Maritime & Coastguard Agency

# Syllabus
# 1 Day MCA Small Workboat Stability Course

1. General terms in use;
2. General Principles of Transverse Stability: -

    - Location of CoG, K, M, CoB;
    - Rolling and shift of CoB;
    - Theory of Moments, Righting levers, List & heel; and
    - Equilibriums.

3. Adding, removing and shifting weights: -

    - Simple calculation of transverse stability and effects on draft;
    - General understanding of change of trim;
    - Trimming moments;
    - Longitudinal Metacentre & LCF; and
    - Importance of monitoring of any changes, regular checks.

4. The Stability Booklet
5. Stiff and tender vessels
6. Use of cranes and shift of CoG
7. Free Surface Effect

    - Tanks;
    - Consumption of fuel and water; and
    - Water on deck.

8. Critical KG calculations (Transverse Stability)
9. Inclining Test
10. Deck edge Immersion
11. Catamaran stability
12. Risks associated with Tug and Tow;
13. Risks associated with deck cargoes;
14. Wind & Ice accretion Effects.

**Assessment:**

The above one-day course includes a short 45-minute written exam which tests the knowledge and understanding of the students.
Pass mark: - Minimum 60 %