BOAT CREW TRAINING

Marlinspike Seamanship

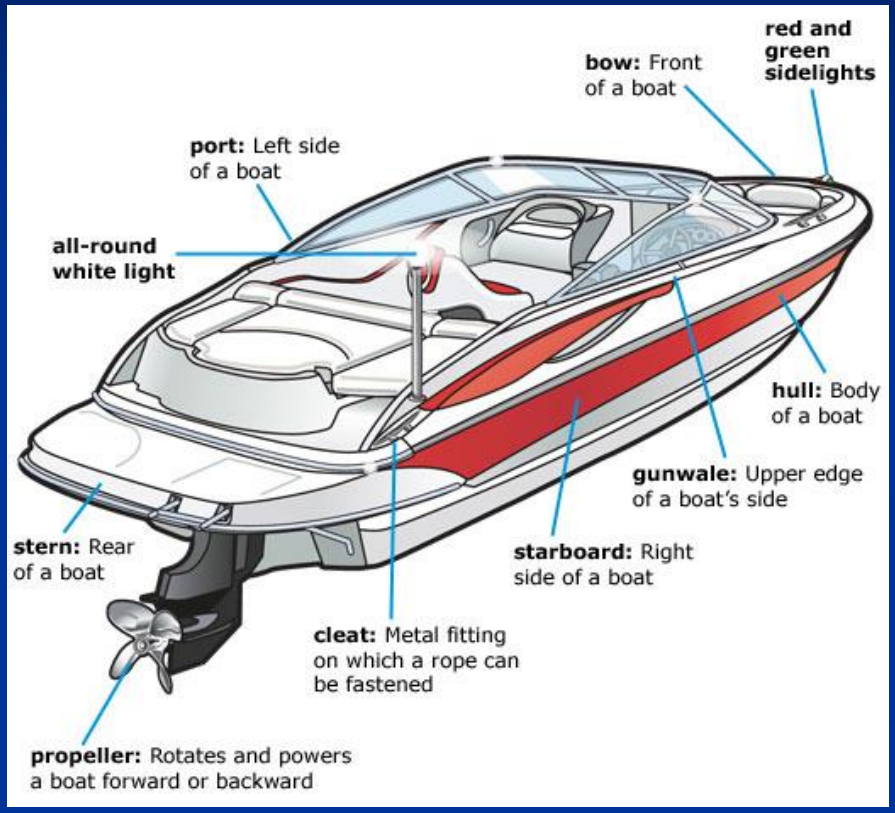
(Boat Nomenclature and design)

BCM-03-01

BCM-03-03 to -06

BCH 16114.4A Ch 3,4,6

Boat Nomenclature



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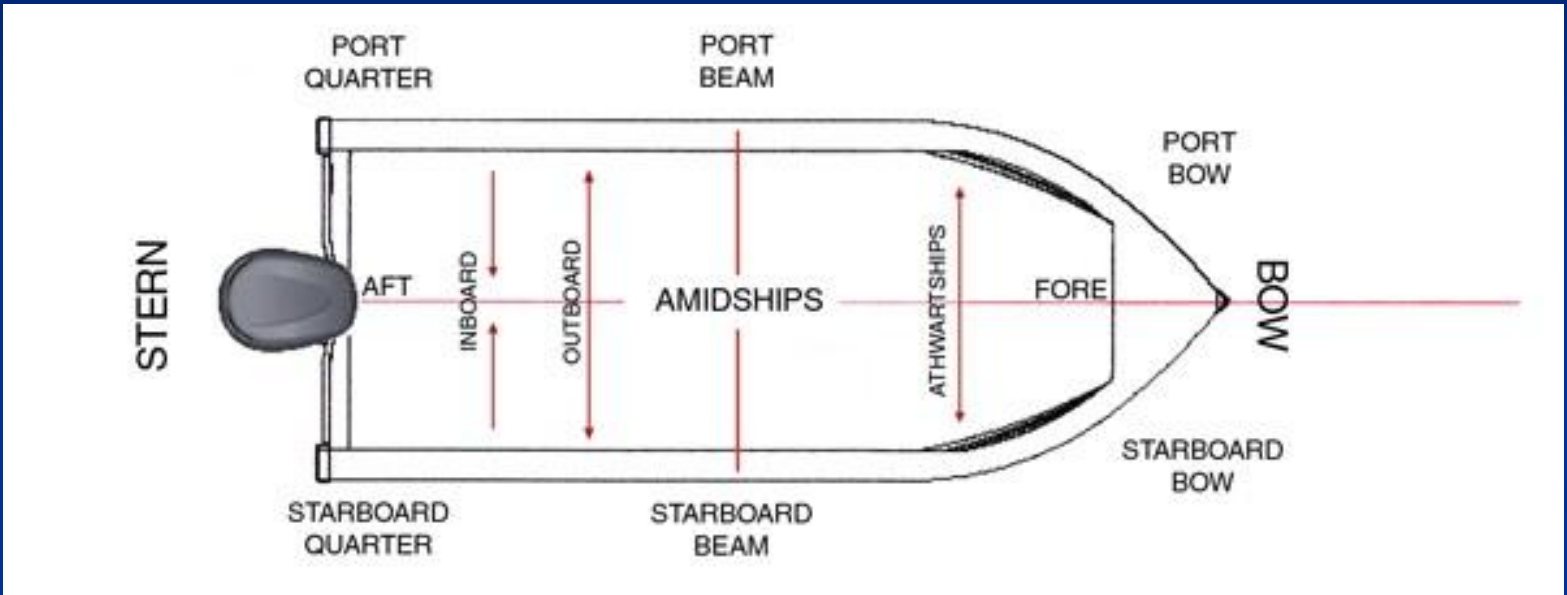

(Note: Length, Beam, Draft)

Hull Types

Displacement:

- Push water aside
- Plow thru water

Cruisers, most sailboats, ships

Planing:

- Skim along surface
- Flat or v-bottom

Small power-driven, some sailboats

Keel Types

Bar Keel- extends below the hull

Flat plate keel- within boat's hull

Other Factors

Watertight integrity: Doors, hatches, hull fittings (caution when opening if grounded)

Stability affected by:

Static forces- weight distribution in boat

Dynamic forces- wind, waves, speed,

turning

Stability Factors

- **Center of gravity:** Depends on load. Weight of boat acts vertically downwards.

-Center of Buoyancy: Upward force of water on hull.

- Equilibrium: Center of Buoyancy acting upwards/vertically is below the Center of Gravity acting downwards.

Types of Stability

Longitudinal (bow to stern) - prevents pitch-poling

Transverse (side to side)- prevents capsizing

Seas and Stability

Deep water waves (wakes)- approach at an angle, 25-45 degrees, slow down.

Breaking waves- increase power to get bow over the crest, slight bow up to approach next wave. Do not "fly thru" the crest

Dealing with Current/ winds

- -Ride the back of the swell for following sea
- -Hand on throttle, adjust speed
- -If can't get to shelter before a storm, head into wind
- - 1 knot of current may affect boat as 30 knots of wind