Nautical Knowledge

Boating in all its forms has a language of its own. These boating terms have evolved over many years and describe specific aspects of boating. It’s important that you understand some of the frequently used terms.

1. **At speed**
   In NSW a vessel travelling faster than 10 knots on the plane.

2. **Aqua planer**
   A person being towed on a board affixed to a tow rope.

3. **Bar**
   A shallow area formed by sand near the mouth of a river, or at the approach to a harbour. Bars can dramatically change water and wave conditions, so extreme care is necessary when crossing them.

4. **Bilge**
   The compartment at the bottom of the hull of a boat where water collects and may need pumping out.

5. **Bow**
   The front of the boat.

6. **Bowriding**
   An illegal practice whilst underway it refers to a person dangling their legs over the bow.

7. **Stern**
   Rear or back of the boat.

8. **Draft**
   The depth of a vessel below the waterline.

9. **Freeboard**
   The height of a vessel above the waterline to the deck.

10. **Channel or fairway**
    A navigable route through a body of water, or marked waterway.

11. **Conditions of heightened risk**
    When adverse weather conditions such as rough seas, high wind and poor visibility increase boating risks.

12. **Current**
    The horizontal movement or flow of water. Currents can be either tidal or non-tidal.

13. **Distance off**
    Set by state maritime authorities distance off refers to the minimum safe distance to keep from other vessels and people in the water at speed.

14. **Downstream**
    Travelling in a direction towards the sea.

15. **Upstream**
    Travelling towards land in a direction away from sea.

16. **Draft**
    The depth of a vessel below the waterline.

17. **Dredge**
    A sand pumping barge operating in a river or body of water to deepen the channel.

18. **EPIRB**
    An EPIRB (Emergency Position Indicating Radio Beacon) is a radio distress beacon that, when activated, transmits a signal via satellite to a ground station to assist emergency services to locate a vessel in distress. In Australia only a 406MHz EPIRP is acceptable.

19. **Following sea**
    In boating a following sea refers to waves which are running in the same direction as the boat. Following seas can be especially dangerous for smaller vessels as the potential for swamping, broaching (swing sideways) or plowing into the wave ahead are greater in these conditions.

20. **Fishing vessel**
    A commercial fishing trawler.
21. **Give way vessel**
Term from the collision regulations used to describe the vessel which must slow, alter course or give way to another vessel.

22. **Stand on vessel**
The vessel referred to in the collision regulations which must maintain its course and speed. (This vessel has the right of way).

23. **Heel**
Wind and wave forces causing the vessel to lean over.

24. **List**
Uneven distribution of internal goods or persons leaning the vessel over.

25. **H.E.L.P Position** (Heat escape lessening position)
Referred to as the huddle position this position is designed to conserve body heat whilst immersed in the water by adopting a crouched position, with legs and arms crossed and movement kept to a minimum.

26. **Hypothermia**
When the body’s core temperature drops below 37 degrees when immersed in cold water.

27. **Cardinal marks**
Navigation buoys which indicate where deep lies to the North, South, East or West.

28. **Isolation danger mark**
Indicates an isolated danger such as rock, wreck, shoal or reef. You can pass this mark on either side, but should not pass too close.

29. **Special mark**
A navigation buoy indicating an exclusion zone, hazard or underwater pipe.

30. **Port and starboard marks**
Coloured red for port (can shaped) and green for starboard (cone shaped) these navigation buoys indicate port (left) and starboard (right) sides of a channel. When coming in from sea (travelling upstream) you pass/leave the starboard mark to your starboard side. (right)

When travelling downstream (out to sea) the opposite occurs you pass/leave the port mark to your starboard (right side) side.

31. **Leads (transits)**
Marks showing one triangle up and the other pointing down, used in channels and at bar entrances which when in line indicate the centre of the navigable channel. Keep the leads inline to remain with the channel.

32. **Knot**
A measurement of speed applied to wind or to vessels. One knot is a speed of one nautical mile per hour, or 1.852 km/hr.
33. **Look out**
The person responsible responsible for maintaining proper lookout with sight, hearing, aids to navigation and all other other means to assist in avoiding a collision or grounding.

34. **Making way**
A vessel underway is being propelled through the water, using power or sail.

35. **Underway**
Not at anchor, tied to shore or a buoy, or aground. If you are drifting you are under way.

36. **Mayday**
Distress signal indicating grave an imminent danger (persons in the water)

37. **Pan Pan**
Distress signal indicating no grave danger but assistance is required.

38. **Securite Securite**
Pronounced SAY-CURE-E –TAY, this safety signal indicates that the station using it is about to transmit a message concerning an important navigational alert or weather warning.

39. **Nautical mile**
International unit of distance over water. One nautical mile is equal to 1.852 kilometres.

40. **Navigation/steering rules**
The regulations governing the movement of vessels in relation to each other. Also known as the Collision Regulations (ColRegs), steering or sailing rules. The “rules of the road at sea”.

41. **Open waters**
Waters outside harbour headlands. Sometimes referred to as “ocean” waters.

42. **Enclosed waters**
Navigable waterways within the entrance headlands including harbours, rivers and estuaries.

43. **Observer**
A designated person to watch a person being towed and report back to the Skipper/driver any issues associated with the tow.

44. **Personal flotation device (PFD)**
Also known as a buoyancy vest or lifejacket, an approved PFD Type 1, Type 2 or Type 3 must be carried or worn for each person on board most recreational vessels.

45. **Planning**
A vessel is said to be planning when its displacement decreases, it lifts itself over its bow wave and moves on the top of the water at speed.

46. **Port side**
The left hand side of a vessel when you are looking forward from the stern and the side on which a red sidelight is displayed.

47. **Starboard side**
The right hand side of vessel when you are looking forward from the stern and on the on which a green light displayed.

48. **Power boat under 12 metres navigation lights**
Must display port (red side light), starboard (green side light) and an all round white light.

49. **Submarine cable**
A power cable laid across the river bed.

50. **Trim**
The balance of a vessel, both fore and aft as it sits in the water. Using the engine’s tilt function to properly trim a planing-hull boat while underway increases stability, fuel efficiency, and safety whilst underway.

51. **V Distress sheet**
A florescent orange-red sheet (1.8 metres by 1.2 metres) with a large black “V” printed in the middle. Used for signalling emergency assistance.
52. Wake and No Wake areas
The track left on the water’s surface by a moving vessel. No wake areas are areas where you must slow your vessel so it does not make either a bow or stern wake so that the vessel is off the plane and level in the water.

53. Wash and wake
Wash is a “V” shaped wave left behind a boat as it is being propelled through the water. Wake is the related wave effect which occurs when the vessel increases speed causing the stern to drop deeper in the water. Wake from a vessel can cause bank erosion and damage to sensitive environmental areas.

54. Windward
The side of the vessel that is facing into the wind. The direction from which the wind blows (upwind)

55. Yaw
To swing, swerve or steer off course due to waves, wind and swell.

Buoys beacons and marks you’ll see on the water