

Water Awareness and Charge Certificate Manual

Module 10: Pulling Boat & Dingy Seaworthiness

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Outcomes

After completing this module, the certificate holder will:

- Be able to explain the concept of seaworthiness
- Be able to assess a dinghy yacht to determine its seaworthiness
- Be able to assess a pulling vessel to determine its seaworthiness
- Be able to correctly maintain and store a vessel and associated equipment

1 SEAWORTHINESS

Before the charge holder allows the use of boats of any description for water activities, he or she must ensure that such boats are in a seaworthy condition, and therefore does not form part of the "pre accident" set of parameters which usually are the cause of "accidents".

Seaworthiness of a boat is a direct result of the quality of SEAMANSHIP practiced by person responsible for the boat.

Boats should be inspected before being allowed on the water and the following items are a basic guide to what to look for.

1.1 Yachts

1.1.1 Buoyancy

Different classes of yacht have different methods of complying with class requirements, but in general the buoyancy in a yacht will take the form of an airtight compartment or compartments, formed either as integral components of the structure of the boat or as inflatable bags fitted in the relevant locations such as under thwarts, side benches and bow areas under the foredeck.

Inflatable bags should be checked that they can maintain pressure after being pumped to the correct pressure. Inflatable bags should not be over inflated (especially in cold conditions such as early mornings), as there is a possibility that excessive pressures could be reached in the bags during the midday period if exposed to direct sunlight. Inflatable bags should not be under inflated as they can possibly slip out from their securing straps. Ensure that no sharp points can puncture the bags. Loose items should not be allowed to fall between the bags and the hull.

Built in compartments should not have water in them at any time, if there is, the cause of the leak must first be ascertained and steps taken to correct the situation. Sometimes water gets in from ventilation hatches or bung plugs which have been left open to assist with air circulation, and obviously the fitting of tank bungs and hatch covers will form part of the seaworthiness checks.

Most yachts, either of fibreglass or wooden construction will leak to some small degree, which may be deemed acceptable depending on circumstances.

1.1.2 Standing rigging

All components which keep stayed masts up need to be checked for wear, and fitting.

These items include hounds band rivets, swaged eyes, stranded stay wire, kinked stay wire, pin cir-clips, shackles, and chain plate fastenings.

1.1.3 Running rigging

Worn halyards and masthead sheaves are often sources of problems. Halyards are often found to be badly secured, such that their release is difficult and time consuming in the event of a capsized rescue situation.

Sheets are often scrounged replacements and not suitable for the type of boat, too thick or too thin, too long or too short. This sort of rigging mismatch can potentially lead to the occurrence of capsizes. Woven sheathes on synthetic rope which have worn through to the core are very dangerous, and jam easily.

Mainsail outhauls are often found to be any old scrap of lanyard, which end up being lashed to the end of the boom in some iniquitous fashion.

1.1.4 Securing of foils

A rudder which has fallen to the bottom of the dam is of no use to anyone. Often rudders which did not originally belong to the boat get used and the spring clips which are supposed to prevent the rudder from falling off the pintles when the boat is capsized are either bent or missing or don't fit.

Rudder blade downhaul/uphaul lanyards need to have a proper securing cleat which can be quickly un-cleated when required.

Dagger board securing lanyards, and centre board downhaul/uphaul lanyards and purchases need to function correctly, to assist with righting manoeuvres after capsizing.

1.1.5 Fittings

Any fitting which is either broken or not the correct fitting for the job, can potentially be the cause of a sailing accident.

1.2 Gigs and rowing boats

Inspections for seaworthiness for gigs and rowing boats are similar to those for sailing boats.

However certain extra fittings of major importance are found in rowing boats, and these have to do with the method of propulsion.

Check for loose socket fittings, worn crutches, crutch lanyards and clips, worn jackets, cracked oars or bent oars, oars of a suitable size to match the pulling crew and broken foot straps on the stretchers.

1.3 Boat maintenance and storage

1.3.1 Maintenance

Allowing the use of poorly maintained boats will increase the change of problems occurring when the weather conditions deteriorate.

1.3.2 Storage

Boats should be stored with suitable weather covers if stored outside. Weather covers should not allow the formation of water puddles which can easily damage them. The covers must be fitted in such away as to allow for air movement underneath to assist with drying out of buoyancy compartments.

Boats must be stored such that any rainwater, or leak water must be able to drain out through bung holes or perhaps self bailers, particularly if they are wooden plywood boats.

Compartment covers should be removed to assist with airflow through the hull.

Boats must be stored on their correct dollies with the cradle support pressure being correctly distributed to the hull.

Long term storage of fibreglass and wooden boats on incorrect dollies or trailers will lead to hull distortions which can damage the hull permanently. Life jackets are not considered optimal forms of padding.

1.3.3 Sails

Sails should be dried before folding and stowing in sail bags, and stowing of bundles of wet sheets into sail bags is yet another sigh of poor seamanship.