

## **GUIDANCE NOTES ON STABILITY INFORMATION – SAILING VESSELS**

### **GENERAL**

As most sailing yachts also have engines, Ensign requires the intact stability criteria for motor yachts also to be complied with.

### **FORM AND CONTENT OF STABILITY INFORMATION**

The basic form and content of the stability information is to be as per the appended model book. Notes/comments included in the model book [*they are shown in italics thus*] are intended for guidance and require suitable modification to ensure applicable to the yacht in question.

### **LIMITING KG CURVES:**

The provision of limiting KG curves for both intact and damage stability, where appropriate, removes the need to provide KN values and GZ curves in the final trim and stability information book. For any condition of loading, comparing the vertical centre of gravity with the limiting curve will provide a quick indication of compliance, or otherwise, with the Code stability requirements without the need to plot GZ curves or undertake additional damage stability calculations.

The limiting KG curves should include the most onerous of both intact and damage considerations and cover the limits of operational trim and draught/displacement. The curves should be suitably labeled to indicate restrictions and that they apply to intact, and damage as appropriate.

For the purpose of checking, detailed information on the derivation of the Limiting curves is to be submitted for MCA confirmation.

#### **Intact Stability:**

Section 11.2.1.1 of the Code requires intact stability requirements to be met “for seagoing conditions”. This means *all* seagoing conditions.

Limiting KG curves for Intact Stability covering the full operational trim and draught/displacement range will ensure 11.2.1.1 is fully met.

Deckhouses/superstructures that can be shown and agreed to be *weather tight* may be included as reserve buoyancy in the consideration of Intact Stability (11.2.1.5)

For multi-hull yachts, section 11.2.2.3 of the Code is to be complied with.

**Damage Stability:**

Sections 11.3.1 and 11.3.4 of the Code state the requirements for damage stability which in the past may only have been considered for conditions included in the Stability Information book. Unlike intact stability, no provision has been made for any other condition of loading to be readily checked against damage requirements. The provision of Limiting KG curves for damage over the operational trim and draught/displacement range will provide for this gap in information

Buoyancy provided by deckhouses/superstructures should not normally be included in the consideration of damage stability.

**ITEMS TO BE EXCLUDED FROM THE LIGHTSHIP**

The following items, which may not be exhaustive, and which may readily be replaced/changed or left ashore for specific voyages, are considered best excluded from the lightship. These items are to be included in the condition pages as deadweight items:

Tenders(non-rescue boats)/fishing equipment/diving equipment/gym equipment  
etc

This should be borne in mind not only in the preparation of the stability information but while conducting and approving inclining experiments.

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