

Water Awareness and Charge Certificate Manual

Module 13: Boat Loading

Current Document Revision Number: 1.1

Revision Date: 13 January 2018

Module Contents

1. BOAT LOADING.....	3
----------------------	---

Module Title	Comments	Rev No	Revision Date
Module 13: Boat Loading	Initial Release	1.0	23 Mar 2010
Module 13: Boat Loading	Outcomes Added	1.1	13 Jan 2018

Outcomes

After completing this module, the certificate holder will:

- Be able to calculate the approximate weight that a vessel can support
- Be able to demonstrate trim and securing a load.

1. BOAT LOADING

Water activities are more dangerous than land based activities for two reasons. Firstly because of the risk of drowning and secondly because of injuries caused by the instability of the craft.

All boats are designed to carry a load up to a specified maximum weight. The worse the weather and sea conditions that the boat has to endure, the less load it can carry. Remember that the more water that enters the boat, the greater the load that the boat is carrying, and the more it becomes susceptible to free surface effect (i.e. water sloshing about inside the boat).

A "Rule of Thumb" for determining how many kilograms a craft can safely manage is that for each cubic meter in volume a boat can safely carry 185 kg's.

To determine the volume of the boat one must multiply the product of the length, breadth and depth by a factor of 0.6. This gives an approximate volume of most mono hull boats.

Statistics show that the most common causes of boating accidents are from overloading and improper loading of small boats. Most of the fatal accidents caused by a loading error involved boats under 9m in length and half these vessels had 10 horsepower or less.

There are several things to keep in mind when loading a boat:

DO NOT overload. Use the above rule and reduce the load if the weather conditions are not perfect.

An overloaded boat is very unstable and therefore far more likely to capsize. It is also very difficult to handle, both in steering and in propelling.

Trim the boat correctly. Distribute the load evenly throughout the boat and keep the load as low as possible. The load should be balanced along both axis, port-starboard as well as bows-stern.

DO NOT have uncontrolled movement in a boat. No item of equipment must be left loose in a boat. No person is to stand up or move around in a boat unless controlled by the Cox.

If one needs to move around in a boat, stop or slow the boat, only let one person move at a time and instruct him to keep low and to the centre line of the boat. Before any movement occurs, ensure that the boat is as stable as possible and that there are no dangerous items that could be fallen onto.

It is far better to make more than one trip or to leave equipment behind than to experience the trauma of capsizing or of trying to handle an overloaded boat in bad weather conditions.