

CHAPTER 6

ANCHORING, TOWING AND BERTHING

6.1 General

6.1.1 A primary assumption made in this chapter is that high-speed craft will only need an anchor for emergency purposes.

6.1.2 The arrangements for anchoring, towing and berthing and the local craft structure, the design of the anchor, towing and berthing arrangements and the local craft structure shall be such that risks to persons carrying out anchoring, towing or berthing procedures are kept to a minimum.

6.1.3 All anchoring equipment, towing bitts, mooring bollards, fairleads, cleats and eyebolts shall be so constructed and attached to the hull that, in use up to design loads, the watertight integrity of the craft will not be impaired. Design loads and any directional limitations assumed shall be listed in the craft operating manual.

Explanation of 'design loads'

The intent of 6.1.3 is that under any operating load up to the breaking strength of the anchor cable or mooring lines, the loads on the bitts, bollards, etc. will not result in damage to the hull structure that will impair its watertight integrity. A strength margin of at least 20% above the minimum specified breaking strength of the relevant cable or warp is required.

6.2 Anchoring

6.2.1 High-speed craft shall be provided with at least one anchor with its associated cable or cable and warp and means of recovery. Every craft shall be provided with adequate and safe means for releasing the anchor and its cable and warp.

The means of release should be capable of safe operation even when the anchor cable or warp is under load..

6.2.2 Good engineering practice shall be followed in the design of any enclosed space containing the anchor-recovery equipment to ensure that persons using the equipment are not put at risk. Particular care shall be taken with the means of access to such spaces, the walkways, the illumination and protection from the cable and the recovery machinery.

6.2.3 Adequate arrangements shall be provided for two-way voice communication between the operating compartment and persons engaged in dropping, weighing or releasing the anchor.

"Operating compartment" is defined in 1.4.42.

6.2.4 The anchoring arrangements shall be such that any surfaces against which the cable may chafe (for example, hawse pipes and hull obstructions) are designed to prevent the cable from being damaged and fouled. Adequate arrangements shall be provided to secure the anchor under all operational conditions.

6.2.5 The craft shall be protected so as to minimize the possibility of the anchor and cable damaging the structure during normal operation.

6.3 Towing

6.3.1 Adequate arrangements shall be provided to enable the craft to be towed in the worst intended conditions. Where towage is to be from more than one point, a suitable bridle shall be provided.

“Worst intended conditions” are defined in 1.4.61.

6.3.2 The towing arrangements shall be such that any surface against which the towing cable may chafe (for example fairleads) is of sufficient radius to prevent the cable being damaged when under load.

6.3.3 The maximum permissible speed at which the craft may be towed shall be included in the operating manual.

The maximum permissible towing speed should be determined from the strength of the towing attachment(s) as required for displacement-mode operation, modified if appropriate by any control or operational limitations.

6.4 Berthing

6.4.1 Where necessary, suitable fairleads, bits and mooring ropes shall be provided.

6.4.2 Adequate storage space for mooring lines shall be provided such that they are readily available and secured against the high relative wind speeds and accelerations which may be experienced.

Stowage for mooring lines should normally be in enclosed lockers or bins. Open-topped bins should only be accepted where it is highly improbable that the contents might be dislodged or otherwise become a hazard in operation up to the worst intended conditions.