

3. Precautions

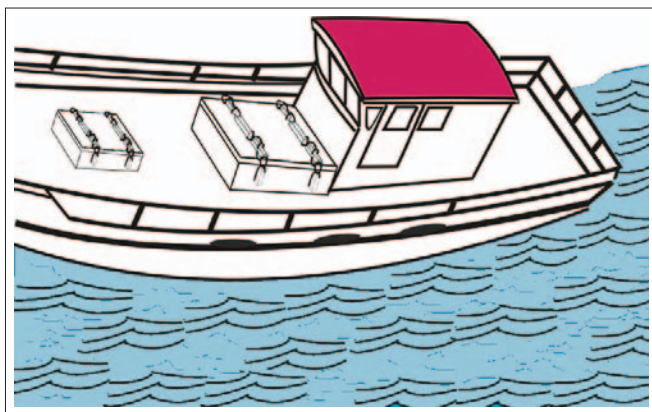
The following sections illustrate some precautions which can be taken to ensure the stability of fishing vessels.

ENCLOSED SUPERSTRUCTURES AND MEANS OF CLOSING

All hatches, doorways, side scuttles and port deadlights, ventilators and other openings through which water can enter into the hull or deckhouses, forecastle, etc., should be kept closed in adverse weather conditions.

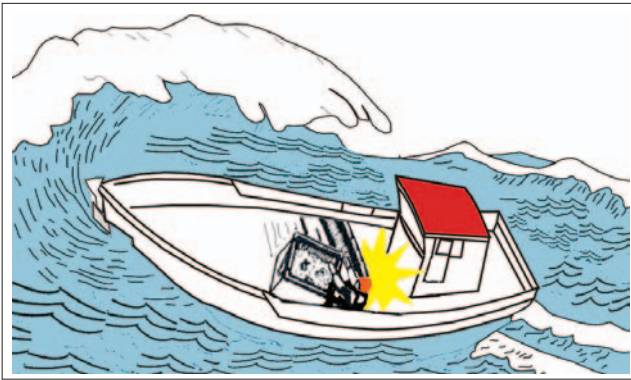
Accordingly, all fittings for closing and securing such openings should be maintained in good condition and periodically inspected.

All air pipes to fuel or water tanks should be properly protected and sounding pipes should be maintained in good condition and securely closed when not in use.



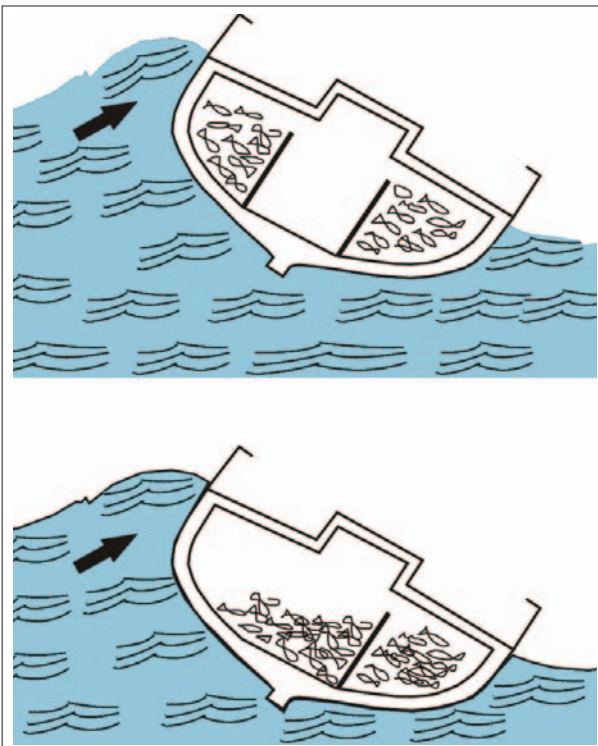
When the vessel is heeled by an external force to a large angle, a substantial part of its buoyancy, and thereby the vessel's ability to return to the upright position, comes from enclosed superstructures as shown in the picture above. In order to provide buoyancy, the enclosed superstructures must be fitted with appropriate closing appliances that are kept in good condition and securely closed.

SECURING OF HEAVY MATERIAL



All fishing gear and other heavy items should be properly stowed, placed low in the vessel and prevented from moving. **Fishing gear or other heavy items placed high in the vessel (for example on the top of the wheelhouse) will reduce the stability of the vessel.**

When ballast is provided to ensure sufficient stability of small vessels it must be permanent, solid and fixed securely in the vessel. Permanent ballast must not be removed from the vessel or relocated without the approval of a competent authority.

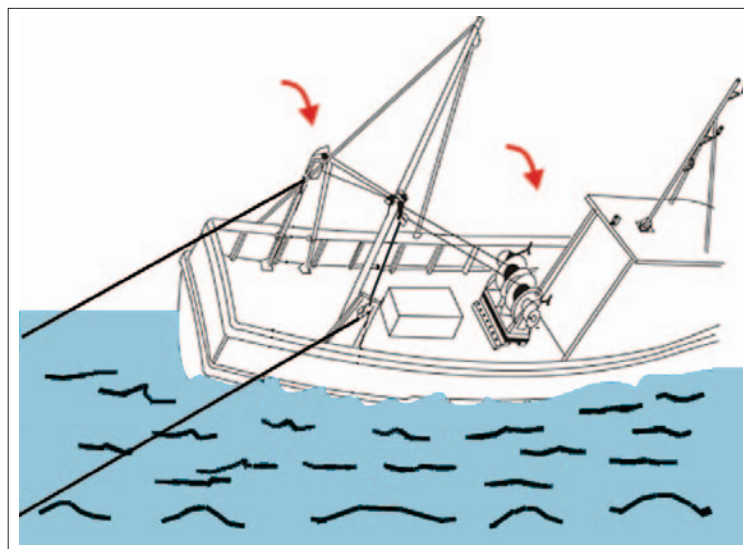


STOWAGE OF THE CATCH

Fishholds should be filled in a manner and order to prevent any extremes of heel or trim; and should not result in inadequate freeboard of the vessel.

To prevent a movement of the fish load carried in bulk, portable divisions in the holds should be properly installed.

EFFECTS OF FISHING GEAR ON STABILITY



Particular care should be taken when the pull from fishing gear might have a negative effect on stability (e.g. when nets are hauled by a power block or the trawl catches obstructions on the seabed). The pull of the fishing gear should be from as low a point on the vessel as possible.

Extra care should also be taken when the vessel hangs fast by its fishing gear.

The heeling moment caused by the pull from the fishing gear will cause the vessel to capsize if it is larger than the righting moment (**moment of statical stability**).

Factors that increase the heeling moment and thereby the risk of capsizing of a vessel, include the following:

- heavy fishing gear, powerful winches and other deck equipment
- high point of pull of the fishing gear
- increased propulsion power (trawlers)
- adverse weather conditions
- vessel hanging fast by its fishing gear