be to ensure that ships' staff are provided with sufficient time to verify/approve proposed cargo plans, noting that at present the pace of modern container operations is such that it is very difficult for ship's staff to maintain control of the loading plan.

ICS (in conjunction with the World Shipping Council) has completed the first draft of the Code, which has been circulated for consultation, with a view to presenting it to the Marine Safety Committee at the IMO later this year. Other subjects to be addressed in the Code will be to ensure that comprehensive cargo securing manuals are in a ready and easy format, changes in vessels GM and securing details are easily found, planners have marine experience, software providers develop programmes that alert planners and ship's staff to deviations, and that effective communications and procedures exist between all parties involved in the planning and delivery of containers to ensure ship's staff have the resources and the opportunity to safely oversee the loading and securing of cargo. Also addressed will be strict adherence to operational limits on hull stress, establishing actual weights before

loading and to maintain safe speed in heavy weather. Peter reiterated that ICS was no newcomer to producing documents of guidance and best practices which have become industry standards and that industry guidance is often used as a template for new regulations.

Port concerns

Mike Compton took us back to 1972 and the containership *Asia freighter* which was a 'state-of-the-art' vessel at the time. Comparing photographs of the *Asia freighter* with that of a modern day container vessel, in the 1970s it could be seen that containers on deck were no more than 3 high with the majority stowed under deck. Nowadays, container ships with 7 or even 8 high on deck is not unusual. In 1972 the world freight container fleet was less than 1 million TEU, whereas the comparable figure for 2006 was estimated at about 23 million TEU. In 1972 it is not really known how many TEU were handled by world's ports although the top ten ports were in Europe and North America. In 2006, an estimated 500 million TEU were handled by world's ports with seven of the top ten ports located in the Far East. From this it can be seen that containers are being worked harder than ever, as are also ships and crews, ports, dockworkers and handling equipment. The Container Safety Convention (1972) contains provisions for the testing, inspection, approval and maintenance of containers, and the attachment of a safety approval plate containing the relevant technical data. This Convention is now under review, particularly in the standards of maintenance of containers.

Mike remarked that under declaration of weight used to be the direct concern of both ports and ships (both for safety and charges reasons) but, as the SWL of the cargo handling equipment has increased, nowadays the weight of cargo is not such an important factor for the port industry. However, the *MSC Napoli* report showed that too many under declarations of weight can put a ship at risk, a rather new angle. It is the shippers' responsibility to declare the weight, and declare it correctly. This leads to who should insist on the requirement of declared weight, how can it be checked, by whom and when? Modern loading gantries can check the weight of the container being loaded, but by then it is too late. Another concern for both ports and ships is the correct declaration of IMDG cargo. Answers are still awaited on the percentage of dangerous goods cargo on the *MSC Napoli*, what percentage was undeclared and what stowage incompatibilities were uncovered.

Commercial pressure

Captain Nick Cooper, NI President, addressed the meeting from the floor and briefly focussed on the relevant points. Container stacks collapse due to positioning heavy containers on top of light or empty ones, but the most common cause of container losses is commercial pressure on masters and vessels to maintain their schedule and not slow down for bad weather. The best people to plan the load ideally are former chief or second officers with container ship experience. Speaking from his own experience, he is in the envious position of working for a company where he is answerable for the safety of his vessel to the head of the technical operation and not the commercial operators. However, there are certain terminals where pressure has been put on the master to have the gangway raised and lines let go as soon as the last container has been loaded and the last stevedore leaves the vessel. Safety is being compromised by the overwhelming desire to maintain schedules.

As expected from such a large and diverse audience, the discussion following the presentations varied across the spectrum of all issues in the container industry. One of the main concerns is how can containers be weighed efficiently. The technology exists but is not readily available and what is needed is a system to capture information that the weight being lifted is actually the weight declared. The software can be developed but nobody has asked for it. Pressure must be raised by the industry to make the best use of technology.

Lashing requirements

Keeping containers on a ship is not simple and a lot of work is being done by the industry on lashing requirements. Calculation of the forces involved is complicated and cannot be resolved by mathematics alone, but must be done by practical methods. It is not only those forces due to ship's motion that affects the lashing requirements, but also those forces relating to the flexibility of ships and containers. The design of lashing equipment is unchanged from 35 years ago; however, an international standard for the safe lashing of deck containers is in the final stages of development at IMO and should be ready for implementation later this year.

There is a need for training and education right through the system, particularly with IMDG cargoes – from those who stuff the containers to planning the stowage and securing the container on the vessel**. The IMO code of practice should be the force to regulate the industry and it is incumbent on the IMO to decide what further action to take, perhaps

making it mandatory. Other discussions centred on there being no mandatory checking of twistlocks, the reduction of scantlings of containers and reduced strength of corner castings, and the unrealistic stowage conditions given in shipyard plans. Discussion and debate could have gone on for longer, but the meeting had to be drawn to a close.

Summary

Philip Wake, summing up the evening's debate, noted that, as well as giving answers to some of the points raised, it also raised more questions. There was useful feedback on the Code of Practice by the ICS. Key points brought up were: need for the weight of containers to be checked and equipment used sensibly to check weights. Delaying containers from being shipped due to overloading will be a powerful incentive to shippers to correctly declare the weight, and there were moves afoot to educate those who stuff containers.

There are also differences relating to the control of the ship's crew in the whole process, with a variance between companies. Realistically, with fast turnaround times and commercial pressures, the ship's staff haven't as much control as they should have.

***The South East England Branch will be holding a seminar on the safe stuffing, stowage and securing of containers on 12th November.*

Harry Gale MNI