



# Carefully to Carry

## The separation of products in the holds of bulk carriers

Over the years, a considerable trade has developed in the bulk carriage of relatively small quantities of cereals, oil seeds and their derivatives. Frequently a number of such products may be shipped simultaneously onboard bulk carriers. It is not uncommon for three or more consignments to be stowed in the same hold using separation material in order to avoid admixtures.

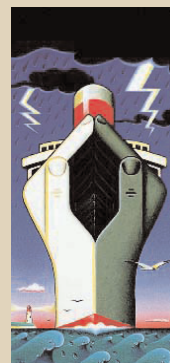
Incidents have arisen where, despite the use of separation cloths, admixtures have taken place and claims made by cargo interests.

The steps necessary to avoid any risk of admixture are not complicated but it may be worthwhile bringing them to the attention of ships' officers and others responsible for the stowage of such cargoes.

It is suggested that the following measures should be taken:

- Where it is intended to over-stow one bulk parcel with another, the lower parcel should be trimmed as flat as possible. If the surface is left uneven there is a risk that the separation material may be damaged either as the result of uneven stresses during the sea passage or as a result of contact with the grab or elevator legs and bulldozers which may be used during the discharge of these commodities. Provided this procedure is followed, a single layer of separation material of good quality is considered adequate. Recommended materials include woven polypropylene, polythene sheets or burlap.
- During loading operations it is essential that the distance between the separation material and either the top of the weather-deck hatch coamings or the deck head of the hold is measured and recorded. In this way it is possible to effectively locate the separations between the parcels during discharge and thus avoid any tearing or damage to the separation material.
- The loading of second and third parcels may entail pouring cargo from a considerable height. As a result the surface of the lower stow inevitably becomes depressed; this can be seen clearly on Figs 1 and 2. Because of the need to ensure a relatively even surface between any two parcels it may be wise to plan the stowage so that commodities with a high angle of repose, such as cereals and oil seed derivatives, are loaded below those with a low angle of repose such as canary seed or linseed.

*Note: Siting the separation material at a level between the slant plating of the upper and lower hopper tanks (Figs 1 and 2) will eliminate any difficulties on account of settling of the cargo, (Figs 3 and 4).*



"The carrier shall properly and carefully load, handle, stow, carry, keep, care for and discharge the goods carried."

Hague Rules,  
Articles iii, Rule 2

### Carefully to Carry Advisory Committee

This report was produced by the Carefully to Carry Committee – the UK P&I Club's advisory committee on cargo matters. The aim of the Carefully to Carry Committee is to reduce claims through contemporaneous advice to the Club's Members through the most efficient means available.

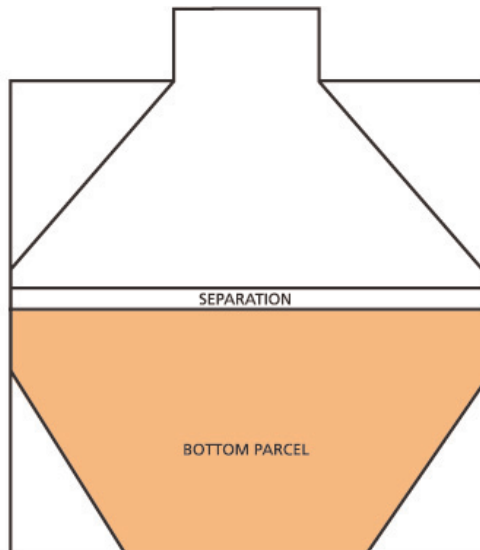
The committee was established in 1961 and has produced many articles on cargoes that cause claims and other cargo related issues such as hold washing, cargo securing, and ventilation.

The quality of advice given has established Carefully to Carry as a key source of guidance for shipowners and ships' officers. In addition, the articles have frequently been the source of expertise in negotiations over the settlement of claims and have also been relied on in court hearings.

In 2002 all articles were revised and published in book form as well as on disk. All articles are also available to Members on the Club website. Visit the Carefully to Carry section in the Loss Prevention area of the Club website [www.ukpandi.com](http://www.ukpandi.com) for more information, or contact the Loss Prevention Department.

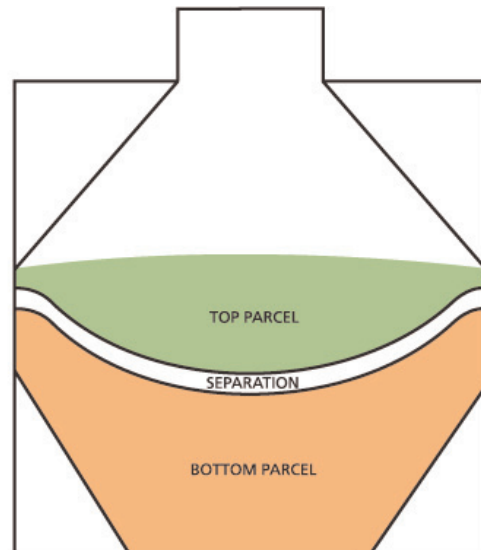
- Ideally, the level of the separation between any two parcels should not be located in the vicinity of the upper ballast tank hoppers (as in Figs 3 and 4). This will ensure that when the inevitable settling of the cargo occurs, during the course of the voyage, the surface area of the separation material will remain adequate, and prevent admixture; see Figs 1 and 2. This problem, of course, does not arise in the vicinity of the lower hopper tanks.

*Fig 1 cross section*



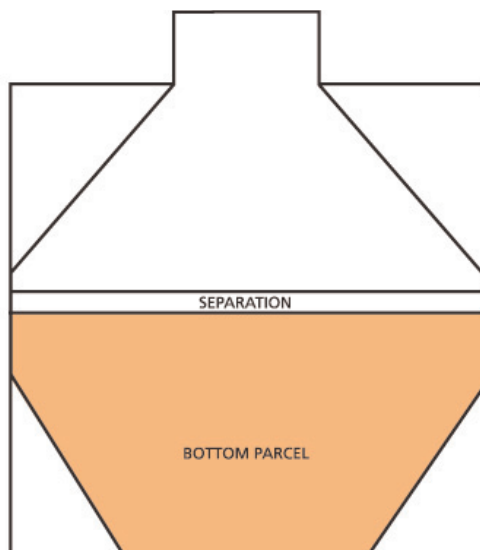
*Situation prior to loading*

*Fig 2 cross section*



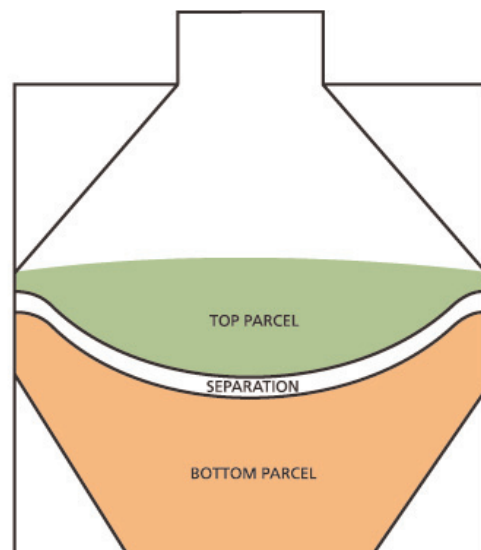
*Situation shortly after commencement of loading top parcel*

*Fig 3 cross section*



*Situation in loading port*

*Fig 4 cross section*



*Situation in port of discharge*