Containerised Cargo; Claims Prevention Guidelines

March 1997

This article summarises the basic preventative measures that should be taken to avoid P&I claims relating to the handling and operation of containerised cargo.

a) Stowage of cargo in the container

Proper care should be taken to ensure that the container is in a sound condition; i.e. in structural good order, and clean. Residues from previous cargoes, particularly chemicals, should be removed to ensure that there are no prospects of contamination. The stow should be solid enough to remain firm throughout the period of carriage despite the movement of the ship, and thus the need to ensure that weight is evenly distributed. Great care should always be used when stuffing containers. Forklift trucks have in many cases caused considerable damage by piercing their container walls.

Reefer cargoes

Before receiving chilled or frozen goods the reefer container should be pre-cooled and generally clean and free from contaminating and tainting residues. Temperature recording equipment should be properly calibrated, in working order, and fitted with temperature recording charts which form the basis of establishing whether or not there has been a breakdown or interruption in the proper functioning of the reefer equipment. Shippers should be required to provide any special instructions as to the carrying temperatures. If no instructions are given, a protest should be noted in writing and the container carried in accordance with recommended practice.

Pre-trip inspection

Every refrigerated container should be fully inspected by the container operator for proper operation before every voyage. Generally this is done manually and using a check sheet, but modern microprocessor control systems are increasingly able to carry out many of the necessary checks automatically. Some types of check always require an individual’s personal attendance, such as inspection of cables, etc. for signs of damage.

b) Handling of the containers (sea carriage)

Careful lashing of containers, whether in ships converted for container carriage, ro-ro ships or cellular ships, is essential. Wherever possible, containers should be stowed with their doors adjacent or flush against each other. Those with valuable or easily perishable cargo should be stowed in the least accessible parts of the hold or stowage plan with their doors welded closed if necessary. This type of stacking is also recommended when containers are left in inland depots or port compounds. Containers with valuable cargoes are safer stowed beneath and surrounded by other containers stowed with less valuable cargoes.

c) Seals

The importance of a secure seal, and a record of the seal number during the various stages of carriage (from receipt of the container to delivery ultimate destination) cannot be over-emphasised. There is no totally secure type of seal, but the bolt type is regarded as the best available. Seals should be of good quality and non-corrosive, and their number easily identifiable. Whether the container is stowed by the carrier or received on his behalf already stowed by the shipper, the carrier or his agents should make an immediate record of the numbers of any defective seals, and of any replacements, which should be fitted at the same time.

Upon discharge, a thorough examination of every seal on each container should take place to check that they remain intact. If a valuable cargo is involved, the unloading or unpacking of the container should preferably be carried out in the presence of a customs officer or other person in authority.

If, at any time during the period for which the carrier is responsible for the container, damage is noted to either the container, the seal, or the cargo stowed inside, a survey should immediately be arranged with the assistance of the Club’s local correspondents. If the survey requires the breaking of seals, then, upon completion of the inspection, care should be taken to ensure that the container is resealed and a record taken of the new seal number.

d) Shipper stuffed containers

Additional problems can be encountered when containers are delivered to the ship after they have been stuffed and sealed by the shipper. Operators and shippers in the container industry are sometimes the victims of sophisticated theft and fraud, and it is not unusual to find that containers are empty on discharge, despite an intact seal, or full of sand or rocks instead of the contractual cargo. In some countries, the carrier is absolutely liable for loss of cargo if the container seal shows any sign of interference. At the time of loading, the container and the seal should be checked to ensure that they are in good condition, and when facilities and/or time permit, the containers should be weighed and the weight checking against that declared by the shipper. If during loading there is reason to suspect that a container does not contain the cargo or quantity declared, it should be returned to the quay and a survey of the contents arranged.

Bills of lading should always be endorsed to show that the shipper has sealed the container and that the carrier has had no opportunity to inspect the cargo and cannot guarantee its condition or contents. The following or similar words are generally sufficient:

"Container received by the carrier stuffed and sealed by the shipper; said to contain (details of cargo); weight, condition, quality and contents unknown!"
e) Deck stowage of containers

Because of their construction and design, sealed containers are better able than most other forms of packing to withstand the rigours of carriage by sea on deck. In many instances, therefore, it will not be a deviation or other breach of contract to carry containers on the deck of purpose built or fitted vessels provided that the relevant bill(s) of lading expressly allow such stowage. (The Club should always be consulted, however, in order to ascertain whether or not cover is likely to be affected.) On the other hand, deck carriage on vessels which are not specially adapted is likely to constitute a deviation unless the bill of lading expressly indicates that the container(s) will be loaded on deck. Containers should not in any event be stowed on the deck of such vessels unless they can be securely lashed and the deck can clearly take the weight.

f) Prevention of theft/pilferage of or from container (pre- and post-sea carriage).

Containers may stand for a considerable time in inland depots or port compounds before and after the actual sea voyage. The carrier may be responsible for containerised cargo before or after sea-carrage, either because he uses depots to consolidate containers for shipment and as a collection point after carriage, or because liability is imposed by law. The selection of suitable premises is thus essential to ensure that containers are secure and well protected. A safe depot should be surrounded by a well maintained security fence, well lit at night, guarded by professional security personnel, with only one entrance/exit, manned at all times and subject to a reliable alarm system. Containers with goods of high value or risk should always be stowed in the most secure part of the depot, preferably near the security guard’s office or situated where they can easily be seen.

Proper documentation, on official paper, should always be demanded and produced at the appropriate time to minimise wherever possible the use of forged documents.

g) Claims handling

In cases of shortage, the seal is the most important item of evidence, either to prove short shipment, or to show where the loss occurred through a check on when the seal was last seen intact. However, when containers are carried in intermodal transport, documentation concerning the seals at each hand over point during transit is often not readily available. If damage is caused by defects in the container itself, documentary evidence covering its condition at each stage of transport is essential.

Members should therefore ensure that at each stage of intermodal transport the container and seal are checked and their condition documented. This is essential if rights of indemnity against sub-contractors, and others responsible for carriage before or after the sea voyage, are to be preserved and enforced. Indeed, through transport and multimodal bills of lading should be approved by the Club, and Members are required to preserve their rights of indemnity against sub-contractors and others who may perform part of the contract of carriage. Correct documentation ensures, so far as possible, that final liability rests with the party actually responsible for the loss or damage, and the Club can assist Members and advise on the documentation involved.

Signed Equipment Interchange Receipts (EIR) clearly identifying the containers and seal numbers to which they refer as well as any apparent defects are essential.

h) Container securing equipment

The loss overboard of containers and their cargo involves not only the potential for high value claims, but also poses considerable risks to general safety, to the vessel itself, and to the navigation of other ships and vessels. Special attention should therefore be paid to:-

i. Column and tier weights - a securing system is normally designed for certain stowage arrangements that takes account of total column, weight and maximum tier weights.

ii. Sub-standard equipment - container securing equipment should be maintained in a reasonable manner, and the use of "rogue" or damaged equipment should be avoided. Twifblock with fractures in their housing, and other equipment similarly fractured or wasted, can fail at a lower load than that allowed for in the securing system, and all those concerned with on board operations should pay careful attention to any defects to ensure that they are remedied or, where appropriate, that equipment is replaced.

i) Heavy weather

The risks associated with containerised cargo are of course generally brought into sharp focus if the carrying vessel encounters heavy weather conditions or if the vessel routing heightens the impact of the weather upon the ship and cargo.

The latter should, of course, be accommodated in voyage planning, when it is both reasonable and possible to do so, and the pressure to maintain schedules should not override the practices of good seamanship.

Stability may similarly affect securing equipment. If the vessel is excessively stiff she may be subject to a short rolling period, creating greater loads on all equipment and fittings. (See also Heavy Weather - The Ingredients for a Successful Defence).

Masters and shore based planners thus need to ensure that safe practice is maintained at all times by the exercise of proper care to address these and the other factors discussed above.

j) Dangerous goods

There are nine classes of dangerous goods:-

Class 1 Explosives
Class 2 Gases
Class 3 Flammable Liquids
Class 4.1 Flammable solids
Class 4.2 Substances liable to spontaneous combustion
Class 4.3 Substances which in contact with water emit flammable gases
Class 5.1 Oxidising substances
Class 5.2 Organic peroxides
Class 6.1 Poisonous substances
Class 6.2 Infectious substances
Class 7 Radioactive materials
Class 8 Corrosives
Class 9 Miscellaneous dangerous substances

It is important that Members ensure that they are provided with a proper and correct declaration of the type of goods being shipped, and that they are packed and stored as recommended in accordance with the IMDG code.

According to paragraph 12.3.7 of the general introduction of the IMDG code, the signing of a "packing certificate" indicates that certain provisions have been properly carried out which includes:

i. The CTU (Cargo Transport Unit) is clean, dry and apparently fit to receive goods.
ii. If the consignments include goods of Class I, except division 1.4, the CTU is structurally serviceable in conformity with Section 12 of the Introduction to Class I of the IMDG code.
iii. No incompatible goods have been packed into the CTU, unless approved by the competent authority concerned.
iv. All packages have been externally inspected for damage, and only sound packages have been packed.
v. All packages have been properly packed in the CTU and secured.
vi. When dangerous goods are transported in bulk packages, the cargo has been evenly distributed in the CTU.
vii. The CTU and the packages therein are properly marked, labelled and packaged.
viii. A dangerous goods declaration has been received for each consignment of such goods in the CTU.

It is clear that considerable care needs to be exercised in the carriage of dangerous goods. In extreme situations a vessel can be lost from the reaction of chemicals that may not be slowed or packed appropriately.

The IMO Code of Safe Practice for Cargo Stowage and Securing covers what container packers should know and do. Personnel commissioned to undertake cargo stowage should be properly qualified and experienced. Safe stowage and securing depends on proper planning, execution and supervision.

The overall objective, of course, is that cargo carried in CTU’s should be packed and secured so as to prevent damage or hazard to the ship, to persons on board, to the Marine Environment, and to third parties who may also be at risk from a casualty.

k) Regulatory codes and statutes

The International Convention for Safe Containers, 1972 as amended (CSC 1972) sets out criteria to regulate international safety standards. Although concentrating on safety of human life, it is also a useful equipment management facility which serves as a cargo claims prevention scheme, emphasising the need for equipment management and maintenance programmes.

Guidelines on the application of the IMO International Safety Management (ISM) Code are also relevant (Members have received a copy of recent Guidelines enclosed with the Club’s circular of August 1996). The functional and certification requirements of the (ISM) Code include provision for Shipowners and operators to establish Management Systems, which promote the proper care and safety of cargo.

Container vessels are required to have on board a manual that complies with the Code of Safe Practice for Cargo Stowage and Securing. Owners may use consultative companies who prepare Shipboard Operation and Emergency Plans (SOPEPS) for ISM approval to prepare such manuals. The Cargo Securing Manual is subject to approval by the Maritime Authorities of the Flag State, which in many cases implies that the classification society will endorse the manual.