

SEVERE LIST / CARGO SHIFT

12

ACTION (NOT NECESSARILY IN ORDER)
Sound the general alarm and muster crew.
Establish the cause of list – whether it is due to unequal distribution of the weights (e.g. leaks; cargo shift; water absorption of deck cargo; internal valve leakage/transfer of ballast water) or due to loss of GM caused by free surface effect (e.g. slack ballast tanks, slack ballast/firefighting water in the cargo hold, liquefaction of the cargo in the hold).
Check sounding of all cargo hold bilges and ballast/void/fuel tanks
Advise manager/owners and charterers. Call for assistance if vessel is in grave or imminent danger.
In conjunction with manager/owners decide on action to stop increase in list and to correct list.
Before taking on any ballast or transferring ballast, cargo or bunkers within the ship check that it is safe to do so by calculating the effect on the vessel's stability, draught and trim.
CARGO SHIFT
Alter course to ease the motion of the ship and to try to keep wind and weather on the bow of the high side • Alter course and reduce speed to change the motion and vibration pattern of the ship.
FIRE FIGHTING WATER
Large volumes of water in accommodation or in cargo holds will quickly reduce stability and may cause a list. Keep a strict account of the time pumps are in use and calculate the quantity of water pumped into the ship and the effect it has on stability. Make adequate provision for drainage and pumping out of water from spaces.
FREE SURFACE EFFECT
Make every effort to minimise free surface effect.
Fill or empty only one DB tank at a time.
If list is caused due to liquefaction of the cargo in the hold, refer Contingency Plan No. 48 - Cargo Liquefaction
CORRECTING A LIST DUE TO LOSS OF GM
Take great care when filling double bottom ballast tanks to avoid the risk of capsizing.
The double bottom tanks on the listed side should be filled first, one at a time. Ballast smallest DB tank first.
Only when the tanks on the low side have been pressed up and free surface effects eliminated should the tanks on the high side be filled one at a time and pressed up.