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1.14.2.13 Solar radiation; 1.14.2.14 Sonic velocity and sound channels; 1.14.2.15 Turbidity; 1.14.2.16 Viscosity; 1.14.2.17 Water quality; 1.14.2.18 Water temperature; 1.14.3 Coastal zone classifications and bottom types; 1.15 Ambient air; 1.16 Climatic extremes; 1.17 Marine pollution; References; Chapter 2 Marine vehicle types; 2.1 Overview; 2.2 Merchant ships; 2.2.1 General cargo ships; 2.2.2 Container ships; 2.2.3 Roll-on roll-off ships (Ro-Ro ships); 2.2.4 Car carriers; 2.2.5 Bulk cargo carriers; 2.2.5.1 Tankers; 2.2.5.2 Dry bulk carriers; 2.2.6 Passenger ships; 2.2.7 Tugs  
2.2.8 Icebreakers and ice strengthened ships; 2.2.9 Fishing vessels; 2.3 High speed craft; 2.3.1 Monohulls; 2.3.2 Surface effect ships (SESs); 2.3.3 Hydrofoil craft; 2.3.4 Multi-hulled vessels; 2.3.5 Rigid inflatable boats (RIBs); 2.3.6 Comparison of high speed types; 2.4 Yachts; 2.5 Warships; 2.5.1 Stealth; 2.5.2 Sensors; 2.5.3 Own ship weapons; 2.5.4 Enemy weapons; 2.5.5 Sustaining damage; 2.5.6 Vulnerability studies; 2.5.7 Types of warship; 2.5.7.1 Frigates and destroyers; 2.5.7.2 Mine countermeasures vessels; 2.5.7.3 Submarines; References; Chapter 3 Flotation and stability; 3.1 Equilibrium  
3.1.1 Equilibrium of a body floating in still water; 3.1.2 Underwater volume; 3.2 Stability at small angles; 3.2.1 Concept; 3.2.2 Transverse metacentre; 3.2.3 Transverse metacentre for simple geometrical forms; 3.2.4 Metacentric diagrams; 3.2.5 Longitudinal stability; 3.3 Hydrostatic curves; 3.3.1 Surface ships; 3.3.2 Fully submerged bodies; 3.4 Problems in trim and stability; 3.4.1 Determination of displacement from observed draughts; 3.4.2 Longitudinal position of the centre of gravity; 3.4.3 Direct determination of displacement and position of G; 3.4.4 Heel due to moving weight  
3.4.5 Wall-sided ship

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### Sommario/riassunto

The Maritime Engineer's Reference Book is a one-stop reference for engineers involved in marine engineering and naval architecture by leading international contributors from one of the most respected stable of marine titles on the market. Material ranges from the basics to more advanced topics on the key areas of ship design, construction and operation. It covers classic topics including ship stability and manoeuvring as well as new technologies such as computer aided ship design and automated underwater vehicles. Facts, figures and data are presented from world-lead

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