Problems with inaccurately declared weight in the container trade

One of the major issues in the shipping industry is ensuring safety. This article will draw attention to a particular problem with containerised cargoes, namely, the issue of correctly stating a cargo’s characteristics.

Safety includes the correct statement with regard to the weight and contents of the container to be loaded. It is suggested that 10 per cent of containers have wrongly declared weights when presented to the ship for loading.

These weights are declared by the shippers. Such errors can lead to stability problems and difficulties in stowage. This, in turn, can result in lives and property being put at risk.

Cause

There are two basic reasons for misstatements of weight. The first is lack of experience. Regular shippers and major forwarders know their packages’ weights. But when it comes to smaller forwarders that ship irregularly, the variation in container tonnage consistency is much greater, leaving additional margins for mistakes.

The second reason is cost (freight). There are plenty of ways to calculate freight, but they all depend on the ratio between volume and weight. With containers being standardised, the volume is known and the stated weight therefore has a direct impact upon the amount of freight. One method of weight calculation is described (by the American term) as “dimensional weighing”; that is, volumetric weighing and cubed weighing. This entails a measurement of the package and a calculation of the approximate or minimum weight thereof. The weight of the container is provided to the carrier. Unmodified containers can carry a maximum of 1 mt/ft, therefore the approximation of the contained weight should be fairly easy. However, a charterparty for cargo in bulk may stipulate that freight is to be calculated for a minimum quantity; in such cases, if the actual weight is higher than the stated weight, a shipper may believe that he obtains a “saving” on freight costs. In a recent freight dispute on oil bulk cargo, BP Oil International Ltd v Target Shipping Ltd (The Target) [2013] EWCA Civ 196 (noted in Shipping & Trade Law, (2013) 13 STL 5 4), the shipper wrongly believed that he only had to pay on the minimum quantity allowed by the charterparty, namely 80,000 mt, and so he loaded a much higher total tonnage of 112,843.5 mt.

This, though, is not the typical way for calculating freight. As stated, the usual process is that the shipper will declare the weight and the freight charged will be based on the declared figure. It is because of this that a shipper will sometimes declare a lower weight, and this brings about a potential for disaster.

Effect

The above conduct will have an effect on the master’s duties, safety and the ship’s liabilities. Given that a bill of lading will almost always be issued for the carriage of containers, whether requested by the shipper or not, the Hague-Visby Rules will apply to their carriage by sea. Accordingly, under article III(2), the carrier has to, inter alia, “properly and carefully load, handle, stow, carry, keep [and] care for” the goods carried. So, if the master is provided with incorrect figures, his calculations and the vessel’s stowage plan will be equally as wrong. This is most important when it comes to containers, which, based on the shippers’ advice, can be stacked very high. If the weight is misdeclared, this can lead to incorrect stowage, causing the containers to become unbalanced and collapse.

The MSC Napoli example of 2007 is helpful (see (2009) 9 STL 2 3). She was a 4,419 TEU container ship, which suffered a crack in her hull while in the English Channel and had to be beached, as she would otherwise have broken up. According to official reports, such as the one from the ship’s Classification Society, Det Norske Veritas, one of the main reasons for the listing and eventual loss of the vessel was the excessive weight of the containers onboard. This resulted in the very structure of the hull cracking and giving way. The UK’s Marine Accident Investigation Branch found that at least one in five containers weighed more than declared. On average, the increase was of 3 tonnes, while the greatest difference was 20 tonnes of additional weight.

Such incidents are not at all rare, nor are they limited to catastrophic hull failures. Other issues include containers collapsing causing a domino effect onboard, or even the instability leading to capsizing.
Shortly after the *MSC Napoli* incident, *Annabella* continued the disaster saga (see (2008) 8 STL 51). She was a 868 TEU container ship flying a UK flag. While crossing the Baltic Sea, seven of her containers collapsed. The UK’s Marine Accident Investigation Branch found that these containers weighed a total of 225 tonnes, that the lowest four had a maximum allowable stacking weight of 100 tonnes and that the maximum allowed weight for the stack was 150 tonnes. Because the containers’ weight was misstated, the cargo planning and the ship’s loading computer had both failed to make accurate calculations and the stacking was effectively an accident waiting to happen.

This is not to say that masters of container ships cannot make mistakes in managing the loading of containers. However, on most container vessels, cargo planning is done “ashore” and not onboard or at the quay. Consequently, masters always have to adjust ballast on the spot in an attempt to overcome problems with shore-based cargo plans calculated on the figures declared by the shippers. It is understood that the above increase the possibility of a mistake, such as overstowage, which can, at the least, lead to severe delays in the discharge process. A good example of delays and the accompanying matters in cases of overstowage is *Transgrain Shipping BV v Global Transporte Oceanico SA (The Mexico 1)* [1988] 2 Lloyd’s Rep 149.

Equally, mistakes by third parties can also cause problems. One example is when loading is conducted by third parties, such as a terminal operator, who may perform such inadequate stowage as to render the ship unseaworthy and cause severe damage. In such circumstances, the terminal operator would be the equivalent of the stevedores loading pre-painted aluzinc steel sheets on-board *MV Eems Solar* in *Yuzhny Zavod Metall Profil LLC v Eems Beheerder BV*. In that case, the poor stowage resulted in a claim for cargo damage of US$158,809.69.

Another problem can arise from improperly packed cargo inside containers. The party preparing the container may have no idea of the conditions at sea and the potential forces applicable to ship and cargo, and may employ workers who have never seen a cargo vessel, or even the sea. Therefore, a seemingly immovable piece of machinery weighing 20 tonnes, which is not properly lashed and secured inside the container, could move freely mid-voyage causing severe damage to itself and other objects, including the ship and her crew. In these instances, though, because the containers are always sealed, not much can be done. There have been proposals for the installation of X-ray machines (also serving as detectors for any stowaways or hazardous devices, especially after the 9/11 attack), but at the moment there are few mobile X-ray machines, and they can only handle one container at a time.

### The carrier’s conduct and solutions

What the master/carrier has to do, under article III(3)(c), is show on the bill of lading the information given by the shipper. This rule states that where the master/carrier has:

(i) reasonable grounds for suspecting that the information provided by the shipper (for inclusion on the bill of lading) is not correct, or

(ii) a reasonable means of checking information provided by the shipper

he is not bound to show that information on the bill of lading to be issued in his name.

Because of the very nature of the container trade (as it is now), it is difficult to see how any master could ever be in a position to query the information provided by a shipper. The containers arrive sealed and, so, the master/carrier cannot know if the information provided is correct and neither will he have any reasonable means to verify the weight of individual containers.

It is perhaps because of this that a carrier, wishing to be in the best position possible, will clause the bill of lading by adding the words “said to weigh/contain” next to the information provided by the shipper. Carriers believe that the above clause offers them protection or benefit, but this is not strictly correct.

These words (“said to weigh/contain”) are not part of the Hague-Visby Rules (or any other convention on the carriage of goods by sea); they are creations of the market. Under the Hague-Visby Rules, article III(3), the master, on demand of the shipper, must issue a bill of lading showing, inter alia, the weight and contents of the cargo delivered. However, the master is not bound to and should not accept to note or show any marks, numbers, or weight, for which he has reasonable ground for suspecting not accurately to represent the goods received, or which he has had no reasonable means of checking.

Accordingly, if the master believes the figures to be incorrect, he should deny including them in the bill of lading, or else he will be bound thereby. The Rules are clear on this point, and objectively and as a
matter of fact the shipper’s figures are noted on the bill of lading or not. The addition of the “said to weigh/contain” words should be held, under article III(3), to not provide any protection to the carrier whatsoever.

The carriers, though, should not fear the above deviation from the established understanding of the “said to weigh/contain” words. In spite of being bound towards the cargo receiver under the bill of lading, the master/carrier is still protected under the Rules. How? According to the Hague-Visby Rules, article III(5), the shipper is deemed to guarantee the accuracy of his statements at the time of shipment. Consequently, if there is any loss, damage, or expense due to inaccuracies, the shipper will have to indemnify the carrier. This alone should be enough to render the words “said to” and “weight unknown” (subject to a figure being present on the bill of lading; eg Agrosin Pte Ltd v Highway Shipping Co Ltd (The Mata K) [1998] 2 Lloyd’s Rep 614) unnecessary as a shield.

So, what can a master of a container vessel do in practice? The answer is: very little. While in port, containers are loaded and unloaded at the same time and with large container vessels now carrying in excess of 15,000 containers, it is a virtual impossibility for a master to control the weights declared for individual containers by way of any draft survey.

A master/carrier may have the option of sampling the containers under the shipment contract. For example, Rule 24 of the Orient Overseas Container Lines (OOCL) Terms of Carriage 2006 deals with misdeclaration of cargo. Under these terms, the shipper is deemed to warrant that all documents and other information provided to the carrier – including the cargo weight – are accurate. The carrier has the discretion to appoint a “sworn measurer” to verify the shipper’s declaration and is excused from any damage or liability due to delay resulting from any inaccuracies by the shipper. If there is a difference in weight, the freight is to be re-calculated and the cargo will not be discharged and released until such difference is satisfied. The shipper is not left unprotected, as he has the right to a re-inspection at destination.

Without such leeway, and without better equipment at the port, there is little else that any master can do.

International efforts

Aside from such individual carriers’ efforts, as per the OOCL example above, there has been a combined effort at self-regulation by the World Shipping Council (WSC) and the International Chamber of Shipping (ICS). These organisations control 90 per cent of all containerised cargoes and 80 per cent of the world merchant fleet, respectively. In 2008 they attempted to address the matter by issuing the “Safe Transport of Containers by Sea: Guidelines on Best Practices”, which is a short, but comprehensive, guide on dos and don’ts. They also endeavour to push for a change through the International Maritime Organisation (IMO) by submitting a paper to the Maritime Safety Committee (MSC 89) stressing the importance of all containers being weighed and their weights verified prior to loading.

Global self-regulation can only be the child of necessity and pecuniary calculations. The economic estimation considers whether the frequency of losses by weight misstatements, and the cost in money and time caused by such losses are so great as to dictate a change in the rules. This engulfs not only shippers and carriers, but container terminal operators as well. Apparently, this point has not yet been reached for the whole container trade market. There might still be some hope though. Since the autumn of 2012, there has been a movement towards even bigger container ships and this could mean that the larger figures will provide a push for a change (see, for example, the new Triple-E, 18,000 TEU, Maersk container ship; presently the biggest in the world).

Seeing that the market has not thus far achieved a unified regime, organisations such as the IMO could change the rules and place the entire container trade under one universal scheme. In 2012 another effort for change was made, this time by the IMO secretary Koji Sekimizu. Mr Sekimizu made a proposal to the Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC 17) for the obligatory weighing of containers prior to loading; yet as of today neither MSC 89 nor DSC 17 have produced any solid results.

Practical points

The practical aspects of actual weighing are not complex. It is suggested that scales could be incorporated into the cranes, lifts, straddle carriers, or container cranes lifting and moving the containers within a port, prior to loading them onboard a ship.
Aside from the economic factor, the only issue that needs serious consideration is any possible delay that could be caused when a container is found that does not comply with the shipper’s declaration. That container would have to be set aside and a dispute would almost certainly ensue over the verification of its weight. This would avoid overloading of the carrying vessel and reduce, if not fully circumvent, the possibility of stacked containers collapsing. Possible issues, though, could include claims for incomplete loading, deadfreight, laytime and demurrage claims, port expenses and so forth.

On the other hand, such matters known are not unknown and arise in today’s market anyway. So, given the increased benefit to safety of property and life at sea, the only way to proceed should be by way of controlling the stated weight of the container prior to it being loaded onboard.

Konstantinos Kofopoulos LLB, LLM, PhD Candidate, with acknowledgement to Richard Faint LLM, MBA, FCIArb, EIEx for his contributions.

1 See: Steve Cameron, Misdclared Container Weights, Dunelm PR, 2012; and Cameron Maritime Resources, 2012

2 That is to say that the stowage plan is handed to the master by the managing companies calculated on the figures given by the shippers.

3 Not a container case. This was a permitted overstowing. 5,000 mt of bagged maize was overstowed by 500 tons of alubia beans. It was an argument on when the NOR became effective.