

THE SEAFARER'S WORD

A MARITIME DICTIONARY



A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

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A	
A:	Code flag; Diver below, keep well clear at slow speed.
Aa.:	Always afloat.
Aaaa.:	Always accessible - always afloat.
A flag + three numerals:	Code flags; Azimuth or bearing.
Aback:	When a wind hits the front of the sails forcing the vessel astern.
Abaft:	Toward the stern.
Abaft of the beam:	Bearings over the beam to the stern, the ships after sections.
Abandon:	To jettison cargo.
Abandon ship:	To forsake a vessel in favour of the life rafts, life boats.
Abate:	Diminish, stop.
Able bodied seaman:	Certificated and experienced seaman, called an AB.
Abeam:	On the side of the vessel, amidships or at right angles.
Aboard:	Within or on the vessel.
About, go:	To manoeuvre to the opposite sailing tack.
Above board:	Genuine.
Able bodied seaman:	Advanced deckhand ranked above ordinary seaman.
Abreast:	Alongside. Side by side
Abrid:	A plate reinforcing the top of a drilled hole that accepts a pintle.
Abrolhos:	A violent wind blowing off the South East Brazilian coast between May and August.
A.B.S.:	American Bureau of Shipping classification society. Able bodied seaman
Absorption:	The dissipation of energy in the medium through which the energy passes, which is one cause of radio wave attenuation.
Abt.:	About
Abyss:	A deep chasm.
Abyssal, abysmal:	The greatest depth of the ocean
Abyssal gap:	A narrow break in a sea floor rise or between two abyssal plains.
Abyssal plain:	A level region at great depth in the ocean.
Access holes:	Holes cut in a structure to facilitate entry and exit.
A.C.M.A.:	Australian Communication & Media Authority
Acid rain:	The acidification of rain (largely resulting from atmospheric pollution from burning sulphur rich coal) causing forest die back and reduction of quality of water habitats.
Ack.:	Acknowledge.

A. class:	Australian vessel survey class, unlimited offshore.
A. class division:	Divisions made of steel or equivalent material, suitably stiffened and capable of preventing the passage of smoke and flame up to the end of the first 1 hour of the standard fire test.
Accommodation:	The living quarters of a vessel.
Accommodation ladder:	Portable steps providing access from the vessel's entry deck to the waterline.
Accumulator:	A tank that smooths out pressure variability in a fresh water system. A trap to remove water within a refrigeration system.
A-cock-bill	A term used to indicate that the anchor is clear of the hawse pipe and suspended above the water, ready for letting go.
A.C. current:	Alternating current is a form of pulsing electricity supplied by alternators. The voltage cycles between positive and negative at a regulated frequency (cycles per second measured in Hertz).
Accretion:	The process of deposition of material at the bottom of the oceans. Build up of matter over a surface (e.g. ice on rigging, fouling on hulls).
Aces:	Hooks for the chains.
Acorn:	Decorative finial for a post.
Adams, Joe	Australian prolific fast cruising yacht designer tragically murdered in his late years of life in New Guinea.
ADCOM:	Address commission.
Added mass:	An effective increase in hull mass caused by the dragged water-flow during motion.
Added weight method:	A method used to determine a ship's damaged stability by calculating a partial flooding as added weight rather than as lost buoyancy.
Adiabatic:	Occurring without heat.
Adj.:	Adjust, adjustment.
Admiral:	First or highest commander.
Admiralty brass:	Alloy of approximately 70% copper, 29% zinc. See Naval brass.
Adrift:	A vessel not attached to the wharf or an anchor.
Ad valorum:	A term from Latin meaning, "according to value."
Advance:	The twin vectors of advance (headway/headreach) and transfer are the distance forward and the distance to the left or right that a vessel will make while negotiating a turn (its tactical diameter) or going full astern to avoid a collision (its stopping distance).
Advection:	The horizontal air movement in the lower atmosphere due to difference in atmospheric pressure (wind).
Advection fog:	Fog resulting from warm air over relatively colder water.
Admiralty:	Pertaining to the United Kingdom Naval Command.
Admiralty pattern anchor:	An older style anchor with crown, twin flukes and a stock perpendicular to its shank.
Adze:	Shipwrights tool used to face timber (cut surface to shape).
Aerial:	A length of conducting wire that detects and/or over a band of similarly proportional radio wavelengths.
Aero lights:	Aids to navigation for aircraft.
Aeronautical drift (Da):	Drift caused by bailout trajectory or aircraft gliding distance.

Aeronautical position:	Initial position of a distressed aircraft at the time of re-entry, engine failure, aircrew ejection or bailout.
A.F.F.F.:	Aqueous Film Forming Foam
Affreightment contract:	An agreement by an ocean carrier to provide cargo space on a vessel at a specified time and for a specified price to accommodate an exporter or importer.
Afloat:	Supported by the surface of the water.
Aframax.:	The largest dry bulk carriers.
Afromosia:	African fine straight grained hardwood timber. Dark coloured, easily hand worked and acceptable for marine use.
Aft, after:	The stern end of a vessel.
After body:	A vessel's sections aft of amidships.
Aft peak:	A compartment immediately forward of the stern post usually below the load water line.
Aft peak bulkhead:	The transverse bulkhead forward of the stern post, being the forward boundary of the after-peak tank that is required to be maintained as watertight.
Aft peak tank:	The furthest aft tank/compartment (used for fresh water or ballast).
After Perpendicular (AP):	A line which is perpendicular to the intersection of the after edge of the rudder-post with the designed load water-line. This is the case for both single- and twin-screw merchant ships. For some classes of warships, and for merchant ships having no rudder-post, the after perpendicular is taken as the centre-line of the rudder stock.
After rake:	The angle beyond vertical of the vessel's overhanging stern structure.
Aftermost:	Extreme aft end of a vessel.
Agba:	African straight grained hardwood timber durable for marine use.
A.G.D.:	Australian geodetic datum.
A.G.D.66:	Australian Geodetic Datum 1966 - the datum used by the Australian Hydrographical Office on Australian Charts which is a different datum used by the GPS. See also 'WGS84'
Age of the moon:	The interval since the last new moon.
Age of the tide:	The interval since the last full/new moon and the next spring tide.
Agonic line:	A line joining points with no magnetic variation.
Aground:	Touching the sea bottom.
Agulhas Current:	A warm Indian Ocean current running southward along the East African Coastline.
A.G.W.:	All going well.
A.H.D.:	Australian Height Datum adopted by the National Mapping Council for vertical control for mapping (mean sea level 1966-68).
Ahead:	Towards the vessel's bow.
A-hoy:	Used to attract the attention of another vessel.
A.H.L.:	Australian hold ladders.
A.H.O.:	Australian Hydrographical Office.
A-hull:	When a vessel lies perpendicular to the wave fronts. A method of heaving to.
A.I.O.:	Admiralty information overlay.
Air:	A mixture of mainly nitrogen, with oxygen and carbon dioxide, constituting the atmosphere with traces of inert gasses.

Air casing:	An upper deck combing surrounding the funnel stack to protect the deck from heat and assist fireroom ventilation.
Aircraft carrier:	A warship designed to carry planes.
Aircraft coordinator (A.C.O.):	A person who coordinates the involvement of multiple aircraft in SAR operations.
Air draught:	Height clearance of a vessel.
Aircraft glide:	Maximum ground distance an aircraft could cover during descent.
Air hammer:	Compressed air (nail or rattle) gun used to remove surface rust.
Air port:	A window to provide light and ventilation.
Air-purifying respirator:	A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.
Air tank:	A tank that provides additional vessel floatation. A tank of breathable air for underwater scuba divers.
Air tight door:	A fully sealed door that will exclude air from passing.
A.I.S.:	Automatic Identification System.
A.L.A.R.P.:	As low as reasonably practical.
Alaska current:	A warm North Pacific Ocean current running firstly Northward along the Alaskan Coastline then West into the Pacific.
Albatross:	Large wing spanned ocean wandering seabird, featured in the epic poem the Ancient Mariner.
Alden, John:	American early 20th century classic yacht designer, associated with N.G. Herreshoff.
A-lee:	Away from the direction from where the wind comes from.
Alertfa:	See alert phase.
Alert phase:	A situation wherein apprehension exists as to the safety of an aircraft or marine vessel, and of the persons on board.
Alerting post:	Any facility intended to serve as an intermediary between a person reporting an emergency and a rescue coordination centre or rescue sub-centre.
Alignment:	To assemble a shaft in line with its bearing to minimise wear and vibration.
Alive:	A command to be quicker with the task.
Alizé:	The trade winds.
Alkaline:	A compound that is chemically opposite to acid. The electrolyte in Ni-Cad batteries of dilute potassium hydroxide.
All fours mooring:	Anchoring a vessel with two chain cables ahead and two chain cables astern.
All hands:	All the crew.
Allison:	The act of striking or collision of a moving vessel against a stationary object (American).
A.L.M.:	Alarm.
All standing:	To come to a sudden stop.
Aloft:	Up the mast or In the rigging.
Alongside:	Berthed against a wharf or jetty.
Allotment note:	Traditional payment option for a seaman to dispose of some of his pay to relatives.
A.L.P.	Articulated loading platform; a partially buoyant tower rising from a universal joint on the sea floor and used for berthing and loading at

	oil platforms.
A.L.T.:	Altitude.
Altar:	A step in a graving dock.
Alternator:	A device consisting of a spinning magnet within a series of coils that produces AC electrical current, subsequently rectified to DC when used for charging vessels batteries.
Aluminium:	Lightweight corrosion resistant metal used for fittings and hull plating.
Aluminium bronze:	Alloy of approximately 90% copper and 10% aluminium.
A.M.:	Amplitude modulation.
Amas:	The outboard hulls of a trimaran.
A.M.C.:	Australian Maritime College.
American bureau of shipping:	American ship classification society.
Amidships:	The centre of the vessel, with reference to her length or breadth.
Ammeter:	An instrument that measures the amount of current, in amperes, in an electrical circuit.
Amp:	A unit of electrical power and abbreviation of ampere.
Ampere:	Ampere or amps are the unit of electric current. Amps can be compared to the volume of water flowing through a water pipe. Amps = Volts ÷ Ohms
Amphitrite:	Ancient Greek consort of Poseidon, God of the sea.
Amphora:	An ancient earthenware vessel used to transport liquids.
Amplification:	As in making sound louder or a radio wave stronger.
Amp meter:	See Ammeter:
Amplitude:	The maximum power of a radio wave. The bearing of a heavenly body expressed in the degrees towards the North or South Pole from East or West sighted at its rising or setting. For example, amplitude E20°N = 90° - 20° = 70°, W20°N = 270° + 20° = 290°. See azimuth.
Amplitude modulation:	The varying of amplitude to the radio carrier wave to enable encoding for the simulation of audio messages.
A.M.S.A.:	Australian Maritime Safety Authority.
A.M.V.E.R.:	Automated mutual-assistance vessel rescue system.
Analogue:	Analogue display, one that uses physical quantities (e.g. length or deflection) to represent numbers.
Anchor:	A device that holds the vessel to the sea bottom.
Anchorage:	A place to anchor.
Anchor bar:	A lever used to work an anchor windlass.
Anchor billboard:	A deck housing to stow an anchor.
Anchor buoy:	A small buoy used to mark the position of the deployed anchor.
Anchor chain:	Secures the anchor to the ship and ensures that the pull on the anchor is horizontal thus embedding the flukes under tension. Hence the phrase, "a vessel anchors by its chain".
Anchors in tandem:	Use of two anchors in a line to improve holding power.
Anchor light:	A white light hoisted while anchored, also known as a riding light.
Anchor rode:	A length of anchor line.
Anchors aweigh:	Announced when the anchor just clears the bottom at retrieval.
Anchor stopper:	A device to lock off an anchor chain.

Anchor watch:	A lookout posted to safeguard the vessel while at anchor.
Ancient Greece winds:	Northerly - Boreas Easterly - Eurus Southerly - Notos Westerly - Zephyrus
Anemometer:	An instrument that measures wind speed.
Angle:	See angle bar.
Angle bar:	Steel section of L shaped profile.
Angle clip:	A short length of angle bar.
Angle collar:	A ring in angle bar section used to seal a pipe passing through a deck or bulkhead.
Angle of cut:	The lesser angle between two position lines.
Angle of dip:	The angle that the north end of a compass needle is inclined from the horizontal, being downward in the Northern Hemisphere (positive) and upward in the Southern Hemisphere (negative).
Angle of incidence:	The angle that a wave or electromagnetic radiation strikes a surface.
Angle of indraft:	The angle at which the wind crosses the isobars. It results from a balance of pressure gradient force, coriolis force and friction. The angle of indraft varies from approximately 45° at the edge of a storm to 0° in the eye of a cyclone.
Angle of reflection:	A deflection of direction of a wave or electromagnetic radiation directly opposite to its angle of incidence.
Angle of refraction:	A deflection of direction of a wave or electromagnetic radiation due to its encountering a changed density of material.
Angle of repose	The natural slope that a loose pile of grain, sand, coal, etc will rest at.
Anhydrous:	Chemicals without crystalline water.
Anode:	A less-noble metal of an electrolytic cell where corrosion occurs. It may be on the surface of a metal or alloy. The more active metal in a cell composed of two dissimilar metals, or the positive electrode of an impressed-current system. Sacrificial anodes of zinc or aluminium are fitted to vessels to reduce corrosion from more valued components.
Anomaly:	An occurrence that is not typical.
Anneal:	The opposite to temper. When metal bends it becomes brittle (work hardened). The annealing process is one of heating the metal to cherry red then plunging it into lime and allowing it to cool slowly to remove brittleness.
Anode:	The positive terminal of an electrical circuit. A sacrificial anode is a consumable zinc bar used to electrochemically corrode in preference to any nearby more galvanic noble metals of a vessel's underwater structures.
A.N.T.:	Australian National Tide Tables.
Antarctic circum-polar current:	An Easterly setting current situated North of the Antarctic sub-polar current.
Antarctic sub-polar current:	A Westerly setting current along the continental edge of Antarctica.
Antenna:	See aerial.

Antenna gain:	A measure of the effectiveness of an aerial.
Anti-cyclone:	See high pressure system.
Anti-freeze:	An additive to an engine's fresh water coolant that protects against freezing and consequent damage resulting from expansion.
Anti-fouling:	Paint coating on the bottom of a boat to prevent marine fouling. Traditionally copper sheet was used.
Anti-sea clutter:	A radar operational control that limits the return of echoes from nearby waves around a vessel, thus allowing ship targets to be more apparent on the radar screen.
Anti-siphon valve:	A valve allowing air ingress to a liquid filled line, thus limiting siphon action development.
Anti-trip chine:	A flared out aft section of the side/bottom of the boat. The purpose is to prevent the hard chine of the boat catching a wake or small wave on a sharp turn.
A.P.:	See after perpendicular.
Apparent temperature heat index (AT):	The AT index used by the Australian Bureau of Meteorology is based on a mathematical model of an adult, walking outdoors, in the shade. AT is defined as the temperature, at the reference humidity level, producing the same amount of discomfort as that experienced under the current ambient temperature and humidity.
Apartias:	See classical winds.
Aperture:	The space provided for the propeller.
Aphelion:	The time or position at which a planet is farthest from the Sun.
Aphelioties:	See classical winds.
A.P.H.I.S.:	Animal and plant health inspection service.
A.P.I.:	American Petroleum Institute
Apogee:	The point in the orbit of the Moon which is farthest from the Earth.
Apparent coefficient A:	A constant compass error due to reasons other than the ship's magnetic structure such as compass card/sighting alignments.
Apparent wind:	The resultant of the actual wind and the wind caused by the boat's motion. As the boat moves faster, the more the apparent wind moves forwards.
Approaches:	The waterways that give access or passage to harbours and channels.
Apron:	A timber fixed behind the stem that acts as a surface to which the forward ends of the planking can be nailed.
Aquaculture:	Farming of marine plants or animals.
Aqualung:	A breathing apparatus for divers consisting of compressed air tanks and regulator.
Aquatic:	Relates to water.
Aqueduct:	An artificial channel for the conveyance of water usually elevated.
Arch:	A covered passage naturally cut through a headland.
Archaeology:	The study of historical artefacts.
Archimedes' principle:	A body floating in water experienced an upthrust equal to the weight of water it displaces.
Archipelago:	A sea studded with many islands.
Armada:	A Spanish fleet of men-of-war.
Armature:	The rotating electrical windings of a generator or motor.
A.R.P.A.:	Automatic radar plotting aids.

Arc of visibility:	The sectors in which a light is visible from at sea.
Arctic smoke:	Fog resulting from cold air over relatively warmer water.
Argestes:	See classical winds.
A.R.G.O.S.:	A satellite-based location and data collection system.
Ark:	Biblical vessel built by Noah for the creatures of the world to survive the flood.
Arming the lead:	Placing tallow in the recess in the bottom of the sounding lead to ascertain the nature of the sea bed.
Arsenal:	The historic naval shipbuilding yard in Venice.
Artemon:	A small square sail set on the bowsprit.
Articles:	See Articles of agreement below.
Articles of agreement:	The document containing all particulars relating to the terms of agreement between the master of the vessel and the crew. Sometimes called ship's articles, shipping articles
Artificial horizon:	A horizon produced by bubble, gyro, or mercury trough to allow measurement of altitude of celestial bodies.
Artificial respiration:	Historic term for EAR.
A/S:	Ashore.
Ash:	European fine straight grained hardwood timber. Light coloured, flexible, easily steam bent but not durable for marine use. Commonly prized for coachwork and craft machinery.
Ashcroft system:	Timber boat building technique using two layers of overlapping diagonal strip planks with glue barrier between. High strength and low weight.
Ashlar:	Squared hewn stone; as in walling.
Aspect:	The radar displayed angle between the direction a target is heading and your ship, which is at the centre of the display.
Aspect ratio:	The length of the leading edge of an aerofoil or hydrofoil as compared to its width. Luff and foot of a sail.
Astern:	Towards the stern. The opposite of ahead.
Astronomical Twilight:	The period from Nautical Twilight to the moment when the sun's centre is 18° below the horizon in the evening, and from the moment when the sun's centre is 18° below the horizon in the morning to the beginning of Nautical Twilight in the morning.
A.T.E.:	Along track error.
Athwart:	Across.
Athwart-ships:	Across the vessel from side to side.
Atlantis:	Mythical ancient civilisation whose lands were devoured by the sea.
Atmosphere:	The mix of gases immediately surrounding planets.
Atmosphere-supplying respirator:	A respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere, and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.
Atmospheric pressure:	The pressure or weight of a column of air at a specified elevation on the earth, being an average of 14.7 psi at sea level or 1000 hecto-pascals (millibars).
Atoll:	A ring-shaped coral reef which has islands on it.
Atollon:	A small atoll on the margin of a larger one.
Attenuation:	Loss of power in a radio wave typically due to absorption, scattering

	and reflection over an extended distance of propagation.
Auger:	A spiral shaped drilling bit, usually long.
Aurora borealis:	Fantastic light show in the Arctic and Antarctic skies produced as solar rays pass through the earth's magnetic field.
Aussar:	Australian Search and Rescue Authority.
Autopilot:	An electro-mechanical device that can be activated to provide automatic steering over-ride.
Australian coastal and middle-water operations:	Operations within a range laterally along the coast within a limit of 600 nautical miles to seaward; or within such lesser limits as may be specified.
Australian Height Datum:	See AHD.
Auto-pilot:	An instrument to steer a vessel automatically.
Auxiliaries:	The winches, pumps, motors, etc. of a ship but not its main propulsive machinery.
Auxiliary engine:	An engine, outboard or inboard, used to power a sailboat.
Auxiliary machinery:	A ship's machinery other than its main engines.
Avalon:	Mythical ancient British island and burial place of King Arthur, claimed to be the once lake bounded mount, Glastonbury Tor.
Avast:	Stop.
Aviso:	Small, fast messenger ship, Spanish 16th century.
Awareness range:	Distance at which a search scanner can first detect something different from its surroundings but not yet recognise it.
Awareness stage:	A period during which the SAR system becomes aware of an actual or potential incident.
Awash:	Partially covered by water.
Aweigh:	To raise the anchor.
Awning:	Cloth suspended overhead for shade or against rain.
Awning deck:	See hurricane deck.
A.W.S.:	Automatic Weather Station.
Aye, Aye:	I understand and will comply with the order.
Azimuth:	The bearing of a heavenly body expressed as the degrees East or West of the poles (the distance from North or South). For example S20°E = 180°- 20° = 160°, N20°W = 360°- 20° = 340°. See amplitude.
Azimuth ring:	A sighting instrument set over the ships compass to facilitate taking bearings.

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B — ● ● ●

B:	Code flag; I am loading, carrying or discharging dangerous cargo. Sound signal; Last barge of a tow in restricted visibility.
Babbin:	Soft white metal alloy used for shell type engine bearings.
Bacassa:	Seagoing three masted Carib vessel.
Back:	To force a sail against the wind when manoeuvring (a jib is 'backed' when you want to force the bow to fall off); swing away from the wind.
Back, backing:	The wind backs when it shifts in an anti-clockwise direction.
Backbearing:	A reciprocal bearing to the vessels course.

Backbone:	The stem, keel, stern post & transom set up for timber building.
Back flooding	Occurs when fluid passes in reverse through a pump or valve back into the fluid reservoir or compartment.
Back freight:	The owners of a ship are entitled to payment as freight for merchandise returned through the fault of either the consignees or the consignors.
Back haul:	Moving cargo on the return leg of a voyage for the purpose of minimizing ballast mileage and reducing transportation costs.
Back pressure:	A resistance in a pipe-line that restricts the forward flow movement.
Backsprings:	Hawsers laid out as forward springs or after springs to reduce surging when at a berth.
Backstays:	Rigging supports from the masthead to reduce forward bending when the force of the wind is from astern.
Backwash:	Waves reflected back to sea from the shoreline.
Backwinding:	Wind deflected from a sail affecting flow over another.
B.A.F.:	Bunker Adjustment Factor. The fuel charge adjustment to balance market price for bunkers.
B. class:	Australian vessel survey class, for 200NM offshore.
B. class division:	Divisions made of incombustible material and capable of preventing the passage of smoke and flame up to the end of the first ½ hour of the standard fire test.
Baffle plate:	A perforated partition in a tank to limit the surge of liquid as a boat moves.
Bagged cargo:	Commodities usually packed in sacks or in bags, such as sugar, cement, grain, etc.
Baggywrinkle:	Padding of old rope, rubber or canvas wrapped round stays to prevent chafe on the sheeted out sails.
Bail:	To scoop water out of a craft.
Bailer:	Container used to scoop water out of a craft.
Balanced frames:	A steel ship's midship frames that are of an identical square flanged shape.
Balanced rudder:	A rudder design where the pivot point and the centre of its area meet, reducing the effort needed to turn it.
Bale capacity:	Hold cargo capacity from inside frames or ceiling.
Ball valve:	A valve consisting of a pierced internal sphere that opens/closes flow by rotation to become in line with/opposed to a pipelines input and output flow.
Ballast:	Heavy material (iron, lead, or stone) placed low in a vessel to improve stability. Sea water pumped into and out of tanks placed low in a vessel to control stability.
Ballast ground:	Area that ships can discharge solid ballast material.
Ballast keel:	A heavy keel that improves stability.
Ballast tanks:	Tanks in a ship deigned to be flooded from the sea to maintain the stability of the ship as fuel and stores are expended.
Ballistic deflection:	The effect on a gyroscope caused by the change of course of the vessel.
Balk:	A square length of timber substantially dimensioned (e.g.100-300mm)

Baltic moor:	To anchor to leeward by twin lines to the one anchor placed abeam, hence holding the vessel off a light duty jetty.
Bank:	A shallow area of sea or river.
Banker:	A Newfoundland fishing boat or fisherman.
Banks, Sir Joseph:	Botanist and patron of Captain Cook's 1770 exploratory expedition of the South Seas.
Bar:	A shallow entrance across the mouth of an inlet.
Barber hauler:	Tackle with an adjustable length of line on a jib sheet to trim its set.
Barbette:	Cylindrical protective wall around the gun turret stool, shell stowage and hoisting gear between a warship's deck to the turret shelf plate.
Bareboat:	The hire of a vessel without supply of crew, fuel or stores.
Bareboat charter:	A bareboat charter owner leases the ship and manages only its technical and trading operations. See bareboat.
Bare-poles:	When a vessel she has no sails set.
Barge:	A flat bottomed cargo transporter, often without independent propulsion. An admiral's ship's boat in the navy.
Bark:	A bluff bowed 18th century single main deck, three masted trading vessel such as Captain Cook's "Endeavour".
Barnacle:	A shellfish that attaches to rocks and vessels' bottoms.
Barometer:	An instrument that measures atmospheric pressure.
Barque:	A three or more masted sailing vessel, square sail rigged on all masts.
Barquentine:	A three or more masted sailing vessel, square sail rigged on fore mast and fore and aft rigged on after masts.
Barratry:	A crime by the master or mariners of a vessel contrary to their duty to the owners, whereby the latter sustain injury. It may include negligence, if so gross as to evidence fraud.
Barrel bow:	Planks curved around the bow as a nose.
Barrico:	Keg, small barrel.
Bascule bridge:	A counterweighted opening bridge.
Base line:	A horizontal line used in ship plans, drawn the length of the ship at greatest draught of the keel, from which heights are measured.
Bateau:	American flat bottomed construction scow.
Bathometer:	An instrument used to measure depth.
Bathymetry:	Science of the measure of marine depths.
Bathyscaphe:	See Bathysphere.
Bathysphere:	A submersible built to withstand the pressures of ocean depths.
Batten:	A piece of wood /plastic inserted in a sail leech pocket to stiffen the roach. A strip of wood covering a seam in hull planks.
Batten down:	Secure hull openings due to imminent heavy weather.
Battens, cargo:	Strips of steel or timber used to stop cargo from shifting.
Battery:	An electrochemical device that stores electric current, often specialised as a <i>cranking</i> battery (for starting the engine) and <i>house</i> battery (for powering lighting and utilities), the latter often being the <i>deep cycle</i> type (capable of repeated full discharge and recharge with minimal degradation). The traditional <i>wet cell lead acid battery</i> (with dilute sulphuric acid

	as the electrolyte) is being increasing replaced by the newer maintenance free <i>gel cell</i> batteries. Technological advances from lead acid batteries include alkaline (ni-cad) and lithium electrolyte based batteries.
Battery isolation (switch):	A single pole (positive conductor) or preferably double pole (positive and negative conductor) main cut off switch.
Battery sensed:	A voltage regulator that monitors the battery rather than the alternator.
Battleship:	Very large and heavily armoured warship.
Bayou:	Southern USA term for a waterway.
B.B.B.:	Before breaking bulk.
B.D.I.:	Both dates inclusive.
B.D.N.:	Bunker delivery note.
Beachcomber:	A person who collects objects washed ashore. An out of work seaman.
Beam:	Width, generally the widest point on the hull.
Beam knees:	Braces that join the deck beams to the frames.
Beam line:	A design line corresponding to the top of the frames.
Beam plate angle:	A beam made from flat plate bent into an L section.
Beam shelf:	In timber vessel construction, a longitudinal stringer that supports the deck beams.
Beamwidth:	The angular width of a radar beam, horizontal or vertical, the power of which is measured at the half power points.
Beam wind:	A wind from over the side of a vessel.
Bear:	The direction of a point of interest. To bear down on a vessel is to approach her from the windward. To bear up is to approach from leeward.
Bear away:	Steer further away from the wind.
Bearding line:	In ship design and construction, the line of the inside of the planking and the side/face of the stem, keel, after deadwood and stern post. See Rabet.
Bear down:	To approach or come up to.
Bearer:	A supporting foundation.
Bearing:	The direction of an object usually referred to a compass. The static meeting surface that supports a revolving shaft. The bearings of a vessel are that part of her hull which is on the water line when she is at anchor and in her proper trim.
Bearing race:	In a roller bearing unit, the component that is the set of ball bearings and their ringed cage.
Bearing tube:	The pipe carrying a propeller shaft.
Beating:	Going toward the direction of the wind, by alternate tacks.
Beaufort, Admiral Francis:	19th Century Surveyor and Hydrographer to the British Navy and developer of the wind scale bearing his name.
Beaufort scale:	Divisions of wind speed from Force 0 (calm) to Force 12 (Hurricane) with a visual description of the corresponding sea state- summarised below: F0 Calm 0kts Smoke rises vertically, sea as a mirror F1 Light air 1-3kts Smoke moves, glassy sea F2 Light breeze 4-6kts Rippled sea, windvanes move

	<p>F3 Gentle breeze 7-10kts Wavelets, light flags are extended</p> <p>F4 Mod. breeze 11-16kts Small waves, some white horses</p> <p>F5 Mod. breeze 17-21kts Mod. waves, many white horses</p> <p>F6 Strong wind 22-27kts Large waves, foam, spray</p> <p>F7 Near gale 28-33kts Sea heaps up, blown foam streaks</p> <p>F8 Gale 34-40kts Mod. high waves, foam & spindrift</p> <p>F9 Strong Gale 41-48kts High waves, toppling crests</p> <p>F10 Storm 48-55kts V. high overhanging white waves</p> <p>F11 Storm 55-63kts Exceptionally high waves, sea of froth</p> <p>F12 Hurricane >64kts Sea and air undistinguishable</p>
Becalm:	Lack of wind.
Becket:	A piece of rope placed so as to confine a spar or another rope. A handle made of rope, in the form of a circle; the handle of a chest is called a becket.
Bedding compound:	Flexible composition to isolate the bottom of a fitting from its deck foundation in order to seal from moisture or corrosion.
Bed plate:	A series of transverse girders and longitudinal members that distribute engine and crankshaft bearings weight and stress over ship's structure.
Beds:	Support for tanks or engines.
Beech:	European and American straight grained timber good for bending but not durable for marine use. Australian Antarctic Beech much sought after for ships decking.
Before the wind:	When a sailing vessel has the wind coming from over the stern.
B.E.I.:	Biological exposure index.
Belay:	To fasten a line by turns around a pin.
Belaying pin:	Wooden, steel or bronze pin that fits in a hole in a rail and is used to belay.
Below:	Under the deck.
Bells:	Struck every half hour after each change of watch of four hours. 8 bells at change of watch, followed by 1 bell at half hour after change, 2 bells at + one hour, 3 bells at + one and a half hours, 4 bells at + two hours, etc.
Bell suction:	A flared end of a liquid cargo pipeline positioned close to the bottom of the tank.
Belting:	Reinforcing outer plank layer in timber vessel construction.
Belly strap:	A sling positioned around the centre of a barrel or ships boat.
Be-neaped:	Ship aground above the next high tide level, awaiting the return of an increasing tidal cycle to enable re-floating.
Bend:	Where one rope is made fast to a loop of another. To make fast. To bend a sail is to make it fast to a spar. To bend a cable is to attach it to an anchor.
Bending roller:	Machine that forms curved steel plate by passing over three offset rollers.
Bendix:	The gear drive (pinion) on a starter motor.
Benguela current:	A cool or warm South Atlantic Ocean current setting Northward along the Southern African West coast.
Bent:	Short for steam bent timber component, frames, timbers, ribs or floors.

Bent on:	Describes an object tied on by a bend.
B.E.P.:	Best environmental practice.
Berm:	A shelf along the upper edge of the beach thrown up by storm waves.
Bermudan, Bermudian rig:	A mainsail hoisted to the masthead and having a pointed top, with no additional spars near the head.
Bermudan sloop:	Single masted vessel with a Bermudan rig.
Berth:	Where a vessel lies to anchor or mooring. The place in a vessel where a person sleeps.
Between decks:	The space between the decks of a ship.
Bevel:	An angled cut or section in construction.
Bevel gear:	A gear configuration that directs a driveshaft through an angle of 90 degrees.
Bibby alleyway:	A passenger vessel's passageway that is a cul-de-sac.
Bifurcated:	Forked.
Bight:	Where a rope folds over itself. An indentation in the coastline.
Bilander:	Historic French term for a smaller vessel limited to coastal passages - Spanish, balandra, English, billy-boy.
Bilge:	The lowest sections inside a vessel's hull.
Bilge blocks:	Supports for the lower plating/underneath of a vessel in dry dock.
Bilge blower:	A device for removing/replenishing air in a bilge.
Bilge bracket:	Strengthening plate beneath side frames between inner and outer bottoms.
Bilge keel:	A minimal keel fastened to the turn of the bilge to minimize roll or improve sailing performance with shallow draft vessels.
Bilge pump:	
Bilge plates:	Shell plating at the turn of the bilge.
Bill:	The point of a fluke on an anchor. A narrow coastal promontory.
Bill hook:	A hooked bladed long handled tool for cargo (bales) work.
Bill of lading:	Document issued by a ship carrier to the shipper as evidence of their contract.
Billy-boy:	Historic name for English North Coast small coastal clinker fore and aft sailing vessel.
Binnacle:	A casing for the ship's compass, correction magnets and light.
Bioluminescence:	Life forms that emit light.
Biro klasifikase Indonesia:	Indonesian ship classification society.
Bitter, or bitter-end:	The inboard end of an anchor cable secured to the bitt, or below decks, to some strong structural member.
Bitts:	Structures on which to secure mooring lines.
Bitumastic:	A tar based surface coating and waterproofing sealant used on a vessel's rust or leak prone structures.
Blackbeard:	Notoriously evil but unsuccessful 18 th century Welsh pirate, Captain Edward Teach.
Black cargo:	Cargo banned by general cargo workers because the cargo is dangerous or hazardous to health
Blackgang:	The engineering crew.

	cutwater near the waterline.
Body plan:	Elevation of the transverse sections of the hull. Usually drawn in two halves, from amidships to bow on one side and from amidships to stern on the other.
Boiler casing:	A partition that insulates the heat of a boiler.
Boilers:	Steam generating units used aboard ship to provide steam for propulsion (and) for heating and other auxiliary purposes. Steam generating units used to heat timbers in bent construction.
Boiling:	A quick method applied to timber in order to make it supple for bending.
Bollard:	An upright round post with projecting arms, for belaying and snubbing dock or anchor lines.
Bollard pull:	The rated force that a tug boat can apply to a tow line.
Bolster plate:	A doubling protective plating around the entry of the hawse pipe.
Bolt-rope:	The rope which goes round a sail, and to which the fabric is sewn.
Bomb ketch:	Historic sailing vessel equipped with mortars.
Bonding:	The electrical joining of all significant metals components on a boat.
Bonding conductor:	A normally non-current-carrying conductor used to connect the non-current-carrying metal parts of a boat and the non-current-carrying parts of the direct current devices on the boat to the boat's common ground point for purposes of reducing hazards of stray-current corrosion, lightning and accumulated static, and to reduce radio noise.
Bonds:	Items attracting customs and excise taxation that must be imported through a bond port (first port of call) and may be stored in a bonded warehouse.
Bonnet:	The addition of another sail.
Booby hatch:	A small hatchway, typically to a forecastle.
Boom:	A spar used to extend the foot of a sail. Floating barrier to limit passage of enemy vessels or pollution.
Boom crutch:	An upright, usually of wood, with a padded cradle on the top where the boom is rested; it is held in place by sockets and removed after the sail is hoisted.
Boomkin:	A spar projecting from the stern to which is attached a backstay or sheet.
Boom table:	A platform around a mast's base to support the heels of several booms.
Boom top:	A stripe painted around the hull above the waterline, separating the bottom paint from the topside finish
Boom vang:	Tackle system to prevent a boom from rising, or to tension the lower edge of a mainsail.
Boot top:	A painted line, just above the waterline.
Bora:	Northerly wind blowing off the Slav Coast and into the Adriatic Sea.
Bore:	To drill a hole. The large tidal range of some river estuaries can create this tidal wave at the start of the incoming spring tide.
Boreas:	Northerly, later north nor'east wind of ancient Greece. See classical winds.
Boss:	The centre of a propeller from which the blades radiate.

	The stern frame's propeller shaft aperture.
Boss plate:	A reinforcing plate at the stern frame's propeller shaft aperture.
Bosun, boatswain:	The highest rating deck crew who is the supervisor of deck hands and is under the direction of the master or mate.
Bosun's chair:	A seat to hoist a man aloft. The ropes should pass underneath the seat, so that if it breaks the he is still supported.
Bosun's locker:	A store for repair materials for hull, sails and rigging.
Bosun's pipe:	An ancient palm held tin whistle used for signalling orders aboard ship, consisting of a flat plate (keel) supporting a bent pipe (gun), terminating with a blow hole (orifice) at a hollow sounding sphere (buoy). Still used in the Navy to pipe dignitaries aboard a ship.
Bottle screw:	A device that applies tension to ropes or wires by the use of opposing screw threaded terminals tapped into a central frame.
Bottom plating:	A vessel's underneath sections of shell plating.
Bottom shape:	As it affects performance in a planing boat. Maximum speed will be achieved when the bottom of the boat that forms the planing surface is flat. When the planing surface is a vee, the boat will have a softer ride but less potential speed, and will take longer to come up on a plane. A "flat bottom" makes a better "drag" boat; a deep vee will be a better rough water boat.
Bound:	The destination or condition of vessel (outward bound, fogbound).
Boundary cooling:	The process of cooling down the area near the fire to stop its spread.
Bounding bar	A steel bar connecting a bulkhead edge to a tank top
Bow:	The front of a vessel, forward.
Bow door:	Door at the vessel's bow to facilitate the loading/unloading of vehicles.
Bower anchor:	The main anchor stowed in the hawse or at the bow.
Bowfin:	A voracious freshwater fish, American.
Bowline:	A knot tied to form a temporary eye that will not slip. 
Bow line:	A mooring line attached to the bow of a boat.
Bowline in a bight:	A knot tied in the middle of a line to form two loops that can be used as a temporary harness. 
Bowse:	To fasten tightly together.
Bow shackle:	A shackle with a rounded bow, suitable for attaching multiple chains.
Bowsprit:	A spar forward of the stern.
Bow stopper:	A device fitted to the deck ahead of the windlass, to prevent the anchor chain from moving out on its own, or to take the strain off the windlass when the vessel is riding to its anchor.
Bow thruster:	A transversely positioned propeller at the bow of a vessel used to assist in manoeuvring.
Bow wave:	A continuing wave created on each side of the bow when the boat moves.
Bow and buttock lines:	Longitudinal sections of a boat, taken parallel with the centre-line at fixed intervals.
Box:	Fine grained European hardwood shrub tree used for pulley

	sheaves. Also used for making patterns (for castings).
Box the compass:	To box the compass is to name the thirty-two points of the compass in order.
Brace:	Rope or wire rigged to a spinnaker pole to control its fore and aft position. Tackles to trim square sail yards of sailing ships.
Brail:	To haul a sail tight against its yard.
Brails:	The ropes used to haul a sail tight against its yard.
Brake horsepower (BHP):	A unit of power, numerically equivalent to a rate of 33,000 foot-pounds of work per minute.
Bracket:	A plate used to stiffen angled joints of structural members, typically across the bilge turn in side frames or between beams and beam shelf.
Brackish water:	Fresh water mixed with sea water.
Brass:	Alloy of copper & zinc. See Naval brass and Admiralty brass.
Braze:	To join by heat using a hard solder (spelter), typically of brass or bronze.
Brazil current:	A warm South Atlantic current setting Southward along the South American Eastern coastline.
Brazilian mahogany:	Superior South American red lustrous timber with good workability and marine durability. Historically called logwood and also used for red/brown dye.
Breadth moulded (B):	This is the maximum beam, or breadth, of the ship measured inside the inner shell strakes of plating, and usually occurs amidships.
Breadth extreme (BE):	This is the maximum breadth including all side plating, straps, etc.
Break:	A discontinuation of a sheer line, for instance the break of poop or forecastle profile being higher than the waist's deck line.
Break bulk:	Loose itemized units of cargo.
Breaker:	A breaking waves. A small water cask.
Breaker points:	Contacts which open and close within a distributor, sending an electrical impulse for a spark from the high-tension ignition coil of an engine.
Breakers:	Waves that collapse creating white water, often along the shoreline.
Break ground:	When an anchor first lifts off the sea floor during retrieval.
Breaking sea:	As above but at sea, also called white horses.
Break out:	To release something out of stowage.
Breakwater:	Raised section of a sailing dinghies foredeck to shed water from over the bow.
Breaming:	De-scaling the fouled underwater sections of a hull with a blow torch.
Brest beam:	The beam nearest to midships of the poop and forecastle deck.
Breast-hook:	A horizontal knee behind the stem, to securing the bow and wales.
Breast lines:	Mooring lines to control the vessel from swaying.
Breast rail:	The top rail of a balcony on the quarter deck.
B.R.G.:	Bearing.
Brickfielder:	Southern Australian desert hot and dry wind experienced in summer.
Bridge:	An upper room on a large vessel fitted with the controls for driving,

	navigating, communications and keeping watch.
Bridge house:	An upper deck superstructure of officer's accommodation and staterooms..
Bridge rectifier:	An arrangement of diodes (electrical one way valves) that rectify DC current to AC current, often positioned within a heat sink casing to limit excessive temperature build up.
Bridge wing:	Port and starboard extensions to the bridge, allowing improved side and rear sightlines, often installed with duplicate controls used for berthing and close manoeuvres.
Bridle:	A loop of line that evenly distributes the pull on a towline.
Brig:	Twin masted all square rig sailing vessel. A ships goal.
Brigantine:	Twin masted sailing vessel, all square rig on the foremast and all fore and aft rigged on the aft mast.
Brightwork:	A term used to describe wood that is finished natural, using varnish or other clear coating.
Broach:	To slew round on a wave front.
Broach reach:	Any point of sailing between a beam reach and a quartering wind.
Broad axe:	Shipwrights axe used to initially smooth a face on timber.
Broadseam:	A seam in a sail, in which the edges of neighbouring panels are cut in a convex curve, so that when sewn together the panels force fullness into the sail.
B.R.O.B.:	Bunkers remaining on board.
Broken stowage:	Volume of unoccupied space in a loaded ship due to the irregular shape of the cargo and consequent spaces between.
Broken water:	Turbulent and rough sea.
Broker:	An agent who facilitates a contract for a fee.
Brook:	Small stream.
Brook trout:	Salmon related fish, Newfoundland.
Brought-up:	To bring a vessel to a stop.
Brow:	A plate to shed away from an open port, also called a watershed.
Brow gear:	A gangway from ship to shore and its accessories.
Brown trout:	A common trout, European.
Bruce anchor:	One piece designer anchor with three clawed crown.
Buckled plate:	A warped plate or one that is wider at the centre than at the end.
Brush box:	Tall Australian hardwood used principally for flooring timber.
Brushes:	Carbon contacts projecting from a sleeve and brought to bear by spring pressure on the commutator of an electrical generator.
Buccaneer:	Originally a term for English sea rovers that preyed on Spanish merchantmen in the West Indies. Name thought to be derived from their dried blood coloured red pantaloons – boufe canires or meat eaters- it is now commonly used to describe any pirate.
Building slip:	An inclined berth where ships are built.
Bulbous bow:	Bows constructed with a bulb shaped projection rising from the bottom.
Bulbous forefoot:	A convex entry at the keel/stem junction (as opposed to a sharp vee) incorporated to soften the ride. When used in conjunction with a reverse curve at the chine, it usually makes sheet materials impractical requiring other planking methods in the forward section.

Bulldog clip:	A threaded u bolt that will tenaciously grip two steel wire ropes due to its shaped clamping saddle tightening around the wires. To temporarily replace an eye splice, four clips should be used separated by a distance of 8 times the diameter of the wire.
Bullrope:	A hawser used to prevent a ship's bow from bumping against its mooring buoy.
Bulk cargo:	Unpackaged cargos, e.g. coal, ore, grain.
Bulk carrier:	Ship designed to carry unpackaged (flowing) dry cargos such as grain, sand, cement, ores, coal, etc.
Bulker:	
Bulkhead:	Partitions to reduce water or fire engulfing all parts of the vessel in the case of accident.
Bulkhead stiffeners:	Reinforcing steel sections along a bulkhead, most commonly vertical but horizontal (or a combination) may be used.
Bull nosed bow:	A large and rounded underwater bow profile designed to displace water and reduce overall drag..
Bull riveting:	High powered air or hydraulically driven rivets.
Bulwarks:	Walling around a vessel above deck, fastened to stanchions.
Bulwark stay:	A brace between the deck and bulwark to increase its rigidity.
Bumboat:	A ship to shore boat used for reprovisioning. (derived from boom boat)
Bumpkin:	A spar at the stern to carry a backstay.
Bundling:	The assembling of pieces of cargo into manageable units, in practice, of the weight of the available fork lift truck's capacity.
Bungs:	Conical shaped timber or cork to seal a hole in the vessels skin.
Bunk:	Bed.
Bunkers:	Fuel consumed or compartment where solid fuel (coal) is stored.
Bunt:	The middle of a sail.
Bunting:	Material from which flags are made. Flying flags for celebration. (Dressing ship with bunting)
Buoy:	A floating marker, secured to the seabed, used to indicate danger or other to assist mariners.
Buoyancy:	The upthrust upon a body that is partially or wholly immersed in a liquid. Colloquially, the ability of an object to float.
Buoyant lights:	An automatically activated light (2 hour's duration) that can be deployed to assist in the search for a MOB at night.
Burden:	Weight of cargo to load displacement.
Burdened vessel:	The boat not having the right of way.
Bureau veritas:	French ship classification society.
Burgee:	A small flag, either pointed or swallow-tailed.
Burr edge:	The rough edge of a metal plate.
Buss:	Historic North Sea fishing boat.
Buss bar:	A heavy duty bar or strap used for making multiple electrical components connections onto one power line.
Butane:	See LPG.
Butt:	The end of a plank where it unites with the end of another.
Butt blocks:	Internal timber covering plates placed behind butts in the planking to reinforce that weaker spot.
Butterworth:	A washing process to clean tanks using hot water/chemicals sprayed through a patented rotating nozzle.

Butterworth opening:	A deck access designed for butterworth gear.
Butt joint:	Components squarely joined together along their edges.
Butt strap:	A plate used to fasten objects together with their edges butted.
Buttock:	Designer's lines derived from drafted slices drawn parallel to the centreline of a ships waterline plan and transposed to its profile plan.
Button:	A round deck item used to thread cables between vessels when they are laid together.
By the:	By the head. When the bow is lower in the water than her stern. By the stern. When the stern is lower in the water than her bow. By the board. Over the side. By the run. To let go altogether. By the wind. Close-hauled.
By-pass:	A pipe controlled by a valve to re-route a fluid around a flow system.

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C



C:	Code flag; Affirmative. Sound signal; Affirmative.
C flag + three numerals:	Code flags; Course.
C/A:	Coarse Acquisition - the radio signal on the L band frequency of 1575.42 MHz that civilian GPS receivers use. As opposed to the P code used by the US military.
Cab:	A shelter at the corner of a bridge.
Cabin:	The living accommodation on a vessel.
Cabin sole:	The decking of the cabin that you walk on.
Cable:	A unit of measure being one tenth of a nautical mile. A strong line or chain by which a vessel is secured to its anchor.
Cable clamp:	See bulldog clip.
Cable-laid:	Rope (usually) left-handed of nine strands, in the form of three three-stranded, right-handed ropes.
Cable locker:	A forward compartment on small craft used to store the anchor cable.
Cable ship:	Ship constructed for laying and repairing telegraph and telephone cables across oceans.
Cabotage:	Coasting trade. Reservation of such trade to flag nationals.
Cadet:	A young maritime worker trainee. Class of 11 foot sailing dinghy.
Caecias:	See classical winds.
Cairn:	A mound of stones often built as a memorial or conspicuous mark.
Caisson:	A structure used to close off the entrance to a dry-dock.
Calculated altitude:	Angular height of a celestial body above the horizon calculated as opposed to worked from sight reduction tables.
California current:	A cool North Pacific Ocean current setting Southerly along the North American Western coastline.
Calima:	A dusty wind off the Sahara that blows over the Canary Islands in winter.

Calking:	See caulk.
Call sign:	A ship's unique identifying code.
Cam:	An elliptical protrusion along a shaft that on each revolution displaces a following lever (cam lifters).
Calm:	See Beaufort scale.
Camber:	Roundness of deck that sheds water. Fullness of sail created by sail maker; also called draught. It can be altered by bending the mast's middle forwards and bending the boom downwards.
Cam cleat:	Sprung loaded mechanism whose jaws will jam a rope under strain.
Camel:	A tank that is sunk and attached to a wreck, subsequently being filled with air to refloat it. A decked vessel with high stability for use in lifting sunken structures. A wooden float between a vessel and a dock used as a fender.
Cam shaft:	A shaft with a row of eccentric sections for opening and closing the valves of a motor.
Canal:	A dug or dredged waterway.
Canaries current:	A cool North Atlantic current setting southerly along the North African Western coastline.
Candela:	A unit measure of luminous intensity based on a comparison with a candles brightness (candle power).
Canoe:	Narrow, light, low freeboard vessel propelled by paddles.
Cant:	At an angle. Consequently: Cant beam- beams supporting the deck plating or planking in the overhanging part of the stern of a vessel. Cant body- where the planes of a vessel's frames are not at right angles to its centreline. Cant frame- Hull side frame not perpendicular to the vessel's centreline.
Canute, King:	11 th century British king who is said to have demonstrated the limits of a king's powers by ordering the incoming tide to retreat to no avail.
Canvas:	Heavy duty woven material used for sails and tarpaulins.
Canvas-covered:	A technique of covering timber or ply with painted canvas to waterproof a deck etc.
Canyon:	A deep gorge or ravine with steep sides.
Cap:	The ironwork that attaches a mast with its topmast.
Capacitor:	A temporary electrical storage device that blocks DC flow while allowing AC oscillations.
Capacity plan:	Plan of vessel showing capacities of all holds, tanks and other relevant compartments.
Cape:	A headland projecting out to sea beyond the adjacent coastline.
Capelin:	A small bait fish, N. Atlantic, also called caplin.
Capesize:	A large cargo vessel that cannot transit either the Panama or Suez Canals, typically greater than 120 000-180 000 DWT.
Cap shroud:	Supporting wires from either side of a mast leading over spreaders to support its upper sections.
Capsize:	To overturn.

Capstan:	A winch with a vertical rotating drum, used for handling mooring ropes and wires.
Capstan-bar:	A wooden bar used to manually turn the capstan.
Captain:	Master of a ship or pilot-in-command of an aircraft, commanding officer of a warship or an operator of any other vessel.
Caravel:	Historic lateen rigged Mediterranean merchant ship capable of windward performance.
Carbon ceramic seal:	A pump seal consisting of a sprung carbon shaft ring closing onto a ceramic pump body seat.
Carbon dioxide:	A natural atmospheric gas (CO ₂) that is increasing due to man's activities and contributing to the greenhouse effect.
Carbon monoxide:	A deadly product of combustion (CO).
Car carrier:	Special purpose vessel for transporting cars.
Car deck:	A deck on which cars are carried.
Cardinal points:	The four primary compass directions.
Careen:	To heave a vessel down on her side for repairs.
Cargo:	Trade goods and freight carried by a vessel.
Cargo battens:	Strips of wood used to keep cargo away from the hull plating.
Cargo cult:	Worshippers of articles brought to remote lands as trade goods.
Cargo door or port:	Watertight door in the hull side through which cargo is loaded or discharged.
Cargo handling:	The act of loading and discharging a cargo ship.
Cargo manifest:	A list of all cargo carried on a specific vessel voyage.
Cargo net:	A net for securing cargo during loading/unloading.
Cargo plan:	Determines and describes the stability, stowage, segregation, precautions and quantity of the goods carried after loading is completed.
Cargo preference:	Reserving a portion of a nation's imports and exports to national-flag vessels.
Cargo register:	See Cargo manifest.
Cargo sweat:	Condensation formed on cargo when transported from cold climates to warm.
Carlins, carlings:	Support timbers running between the decks beams around hatch openings.
Carpenters trunk:	Access to side lights cabinet.
Carrack:	Historic large Portuguese sailing merchantman with fortified stern castle.
Carrick bend:	A decorative knot. 
Carrier:	Owners or operators of vessels providing transportation to shippers. The term is also used to refer to the vessels. Abbreviation of aircraft carrier.
Carry away:	To break or loose a component due to stress of weather.
Carry on:	To proceed.
Cartage:	Local cargo haulage by drays or trucks (also called drayage).
Cartography:	Map and chart making.
Carvel:	Edge to edge planking that creates a smooth surface, unlike clinker construction.
Case:	Centreboard case.

Case dogs/hooks:	Pair of spiked clamps fitted to crates to facilitate lifting.
Casing:	A lining built around the ship's funnel to protect the decks from heat. See Air Casing.
Cast:	To throw. To begin.
Casting:	An artefact produced by pouring molten metal into a mould.
Cast off:	To let go the lines that secure a vessel to a berth.
Catamaran:	A twin hull vessel.
Catalyst:	An agent that provokes a reaction. Chemical added to polyester/epoxy resins to assist curing.
Cat boat:	A sailboat with one mast, well forward, without headsails.
Cathode:	The nobler metal of an electrolytic cell. See anode.
Cathode protection:	Sacrificial or impressed current system of corrosion protection used on vessels.
Cat o' nine tails:	An instrument of punishment being a whip with nine strands as the terminal.
Cat's paw:	A hitch made in a rope. A light current of air on the surface of the water.
Cattle carrier:	Ship built to carry cattle.
Catug:	A rigid catamaran tug connected to a barge. When joined together, they form and look like a single hull of a ship; ocean-going integrated tug-barge vessels.
Catwalk:	A raised fore and aft walkway affording safe passage over the pipelines, deck obstructions and wet decks.
Caul:	A portion of amniotic sac that can stick to a baby's head during birth. In the past superstitious mariners believed it provided lifelong immunity from drowning, but was also traded as a protective totem for any owner.
Caulk:	Filling the seams of a vessels planking with oakum or cotton.
Caulking iron:	Flat edged tool used to drive caulking between plank seams.
Caulking mallet:	Wooden hammer used with a caulking iron.
Causeway:	A raised pathway across swamp or water.
Caval (kevel):	A two armed metal deck fitting around which a vessel's lines are made fast.
Cavitation:	Reduction in propeller efficiency caused by air pulled down around its blades.
Cay:	Sand or coral islet.
C.B.D.:	A vessel constrained by its draft.
C. Class:	Australian vessel survey class, 30NM offshore.
C.C.T.S.:	Compass course to steer.
C.C.T.V.:	Close circuit television.
C.D.:	Chart datum.
Ceiling:	An inside plank sheathing of a vessel that covers the frames and enables easy cleaning of the hold spaces.
Celery top:	Australian timber prized for planking.
Celestial navigation:	To position find by observing the stars.
Cell:	An anode and a cathode immersed in an electrolyte create a potential difference. This cell is a source of electrical current responsible for corrosion. The anode and cathode may be separate

	metals or dissimilar areas on the same metal. Also called an electrolytic cell.
Cells:	Compartments of a container ship into which containers fit.
Cellular container ship:	A container vessel with vertical cell guides for standard sized containers limiting movement and lashing requirements.
Celsius temperature scale:	Temperature scale of 0° (freezing water) to 100° (boiling water). Celsius = (Fahrenheit - 32) x 5/9.
Centreboard:	A plate that can be lowered to reduce a sailing boat's tendency to make leeway when on the wind.
Centreboard case:	A watertight box that houses the centreboard.
Centre castle:	Raised part of a vessels hull amidships.
Centre of buoyancy (B):	The centre of area of the underwater transverse or longitudinal section of a hull at a particular trim, hence the point at which the force of buoyancy is regarded to be acting vertically upwards
Centre of effort (CE):	The centre of areas of all sails or areas of a waterline.
Centre of flotation (F):	This is the centre of gravity of the area, or centroid, of the water-plane of a ship and is equivalent to a pivot point of the vessel on any change of trim.
Centre of gravity (G):	The centre of weight of a vessel, hence the point at which the force of weight is regarded to be acting vertically downwards.
Centre of lateral resistance (CLR):	The centre of area of the designed underwater longitudinal profile of a hull around which a vessel will pivot from wind on the beam.
Centrifugal action:	The process of dragging gas or liquids through the central inlet of a revolving turbine and flinging it out at its circumference at increased velocity.
Centrifugal pump :	A rotary, usually solid bladed pump that sucks from its centre and exhausts from a point on the circumference of the rotor's housing. They are not self priming.
Cers:	A dry northerly wind of the Gulf of Lyon, southwest France.
Certificate of operation:	A document specifying the operational conditions of an Australian domestic commercial vessel.
Certificate of registry:	A document that specifies the national registration of the vessel.
Certificate of survey:	A document specifying the survey details of an Australian domestic commercial vessel.
Cetaceans:	A marine mammal including whales and dolphins.
C.F.C.s:	Chlorofluorocarbons (traditionally used in refrigerants and fire extinguishers) are chemicals that diminish the ozone layer.
Chafe:	Wear on the surface. Chafing-gear is wrapped on rigging and spars as prevention.
Chain locker:	Locker for stowing anchor chain.
Chain plates:	Metal plates bolted to the side of a vessel, by which the lower rigging is secured to the hull.
Chain riveting:	Paired rows of rivets spaced adjacently.
Chains:	Anchor chain. The extremity of the channels on sailing ship.
Chamfer:	To take off the edge, or bevel the plank.
Chandler:	A supplier of ships stores.
Channel:	A naturally deep or dredged route through a shoal area.

Channels:	Extension boarding at deck level to increase the width of the hull of a sailing ship for the lower stays land upon, thus providing a wider angle of mast support. The traditional position from which a seaman heaved a hand lead line (to establish depth).
Chanties:	See sea shanties.
Charley noble:	A galley's stove pipe.
Chart:	An image of geographical place that shows positions and navigational features.
Chart datum:	The level below which soundings are given and above which drying heights are given on charts.
Charter:	To hire a ship.
Chart house or room:	A compartment adjacent to the bridge for charts and navigation.
Charter party:	A contract between ship owner and a cargo owner, usually arranged by a broker, where a ship is chartered either for a voyage or a period of time.
Chasm:	A deep fissure in the earth's surface.
Chassis:	The backbone frame of a vehicle or a machine. A wheeled frame that fits to a container enabling it to be moved.
Check:	To temporarily restrain a line, as to check to cable from paying out.
Check (in wood):	Longitudinal separation of the fibres in wood that do not go through the whole cross section. Checks result from tension stresses during the drying process.
Checksum digit:	A digit that is appended to a numeric data element and used to verify its accuracy. Checksum digits are computed by adding the digits of the data element.
Check valve:	A one way valve.
Cheeks plates:	The sides of a block that retain the pulley sheaves.
Cheese:	A bundle of spun yarn. To spread out a rope or twine.
Chemical carrier:	A vessel purpose built to carry of volatile, poisonous or corrosive liquids.
Chief or chief engineer:	The senior engineer officer responsible for the satisfactory working and upkeep of the main and auxiliary machinery aboard ship.
Chief mate:	The deck officer second in command of a ship. He assumes the position of the Master in his absence.
Chinagraph:	A greasy pencil.
Chine:	The join between the bilge and topsides of a hull. Double chine - Having an additional planking junction between the chine and the sheer, giving the hull a more rounded look. Hard chine- Having a distinct bottom/side planking junction as opposed to a rounded curve. Multi-chine - Having one or more additional planking junctions between the chine and the sheer.
Chine log:	Longitudinal member used to reinforce the join of sides and bottom of flat or V-bottom hulls.
Chinook:	A dry snow melting katabatic wind of the American Pacific North.
Chlorofluorocarbons:	Chemicals releasing chlorine atoms that destroy the ozone layer.
Chock boat:	A support for a lifeboat.
Chocks:	Wedges used to secure anything with, or to rest upon. The long

	boat rests upon two chocks, when it is stowed. A fillet of wood used to make good a deficiency in a plank.																																							
Chock-a-block:	Full. When the lower block of a tackle is pulled so tight to the upper one, so that it will hoist no higher; also called two-blocks.																																							
Choke:	A mechanism to provide richer mix while starting a petrol engine. An electrical coil to block out radio interference (noise).																																							
Choked:	The tackle falls jammed within a block.																																							
Chord:	A straight line between the luff and leech of a sail.																																							
Chosen position:	A chosen Lat. and Long. Within ½ degree of a vessels position to facilitate a celestial navigational fix.																																							
Chronometer:	Accurate ship's timepiece (clock).																																							
Circlip:	A sprung split ring that fits onto a groove of a shaft and thus retains other shaft fittings from falling off the otherwise open end.																																							
Circuit breakers:	A safety device used in electrical systems to cut the supply of electricity when a fault is evident.																																							
Cirrus clouds:	The highest, feathery, ice clouds.																																							
Civil twilight:	The time between sunrise/sunset and when the sun's position is at 6° below the horizon.																																							
Clamps:	Longitudinal timbers connected to the frames to support beam ends.																																							
Class 1 vessel:	Passenger (NSCV vessel survey category)																																							
Class 2 vessel:	Workboat																																							
Class 3 vessel:	Fishing vessel																																							
Class 4 vessel:	Hire & drive vessel																																							
Class A vessel:	Unlimited offshore																																							
Class B vessel:	200NM offshore																																							
Class C vessel:	30NM offshore																																							
Class D vessel:	Partially smooth waters																																							
Class E vessel:	Smooth waters																																							
Classical winds of the ancient world:	<p>The winds and their points (direction) of the ancient world are translated the Vatican's 2nd century engraved stone table of winds, approximated as below:</p> <table border="1"> <thead> <tr> <th><i>Point</i></th> <th><i>Roman</i></th> <th><i>Greek</i></th> </tr> </thead> <tbody> <tr> <td>N</td> <td>Septentrio</td> <td>Apartias</td> </tr> <tr> <td>NNE</td> <td>Aquilo</td> <td>Boreas</td> </tr> <tr> <td>NE</td> <td>Vulturnus</td> <td>Caecias</td> </tr> <tr> <td>E</td> <td>Solanus</td> <td>Apheliotes</td> </tr> <tr> <td>SE</td> <td>Eurus</td> <td>Eurus</td> </tr> <tr> <td>SSE</td> <td>Euroauster</td> <td>Euronotos</td> </tr> <tr> <td>S</td> <td>Auster</td> <td>Notos</td> </tr> <tr> <td>SSW</td> <td>Austroafricus</td> <td>Libonotos</td> </tr> <tr> <td>SW</td> <td>Africus</td> <td>Lips</td> </tr> <tr> <td>W</td> <td>Favonius</td> <td>Zephyrus</td> </tr> <tr> <td>NW</td> <td>Corus</td> <td>Argestes</td> </tr> <tr> <td>NNW</td> <td>Circius</td> <td>Thrascias</td> </tr> </tbody> </table>	<i>Point</i>	<i>Roman</i>	<i>Greek</i>	N	Septentrio	Apartias	NNE	Aquilo	Boreas	NE	Vulturnus	Caecias	E	Solanus	Apheliotes	SE	Eurus	Eurus	SSE	Euroauster	Euronotos	S	Auster	Notos	SSW	Austroafricus	Libonotos	SW	Africus	Lips	W	Favonius	Zephyrus	NW	Corus	Argestes	NNW	Circius	Thrascias
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Classification	International organizations that monitor and certificate standards of																																							

societies:	construction, repair and survey of vessels – operators' compliance is rewarded with ease of access to foreign ports, cheaper insurance rates and higher vessel resale value. Class societies include: American Bureau of Shipping -America Bureau Veritas-France Det Norske Veritas-Norway Germanischer Lloyd-Germany Lloyds Register of Shipping-UK Nippon Kaiji Kyokai-Japan
Clawing off:	To sail off close-hauled from lee shore.
Clean ships:	Tankers whose cargo tanks are free of traces of impurities that remain after carrying crude or heavy fuel oils.
Clear:	A vessel clears before sailing from a port when documentation is lodged at a Customs House. Rigging are cleared when tangled gear is untangled. Land is cleared when left when a vessel sails beyond coastal dangers. The bilge is cleared when pumped dry.
Clear away:	To remove restraints from gear in preparation to anchor.
Clear berth:	The circle that is available for a ship to swing clear of obstructions within its anchorage. Opposite of foul berth.
Clearing marks:	Natural or constructed navigational marks in transit that when sighted open of each other mark a track clear of dangers.
Clearing line:	Transit that clears charted navigational hazards.
Cleat:	A fitting for used to secure a line.
Cleating:	Tying a rope to a cleat.
Clench:	To bend over the internal end of a copper nail after it has been driven through the plank, thus increasing its holding power.
Clevis pin:	A headed rod with holed end to accept a split pin, used as a shackle bolt or similar.
Clew:	The corner of a sail between the leech and foot. Lower after sail corner.
Clew lines:	The two brails that lead to the clews of a square sail.
Clewed up:	Anchor back at the ships side on retrieval.
Clew-outhaul:	A tackle to stretch the foot of a sail along the boom.
Climate:	The mean of weather conditions.
Clinker:	Lapstrake planking, where planks overlap their edges, as opposed to carvel (smooth planking).
Clipper:	A fast, highly canvassed, fully rigged ship.
Clipper bow:	A bow where the stem has a forward curve and sides have a lot of flair. Also called a schooner bow.
Close:	To approach.
Close-hauled:	When a vessel is sailing into the wind.
Close-reefed:	When the sails are fully reefed.
Cloud:	Ice, water and vapour visible in the sky.
Cloud cover:	The proportion of the sky covered by visible cloud measured in units of Octas, from one (minimal cover) to eight (full cover).
Clove-hitch:	Two half-hitches around a spar or rope; suitable for objects not under strain. 

Club foot:	The flat, broad after end of a vessel's stern foot section.																																								
Club foot jib:	A jib with a boom or "club" on the foot of the sail.																																								
Clutch:	A mechanism to couple or uncouple a drive shaft from its engine.																																								
Clutter:	Radar echoes from waves or precipitation, occurring randomly in the display which may obscure echoes from small targets.																																								
C.M.G.:	Course made good.																																								
C.N.G.:	Compressed natural gas.																																								
C.O.A.:	Contract of Affreightment - in which (typically) an owner agrees a price per revenue ton for cargo on a specified voyages.																																								
Coach bolt:	A bolt with a round head above a squared section of shank that pulls into the timber and resists turning as the nut is tightened.																																								
Coach roof:	A section of the cabin constructed above deck level.																																								
Coach screw:	A screw with a hex or square head (lag bolt).																																								
Coaming:	Vertical structures to stop water entering, as around a cockpit.																																								
Coastal plain:	Low lying land along the edge of the coastline.																																								
Coastal waters:	Sea area along the edge of the coastline.																																								
Coast earth station (C.E.S.):	Maritime name for an Inmarsat shore-based station linking ship earth stations with terrestrial communications networks.																																								
Coat:	A piece of canvas, tarred or painted, placed around mast or bowsprit where it enters the deck, to keep out water.																																								
Coastal radio:	Radio traffic in inshore waters																																								
Coaster:	Coastal operating vessel.																																								
Coasting:	Navigating from headland to headland.																																								
Coaxial cable:	An insulated conducting cable surrounded by an insulated conducting sleeve used for connecting an aerial to its transceiver.																																								
Cobbles:	Sea worn rounded rocks or pebbles. A small open type of rowing boat.																																								
Cock:	A valve.																																								
Cock-a-bill:	An anchor hanging by the ship's side.																																								
Cocked hat:	The gap between the intersections of three imprecise position lines when plotting on a chart.																																								
Cockpit:	A deck area that is lower than the sheer line of the boat and exposed to the elements.																																								
Cod:	A large marine fish. Cash on delivery.																																								
Code flags (letters):	Alphabet of flag signals for speaking at sea, as included at each letter heading in this dictionary.																																								
Code flags (numerals):	<table border="1"> <tr> <td></td> <td>Answering</td> <td></td> <td>Zero</td> </tr> <tr> <td></td> <td>1</td> <td></td> <td>2</td> </tr> <tr> <td></td> <td>5</td> <td></td> <td>6</td> </tr> <tr> <td></td> <td>9</td> <td></td> <td>Sub 1</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Sub 2</td> </tr> <tr> <td></td> <td></td> <td></td> <td>3</td> </tr> <tr> <td></td> <td></td> <td></td> <td>4</td> </tr> <tr> <td></td> <td></td> <td></td> <td>7</td> </tr> <tr> <td></td> <td></td> <td></td> <td>8</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Sub 3</td> </tr> </table>		Answering		Zero		1		2		5		6		9		Sub 1				Sub 2				3				4				7				8				Sub 3
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Coefficient A:	That part of a vessel's magnetic deviation that is constant on all headings, +A for Easterly and -A for Westerly. See apparent coefficient A.																																								
Coefficient B:	That part of a vessel's magnetic deviation (caused by permanent or induced magnetism) that varies as the sine of the compass course, contributing to maximum deviation when heading East or West, and																																								

	minimum deviation when heading North or South.
Coefficient C:	That part of a vessel's magnetic deviation (caused by permanent or induced magnetism) that varies as the cosine of the compass course, contributing to maximum deviation when heading North or South, and minimum deviation when heading East or West.
Coefficient D:	That part of a vessel's magnetic deviation that varies as the sine of twice the compass course, contributing to maximum deviation when heading NE, SE, SW and NW and zero deviation when heading N, E, S or W.
Coefficient E:	That part of a vessel's magnetic deviation that varies as the cosine of twice the compass course, contributing to maximum deviation when heading N, E, S or W and zero deviation when heading NE, SE, SW and NW.
Coefficients of fineness:	Used to describe the underwater form and hull shape, being ratios of areas and volumes to their circumscribing rectangles or prisms.
Coefficients of form:	Used to describe the shape of the ship's hull when comparing one with another. The coefficients are used in power, stability, strength and design calculations.
Coffer dam:	The void space between two bulkheads is called a cofferdam.
Coffin plate:	An inverted boss plate.
C.O.G.:	Course over ground.
Coil:	To lay a rope up in a circle, with one turn or fake over another. A coil is a quantity of rope laid up in this manner.
Col:	Meteorological term for area between high and low pressure systems.
Cold bent frames:	The internal frames of a vessel that are made curved without the use of heat, often possible by using fresh unseasoned timber of a pliable nature.
Cold cranking amps:	The amps delivered by a lead acid battery over 30 seconds while maintaining at least 1.2 volts per cell at 0° F (approx -18°C).
Cold front:	The boundary where a parcel of cold dense polar air (advancing towards the equator) drives underneath the warmer air ahead.
Cold moulded:	Timber construction process that uses several layers of thin strips of timber stapled over a former. Each complete layer is separated from the other by a waterproof membrane.
Cold plug:	A spark plug with low insulator seat which quickly carries the heat from the core, designed for high-speed operation.
Collar:	A ring of plate positioned around a pipe or mast at a bulkhead or deck opening that serves to provide a sealing reinforcement.
Collet:	A split circular inset that tightens on a shaft when longitudinal compression is applied, used in winch clutch or drill chuck applications.
Collier:	A vessel employed in carrying coals.
Collision bulkhead:	First watertight bulkhead abaft the bow.
Collision mats:	Canvas mats constructed as a emergency cover for any hull damage, where the hull may have been punctured.
Collision regulations:	An IMO Convention, The International Regulations for Preventing Collisions at Sea.
Columbus,	Commonly attributed as the first European discoverer of the West

Christopher:	Indies (New World), believing it the west extremity of the Far East (the Indies) by virtue of miscalculating the globe's circumference. Subsequent revelations point to earlier visitations to the American continent.
Colours:	Identity of a vessel (as shown by flying the national flag).
Column:	A derrick head.
Combers:	Step long swell with high and breaking crests.
Combi:	Combination passenger/cargo vessel specifically designed for containers and conventional cargoes.
Combing:	A raised edge around any opening that helps prevent water entering.
Combustion:	This process occurs when trapped air is compressed and heated in the cylinder igniting fuel which is injected into the cylinder.
Come-up:	After hauling a rope, to come up is to hand the rope forward so it can be made fast.
Coming about, coming around:	To put a sailing vessel into the wind and tack.
Commercial purpose:	For the purposes of NSCV Part B, use in connection with a commercial transaction of any kind including operations as a business, as a service (including a service provided by the Crown), for profit or for research.
Commis:	An apprentice waiter.
Common ground point:	A junction point used to establish earth for an electrical system.
Commutator:	The rotating cylinder of copper contact segments attached to one end of the armature windings of a generator.
Companion:	A wooden covering over the staircase to a cabin. A companion-way; staircase to the cabin. A companion ladder; leading between decks.
Compartment:	A space or room in a ship.
Compass:	An instrument that indicates direction. A magnetic compass has a pointer that is attracted towards the Earth's magnetic north.
Compass timber:	Structural timbers sawn from the bows of trees so the grain follows the shape, thus providing great strength.
Complement:	The number of persons on a vessel.
Composite construction:	The use of a mix of materials for a hull's construction.
Composite group flashing:	Flashing navigational mark of a combination of alternating groups of differing numbers of flashes.
Composite group occulting:	Occulting navigational mark of a combination of alternating groups of differing numbers of occultation.
Compression:	The pressure generated in the engine cylinder as the piston rises forcing trapped air to the top of the cylinder.
Compression ratio:	The ratio of the piston's swept volume and that remaining unswept of the cylinder - typically 10:1 plus in petrol and 16:1 plus in diesel high speed combustion engines.
Compressor:	A pump to compress refrigeration gasses. A lever in 18 th century sail fighting ships that brakes the anchor

	cables by squeezing.
C.O.M.S.A.R.:	Committee of Radio Communications and Search and Rescue.
Concession:	A arrangement where a private party (concessionaire) leases assets from a public entity to enjoy contractual investment and termed revenue rights that revert to the public on the contract term expiry.
Conclusion stage:	A period during a SAR incident when SAR facilities return to their regular location and prepare for another mission.
Condense:	To change from a gas to a liquid.
Condenser:	A storage device for direct current connected across the breaker points. It is used to minimize arcing at the points, and its discharge boosts the voltage in the secondary circuit for a hotter spark at the plug. A device that cools refrigerant gas giving up heat to the surrounding fresh air and returning the refrigerant to liquid state.
Conduction:	The moving of heat through solid material.
Conductor:	An electrical conductor is a material which will carry electric current. Most metals, sea-water, the earth, and your body are all conductors. The term is often used for a wire in an electric circuit. Wire conductors must be large enough to carry the circuit current without overheating.
Conduit:	A pipe for cables.
Confined space	A tank or void space that is not normally a workspace that is poorly ventilated and may contain an atmosphere that will not sustain life.
Confluence:	The join of two streams or bodies of water.
Conning:	Directing a helmsman in steering a vessel.
Conning tower:	The raised surface operating control station of a submarine. A protective armour plated control station.
Conrad, Joseph:	Seaman, master and author of colourful sea stories from the days when sail was giving way to those of steam.
Consignment:	Goods placed with a carrier for delivery to a consignee.
Consignee:	Person to whom carried goods are to be delivered.
Consignor:	Person who places goods with the carrier to be delivered to the consignee.
Conspicuous object:	Readily identifiable mark useful for navigation.
Constrained by her draught:	A power-driven vessel which because of her draught in relation to the available depth and width of navigable water is severely restricted in her ability to deviate from the course she is following.
Container:	A box used to transport cargos from door to door without handling the contents. Standard sizes of these metal containers are 20ft or 40ft by 8ft wide and 8.5ft high.
Container terminal:	Purpose built port facilities for loading, unloading storage and stowage of cargoes in containers.
Container ship:	A vessel designed to carry standard containers.
Contamination:	Occurs when foreign materials or impurities enter the fuel, oil or water.
Continent:	One of the six main continuous bodies of land on the planet.
Continental shelf:	Zone of shallow water adjacent to the continent whose seaward extremity quickly drops away to greater depth. Usually regarded as

	the 200mtr sounding line, but in local terminologies may mean from 100mtrs to 350mtrs.
Continuity:	The completeness of an electrical pathway.
Contraband:	Cargo that is prohibited.
Contract of affreightment:	A service contract under which a ship owner agrees to transport a specified quantity of products at a specified rate per ton. This contract differs from a spot or consecutive voyage charter in that no particular vessel is specified.
Contour:	Lines joining equal depths or heights.
Convection:	The moving of heat through liquid or gas by currents; a process commonly associated with warm rising air.
Convergence:	The meeting boundary of two differing currents or winds.
Convoy:	A number a vessels steaming in concert.
Cook, Captain James:	18 th century explorer and cartographer, recognised as leader of the first expedition to chart the East Coast of Australia.
Cooling water:	Circulated water that removes the heat from an internal combustion engine. Circulated water that removes the heat of compressing and condensing the refrigerant in refrigeration systems.
Coordination:	The bringing together of organisations and elements to ensure effective search and rescue response. One SAR authority must always have Overall coordination responsibility and other organisations are to cooperate with this agency to produce the best response possible within available resources.
Coordinated search Pattern:	Multi-unit pattern using vessel(s) and aircraft.
Coordinated universal time (U.T.C.):	International term for time at the prime meridian.
Coral:	Hard calcareous matter produced by marine polyps that forms underwater reefs.
Coral bleaching:	Die back of corals caused by excessive water temperatures.
Cordage:	Is used to denote fibre ropes only.
Cordillera:	A mountain province.
Core:	The central filament in a wire rope.
Coriolis Force:	The apparent force, caused by the earth's rotation, which Force deflects moving air (and water to a lesser extent) to the left in the Southern Hemisphere and to the right in the Northern hemisphere.
Corrosion:	The decay of a metal or alloy by chemical or electro-chemical reaction with its environment.
Corrugated:	Materials having an undulating shaped profile of grooves arranged to increase stiffness of steel sheeting.
Corrugated bulkhead:	Bulkheads having an undulating shaped profile of grooves arranged to increase stiffness.
Corsair:	Historically a North African pirate or privateer.
Corvette:	Historically a fine lined French twin masted square rigged vessel or a British flush single gun deck warship. Now a fast naval escort vessel.
Cospas-Sarsat System:	Russian - American satellite system designed to detect distress beacons transmitting on the frequencies 121.5 MHz, 243 MHz and

	406 MHz.
Cotter pin:	A split pin. After slipping through the hole of a clevis, its arms are prized open to prevent its withdrawal.
Counter:	The overhanging after section of the stern.
Countersunk hole:	An edge bevelled hole in a plate allowing a matching tapered bolt head to seat flush with the plate's surface.
Countersunk rivet:	A rivet head seated flush with the plate surface
Couple:	Two or more dissimilar metals or alloys in electrical contact with each other that act as the electrodes of an electrolytic cell if immersed in an electrolyte.
Coupling:	The link between two parts of a shaft or shaft & drive system.
Course:	The intended direction of travel of a vessel. The direction that a vessel is steered.
Course made good:	The track that was achieved over the sea bed (ground).
Course sail:	The lowest and largest square sail set on the masts of a sailing ship.
Course-up:	A radar display in which the picture is compass-stabilised so that the vessel's intended course is straight up the screen.
Couta boat:	Traditionally a beamy open fishing boat of Australian design, now favoured by enthusiasts as a recreational sailing dinghy.
Cove:	A small cliff bound bay. Slang for a person.
Cove line:	A decorative incision along the sheer of a vessel often picked out in gold or another contrasting colour.
Cowl:	The hood shaped cap of a ventilator.
Coxswain:	The man in charge of a boat. Australian certificate of competency to master a vessel of less than 12 metres in measured length.
Coverage factor (C):	For parallel sweep searches, (C) is computed as the ratio of sweep width (W) to track spacing (S). $C = W/S$.
Covering boards:	The boards at the edge of the deck that cover the frames and planking at the join of the hull and deck of a vessel.
C.P.A.:	In radar plotting the closest point of approach of a target in miles.
C.P.R.:	Cardio pulmonary resuscitation.
C.Q.R. anchor:	Also called a plough anchor due to its shape and action.
Crab:	To catch a crab is to feather the oar in the water too soon, resulting in no forward thrust.
Crabwise:	Sideways movement, like a crab.
Cradle:	A frame to support a hull ashore.
Craft:	Any air, sea-surface or submersible transporter.
Crank:	See below.
Cranky:	A vessel that is easily heeled or listed.
Crater:	The central magma outlet tube of a volcano. A ground depression caused by explosion, impact or remnant from extinct volcano. A depression in a weld as the result of molten metal displaced from the weld point.
Crayfish:	A lobster.
Crazing:	Tiny cracks which appear in the outer surface of varnish, paint or

	gel coat.
Crest:	Top of a wave. The maximum positive amplitude of a radio wave.
Crew:	The people manning a ship.
Crew's gangway:	A walkway elevated over the deck for crew's safe passage across awash decks in stormy weather.
Cribbing:	The foundation of heavy blocks that support a vessel during construction.
Crimp:	To recruit a crew by trickery or hijack.
Crimp terminal/connecter:	Light duty compressible fittings used to join low voltage DC circuitry. Available in spade or barrel type male to female configurations.
Cringle:	A rope eye worked into edge or clew of a sail, reinforced by a thimble.
Cromster:	A Dutch 16th century shoal water fighting ketch.
Cross curves of stability:	Graphical curves of a ship's transverse stability for ranges of heel angle and displacement.
Crosshead:	A mechanism in large reciprocating engines that constrains the piston, rod and bearing, so eliminating sideways pressure on the assembly.
Crossheader:	A pipeline that crosses over a mechanism or space providing flow from a source to a destination.
Crossing the line:	Crossing the Equator; traditionally the occasion of a celebration where a pantomime King Neptune and his court challenge first time initiates leading to punishments and rewards.
Crossjack:	The lowest square sail set on the mizzen of some sailing ships.
Cross-planking:	Plank laid in a transverse fashion, usually along the bottom of a chine built hull.
Cross sea:	Waves running contrary to and on top of the prevailing swell.
Cross-spall:	A temporary horizontal brace to hold a frame in position, ultimately replaced by deck beams.
Crosstree:	Spreader fixed to the mast to anchor the shrouds.
Crown:	The bottom (terminal) part of an anchor on which the flukes are attached. The camber of a deck.
Crow's nest:	A viewing platform at the mast top.
C.R.T.:	Cathode ray tube.
Cruiser:	Historically a privateer. A large lightly armoured warship with medium sized guns, used for commerce protection and scouting.
Cruising guide:	Navigational booklet describing a limited area in detail.
Crustacean:	A hard shelled (usually) aquatic animal; the crab, lobster etc.
Crutch:	Support for a boom.
C.S.:	Course steered.
Ctenophore:	A marine animal with comb like teeth or scales.
C.T.S.:	Course to steer.
Cuddy:	A small cabin.
Culvert:	A tunnelled drain.
Cumulonimbus cloud:	Heavy, dark cloud of great vertical depth often with an anvil shaped

	head, bringing rain.
Cumulus cloud:	Woolly medium height clouds.
Cunningham eye:	Eye in a sail's luff near the foot through which a line is passed to increase luff tension and flatten the sail.
Current:	A directional movement of water.
Cursor:	An electronically-generated cross hair used to indicate a position on a raster scan display.
Curtain:	A sagging line caused by a too much paint or varnish on a vertical surface.
Custom broker:	An agent accredited by a customs authority to manage compliance for an importer.
Customhouse:	A customs office where duties on imports are settled.
Customs and excise:	A government agency tasked with collecting and enforcing taxes on dutiable goods, particularly imports and exports.
Cutter:	A single-masted sailboat with multiple-head rig.
Cut-away:	An angled change in the underwater longitudinal profile of a vessel between the bow and keel or between the stern and keel. Sometimes called cut up.
Cutlass bearing	A ribbed rubber insert within a metal tube that allows water lubrication of an outer propeller shaft bearing.
Cut-water:	The foremost part of a vessel's stem.
C.V joint:	A constant velocity joint. It allows considerable misalignment within a drive train.
Cycle:	A repeating or rotary phenomena.
Cycloidal propulsion system:	The <i>Voith Schneider</i> propeller or <i>tractor system</i> using adjustable vertical hydrofoil blades, independently rotating on a circular base mounting that by developing lift can direct propulsion in any direction.
Cyclogenesis:	The rapid development/intensification of a low pressure system.
Cyclone:	An intense tropical revolving storm in the Southern Hemisphere, also called hurricane or typhoon in the Northern Hemisphere.

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D



D:	Code flag; Keep clear of me, I am manoeuvring with difficulty. Sound signal; Vessel with manoeuvring limitations in restricted visibility.
D flag + six numerals:	Code flags; Date
Dagger board:	A non-pivoting board slotted into a sailing boat's keel to minimize leeway; it is raised and lowered through a watertight case and can be entirely removed.
D.A.L.R.:	Dry adiabatic lapse rate is approx. 9.8° C per kilometre being the temperature change of unsaturated air on rising or falling.
Dam:	A bank built to contain a waterway.
Damp:	Slightly wet.
Damper:	Bread, risen (aerated) by bicarbonate of soda rather than yeast.
Dampier, William:	17 th century British seaman, buccaneer, explorer, hydrographer and cartographer recognised as the first European explorer to land on the Western Australian Coast.

Damping:	A torque applied to a gyroscope to assist it in settling in the meridian.
Danforth anchor:	A light duty stowable anchor with plate flukes that swivel.
Danger angle:	A maximum angle set on a sextant over which a vessel will be navigating too close to an obstruction. See HAS and VSA
Danger line:	A limiting dotted line marked around a charted hazard.
Date line:	A civil modification of the 180° East or West meridian marking the zone where the date on the globe changes from one day to the next.
Datum:	A geographic point, line, or area used as a reference in search planning.
Datum area:	Area where it is estimated that the search object is most likely to be located.
Datum line:	A line, such as the distressed craft's intended track line or a line of bearing, which defines the centre of the area where it is estimated that the search object is most likely to be located.
Datum point:	A point, such as a reported or estimated position, at the centre of the area where it is estimated that the search object is most likely to be located.
Davits:	Structure supporting sheaves or blocks that projects over a vessel's side or stern, to hoist up boats.
Davy Jones's locker:	Mythical undersea domain of the devil, Davy Jones, in which drowned seamen are confined.
Dawn:	Approximate time for first light. See Astronomical, civil and nautical twilight.
Day-sailer:	A sailing boat with limited accommodation for short passages.
Day mark:	USA term for buoyage topmark.
DC (direct current):	Direct current (D. C.) is a form of electricity often supplied by batteries. It is conducted in a constant direction (see polarity).
Daylight hours:	Between sunrise and sunset. See twilight.
Day shape:	Black shapes shown in daylight to indicate the nature of a vessels condition.
D. Class:	Australian vessel survey class, partially smooth waters.
Dead ahead:	Directly ahead.
Deadeye:	A block without sheaves.
Dead flat:	Completely calm sea state. The flat-surfaced midship section of a vessel on the sides or bottom.
Deadlights:	Metal plate coverings fitted over portholes for greater watertight integrity in heavy weather.
Deadmen:	Land based posts that secure the cables of a vehicular cable ferry.
Dead reckoning:	Estimating a position by plotting a record of courses run and distances sailed.
Deadrise:	On a body plan of a vessel, the angle between the base or keel line and the turn of the bilge.
Deadweight:	The cargo, stores, tankage and crew weights of a vessel.
Deadweight tonnage:	It is the difference in displacement in tonnes between the light and loaded conditions. The size of tankers is often given in terms of deadweight tonnage. Ships are usually chartered on the

	deadweight tonnage.
Deadwood:	Blocks of timber, sandwiched and drift bolted together, usually reinforcing the timber construction of the backbone where the vessel narrows (forefoot and heel).
Deadwood chock:	Blocks of timber, sandwiched and drift bolted together, sawn in the shape of and used as a vertical knee.
Deck:	A planked platform on a vessel that provides a surface to stand on.
Deck beam:	Run athwartships supporting the deck plating/boards.
Deck button:	A round, steel deck fitting used to guide cables for barge tows.
Deck girders:	Run longitudinally supporting the deck plating.
Deck head:	The underside of a deck (your roof when below deck).
Deck house:	A superstructure on the deck of a vessel.
Deciles:	A score out of ten to indicate ranking.
Declination:	The angular distance between a celestial body and the celestial equator, equivalent to the latitude of a vessels geographic position.
Declivity:	The slope of a shipway to allow for ease of launching.
Deconsolidation point:	A place where cargo is ungrouped for distribution.
Deep floor:	Any of the floors in the ends of a vessel that, due to the converging sides of ship, become deeper than those in the main body.
Deep frame:	A frame whose transverse dimension is wider than standard.
Deep sea trade:	The traffic routes of vessels which are engaged on the high seas.
Deep six:	To give it the 'deep six'; to permanently dispose of something unwanted. (it probably will rest under six fathoms of water).
Deep storage:	Any cargo stowed in single hold ships.
Deep tank:	A strengthened lower hold fitted with lid that can be used to carry water ballast. A tank of significant depth (typically spanning more than one deck).
Deep V:	A hard chine power boat having a 15 degree or more angle deadrise at the transom.
Definition:	A measure of the degree of detail on a radar display.
Degaussing:	To neutralise the magnetic field of a ship by encircling it with an electric current.
Delta:	The many mouthed entrance to a low lying coastal river.
Delta T:	The dry bulb temperature less the wet bulb, it shows evaporation rate. Used by farmers for determining spraying conditions.
Demand respirator:	An atmosphere-supplying respirator that admits breathing air to the face piece only when a negative pressure is created inside the face piece by inhalation.
Demurrage:	A fee levied by the shipping company upon the port or supplier (usually, assessed upon a daily basis after the deadline) for not loading/unloading a vessel by a date specified by contract.
Density:	Mass per unit volume.
Departure:	The event of a vessel beginning its voyage. The bearing of a coastal object from where a vessel commenced dead reckoning. The easting or westing of a vessel's progress measured in nautical miles.
Depression:	A meteorological low pressure system.

Depth moulded (D):	The vertical distance between the moulded base line and the top of the beams of the uppermost continuous deck measured at the side amidships.
Derelict:	An abandoned vessel.
Derrick:	Boom or Spar used for hoisting or lowering weights.
Destroyer:	A very fast unarmoured warship distinguished by raised forecastles and forward bridge.
Determining a line of position:	A line of position may be obtained by any one of the following methods: <ul style="list-style-type: none"> -a range and a transit; -a compass bearing observed visually or by radar; -a radar range; -a chain of soundings; -a horizontal sextant angle between two known objects; -a vertical sextant angle of an object of known height; -an echo of the ship's whistle or siren; - synchronous radio /sound transmissions from an object; -a radio direction-finder bearing; -lines of position derived from electronic systems; -astronomical lines of position.
Development:	A technique where lines representing a curved surface are drawn on a flat sheet.
Devils claw:	A securing device to hold the anchor and cable in its stowed condition.
Deviation:	The compass error caused by a local magnetic attraction; it is the angular difference, in degrees, between the magnetic course and the course indicated on the ships compass. It varies according to a boat's heading.
Dew:	Moisture droplets that condense when air cools.
Dew-point temperature:	The temperature that the air must be cooled in order for dew to form and a measure of the air's moisture content.
De-zincification:	The common leaching of zinc from the alloy brass in the marine environment that renders it brittle.
D.F.	See radio direction finding.
D.G.P.S.:	Differential global positioning system that refines a ship stations G.P.S. positions by referring those to simultaneously found readings obtained by a shore system with known position. Error in East and West can be calculated from the later and assumed to equally apply to the ship station.
Dhobi:	Washing clothes.
Dhow:	Western name for an Arabian lateen rigged sailing vessel.
Diablo	A hot and dry offshore wind during San Francisco Bay's spring and fall.
Diagonals:	Fairing lines added to a vessel's body plan. They take the form of straight lines (usually three in smaller craft) drawn diagonally from the centreline, to strike the area of the waterline. The projection a line drawn from the series of intersection points found (of diagonal & waterline) along the hull, gives an indication of the likely water flow across the structure.

Diamond:	Stay to support the mast centre laterally.
Diaphone:	Fog signalling horn.
Diaphragm:	A rubberised membrane that when repeatedly distorted by a reciprocating handle results in positive displacement pumping action.
Diatom:	Microscopic phytoplankton.
Dielectric:	Insulating material.
Diesel engine:	An engine invented by Rudolf Diesel, where a fuel/air mixture is compressed until it ignites; it uses low grade fuel and is economical.
Difference of latitude (d. lat.):	The angular distance from one parallel of latitude to another, being approximately 60 nm per degree.
Difference of longitude (d. long.):	The angular distance from one meridian of longitude to another, being approximately 60 nm per degree at the equator to 0 nm at the poles.
Differentiator:	A radar rain clutter control.
Diffusion:	The dispersion of a gas or liquid within another. The permeation of battery acid into the active plates surface.
Digital:	Display of data presented by numerical digits.
Dinghy:	A small boat; tender for a larger boat; sailing dinghies have been developed into racing classes (the name comes from an East Indian rowboat).
Diode:	A one way electrical valve, used to rectify AC into DC current.
Dip:	A position of a flag when lowered part way in salute. The angle between an observer's eye and the horizon, and a line at right angles to the observer's zenith.
Dipping distance:	The distance at which an object of known height viewed from a known altitude will disappear below the horizon.
Direct current:	Direct current (D. C.) is a form of electricity often supplied by batteries. It is conducted in a constant direction (see polarity).
Disabled vessel:	One unable to sail efficiently or in a seaworthy state as a result of engine trouble, damage to the hull or ship's gear.
Discharge book:	Record of a seaman's service.
Discrimination:	Radar ability to show targets which are close together as separate identities.
Displacement:	The weight of sea-water, expressed in tonnes of 1000Kg, displaced by the submerged part of a vessel when it is afloat. This equals the volume (▼) , weight (▲), or mass of water displaced by the hull.
Displacement as a volume. (▼):	This is the size of the hole in the water occupied by the ship measured in cubic metres. There is no density correction.
Displacement as a weight. (▲):	This is the weight of water displaced by the ship and equals the volume displaced multiplied by a constant representing the density of water, i.e.: In fresh water $\Delta = \nabla \times 1000 \text{ kg/m}^3$ In sea water $\Delta = \nabla \times 1025 \text{ kg/m}^3$ The displacement weight of a ship can vary according to circumstances and position in the world, although displacement weight and ship weight are equal when the ship is at rest in equilibrium in still water.
Displacement as a	This equals the quantity of water displaced and as the kilogram is

mass:	the unit of mass and 1000 kg = 1 tonne this is the unit which is used when referring to the size of a ship.
Displacement extreme. (DE)	Equals to the moulded displacement, plus the displacement of the shell plating, bossings, cruiser stern and all other appendages.
Displacement hull:	A hull designed to pass through the water, rather than skim over the surface.
Displacement moulded:	This is the mass of water which would be displaced by the moulded lines of the ship when floating at the designed load water-line.
Displacement tonnage:	This represents the amount of water displaced by a ship, expressed in tonnes. (1 tonne = 1000 kg). The size of ships is always given in terms of displacement tonnage.
Detresfa:	Immediate SAR required - See distress phase.
Distance:	A separation of between one point and another expressed in units of length, for navigational purposes these being divisions of a nautical mile (equal to 1852 metres)
Distress phase:	A situation wherein there is reasonable certainty that a vessel or other craft, including an aircraft or a person, is threatened by grave and imminent danger and requires immediate assistance.
Distress signal:	A flag, sound, light, or radio signal meaning a vessel is threatened by grave and imminent danger and requires immediate assistance.
Distributor:	A rotating mechanism for internal combustion engines, to distribute high tension electricity to the spark plugs. It houses the cam-operated breaker points for the primary circuit.
Ditching:	The forced landing of an aircraft on water.
Ditty-bag:	A small bag used to stow personnel possessions.
Diurnal tide:	A tide that has only one high tide and one low water in each day.
Diurnal variation:	The atmospheric "tide" which causes the pressure to be lower at about 0400 and 1600 local time, and higher at 1000 and 2200. It should be taken into account when considering whether the pressure is truly rising or falling.
D.M.G.:	Distance made good.
Dock:	Dock is used colloquially to refer to a wharf or the act of parking a vessel.
Docking light:	A light near the bow of a vessel used to guide the operator when mooring or docking, not used for a navigation light.
Docking plan:	A detailed plan and profile of the lower hull structure required to correctly position a vessel in a slipping operation.
Dodger:	A canvas weather screen.
Dog:	A domestic quadruped animal and common pet. A short metal clamp used for securing doors, manholes or work pieces. Sea dog - a term for a experienced mariner.
Doghouse:	Enclosure for weather protection and controls at after end of cabin.
Dog shores:	The last supports knocked away during the launch of a ship.
Dog-watches:	Half watches of two hours each, from 4 to 6 and 6 to 8 pm.
Doldrums:	Equatorial low pressure regions with little wind.
Dolly:	A heavy tool held against and supporting a rivet head, while the rivet shank is shaped by repeated hammer blows.
Dolphin:	A sea mammal.

	A mooring post. A curved heraldic fish.
Dolphin striker:	A spar pointing downward from the bowsprit to tension the jibboom stay.
Donkey engine:	A crude motor used to drive winches for cargo work.
D.O.P.:	Dilution of precision – an indication of the quality of the signal being received from the satellite. Dilution of precision can be horizontal, vertical, position and time. These are then combined and given as a GDOP (Geometric Dilution Of Precision). The smaller the number the better. The GPS selects satellites based on GDOP.
Dorade ventilator:	A ventilator in a box. A projecting pipe stands above the deck level so that water entering the box flows past but air is directed into the cabin.
Dory:	The traditional dory is a small, flat-bottomed fishing boat with high flaring sides, and considerable sheer. The commercial fishing dories of New England were stacked on a larger boat and transported to the Grand Banks where they were off-loaded with a fisherman, and later retrieved. Comes from an Indian term for a dugout. Over the years the dory has evolved to encompass various types of boats, usually characterized by flat bottoms and flaring sides.
Doubling:	Reinforcement of a structure by using two layers rather than one.
Double block:	A block (pulley) containing two sheaves.
Double bottom:	The space between the inner and outer bottom plating of a vessels hull, mainly used as water or oil storage tanks.
Double diagonal:	Double diagonal or cold moulded - uses strips of plywood or solid wood veneers laid over the hull in layers of opposite diagonals, glued together, most often with epoxy.
Double ender:	A boat with a pointed or canoe stern.
Double headsail:	Two sails forward of the mast as in a cutter.
Double pole switch:	A safety switch that simultaneously isolates both the active (positive) and neutral (negative) conducting wires of the electrical circuit.
Doubler:	A steel plate placed over existing for added strength under deck fittings or for damage repair.
Double sheetbend:	Used to securely join ropes of the dissimilar sizes. It can be held under strain while being tied. 
Double skin:	Double watertight hull construction.
Double the angle on the bow:	A navigational plot for obtaining distance off from a charted feature. A relative bearing on the object is taken and a steady course maintained; at the time when a second relative bearing is exactly double that of the first bearing, the distance off will be the same as the distance sailed between bearings.
Double up:	To double a vessel's mooring lines.
Doubling plates:	Extra plates added to strengthen where holes are cut for hawse pipes and machinery, or where wear is expected.
Douglas fir:	American straight grained red softwood timber prized for making spars. See Oregon.
Douse, dowse:	To lower a sail (in haste).

	To put out (a fire or light)
Dowel:	A wooden plug used to fill screw holes in the deck.
Downburst:	Violent or damaging draught of wind during a thunderstorm.
Downhaul:	A line for hauling down sails or flags by putting on a downward pull.
Downstream:	In the direction towards the sea.
Downwind:	In the direction that the wind is moving. In a position that is further away from the source of the wind than another vessel or feature.
D.R.:	Dead reckoning.
Draft:	To draw a plan. American spelling of draught.
Drag:	When an anchor slips along the sea bed without holding fast. The attitude of a vessel with the stern lower in the water. The resistance to a body's movement due to turbulent flow of water or air along its after surfaces. See laminar flow.
Dragon boat:	A decorated many paddled canoe used for racing.
Drag sweep:	A loop of cable dragged at a known depth to determine the minimum depth of a channel.
Drail:	A lead weighted fish-hook and line for dragging below the surface.
Drain well:	A sump that collects water seepage for pump out.
Draught:	The distance between the lowest part of a vessel and her waterline. Fullness of sail created by sail maker, called camber or draught. It can be altered by bending middle of mast forward and bending boom downwards.
Draught, load:	Draft at load displacement.
Draught marks:	Numbers placed as a vertical scale at bow and stern to indicate a vessel's draught at the points, enabling trim to be monitored.
Draught, mean:	The average between bow and at stern marks.
Draught moulded (T):	The draught measured to any water-line, either forward or aft, using the moulded base line as a datum.
Draught extreme (TE):	This is obtained by adding to the draught moulded the distance between the moulded base line and a line touching the lowest point of the underside of the keel. This line is continued to the FP and AP, where it is used as the datum for the sets of draught marks.
Draw:	A sail draws when the wind fills it to create thrust.
Drawknife:	A two handed carpentry tool similar to a large spokeshave used to shape spindles, shafts and barrel staves.
Dredge:	To remove material (sand, gravel or shellfish) from the sea floor. To manoeuvre a vessel across a tidal stream by paying out anchor cable with the helm hard over, hence driving the vessel from one side of a river to the other.
Dredged channel:	A channel that has been artificially widened or deepened for the safe passage of vessels etc.
Dredger:	A vessel that removes material from the sea floor in order to provide a deeper navigable channel..
Dressing ship:	To display flags from bow to stern (over the mast) in celebration.
Drier:	A refrigerator component that removes water from the refrigerant.
Drift:	To move with the current, tide or wind.
Drift angle:	The angle between ship's head and its actual direction of

	movement.
Drift bolt:	A joining rod that is driven into timber using a sledge hammer.
Drift current:	A surface current set in motion by a constant wind.
Drifter:	A trawler that drifts to its nets. Lightweight headsail or spinnaker used in light winds. A light-wind race.
Drift error (De):	SAR term for the displacement in position over time of a searched object due to the wind and current it experiences.
Drift pin:	Conical tapered pins driven into sheets with rivet holes that are not fair in order to force them into line.
Drip collector, or pan:	A pan placed under a piece of machinery to contain leaks. Also called a save all.
Drip loop:	A low spot in an electrical conduit for the purpose of collecting and draining off condensation.
Drive:	To press a vessel with high speed for the conditions. To carry much sail in a heavy wind. The entire mechanism connecting the engine to the propeller, i.e., inboard-outboard drive, reduction-gear drive, direct drive, etc.
Drive ratio:	The ratio of diameters between a driving and driven pulley.
Drive train:	All the mechanical equipment from the gearbox to the propeller including for example the propeller shaft, bearing, and couplings.
Drizzle:	Light continuous rain of small drops (less than 0.5 mm diameter).
Drogue or sea anchor:	A device made of canvas or nylon which acts like a parachute or bag underwater, thereby reducing the drift of a vessel.
Dromon:	Ancient Byzantine warship with twin banks of oars.
Drop strake:	A discontinuous strake in the bow or stern sections. See stealer.
Drought:	Prolonged deficiency of precipitation (rain).
Dry:	Not wet. Free from rain.
Dry adiabatic lapse rate:	See DALR.
Dry-bulb temperature:	The shade temperature of a mercury thermometer.
Dry bulk:	Cargoes shipped in a dry state and in bulk; e.g., grain, cement, ore.
Dry cargo ship:	Vessel which carries all, excluding liquid in bulk.
Dry dock:	A walled enclosure capable of being pumped dry in order to service the hull of a vessel.
Dry docking:	To remove the vessel from the water by placing it in a walled enclosure and pumping it dry. The vessel is supported from the localised pressure on its keel and chine by "chocks" and "side shores".
Dry exhaust:	An exhaust system or part of an exhaust system that is uncooled or cooled by air currents. Dry exhaust systems operate at higher temperatures than water cooled.
Dry rot:	The decay of timber caused by fungi, usually initiated under moist unventilated conditions, but not cured by drying out.
D.S.C.:	Digital Selective Calling system using digital codes which enables a radio station to establish contact with, and transfer information to, another station or group of stations. Dangerous goods, solid cargoes and containers.

D.T.G.:	Distance to go.
Ducer:	Second steward.
Duck:	A cloth, lighter and finer than canvas; used for trousers and boat covers. A rubber duck is a small inflatable vessel.
Duct:	A conduit through which piping or cabling is routed.
Ductility:	The property malleability (the opposite of brittle) of some metals, allowing them to bend or drawn into wire without fracturing, i.e. copper.
Duct keel:	Longitudinal conduit forming a boxed keel structure through which piping or cabling is routed.
Dumb barge:	One without an engine.
Dungarees:	Working overalls.
Dunnage:	Wood, mats, etc. used to protect cargo from damage.
Duplicating pipe:	A tube used to print rivet hole layout from template to plate surface.
Dust storm:	A storm carrying dust often high into the atmosphere.
Dutchman:	An infilling piece used to cover up open joints caused by poor workmanship. A vessel from the Netherlands, most famous of which is the ghost ship the <i>Flying Dutchman</i> .
Dyke:	An embankment.
D.W.T.:	Deadweight. The weight of cargo, stores and water.

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E



E:	Code flag; I am altering my course to starboard. Sound signal; I am altering my course to starboard.
E.A.R.:	Expired air resuscitation; the technique of blowing air by mouth into the nose or mouth of a non breathing casualty.
Earring:	A rope attached to a cringle of a sail, by which it is bent or reefed.
Earth/earth return circuit:	Some electrical systems do not use a return wire, but use another conductor instead. The earth's soil is a conductor and this can be used (hence the name). Metal car bodies are also used as a return wire for automotive circuits and are called 'earth-return' circuits. If the negative supply and one side of each lamp was connected to a metal chassis it would be an 'earth-return' circuit. Earth-return circuits are unsuitable for vessels.
Ease:	To let out a rope under control.
Ease to the stopper:	Allowing the stopper to become taut on its captive cable.
East Australian current:	A warm South Pacific Ocean current setting Southerly along Eastern Australia and then Easterly offshore.
East Greenland current:	A cold current setting Southerly along Greenland's East Coast.
Easting:	The distance travelled eastward.
Easy:	Command to be careful.
Ebb:	A falling tide.
E.B.L.:	Electronic bearing line.
E.C.D.I.S.:	Electronic chart and display information system.
Echo:	A returning radar signal reflected from a target.

E. Class:	Australian vessel survey class, sheltered waters.
Eddy:	A swirl or circular motion in the water caused by the meeting of opposite currents around an obstruction.
E.E.C.:	European Economic Community.
Eel:	A snakelike fish.
E.E.Z.:	Exclusive Economic Zone - defined in Australia as 200nm from nearest coastline.
Electrolysis:	Chemical change in a solution or electrolyte due to the passage of electric current. See Stray-Current Corrosion and Galvanic Corrosion.
Electrode:	A pole (terminal) of an electrical circuit. See polarity.
Electro-hydraulic:	A hydraulic system that incorporates electrically switched pumps.
Electrolyte:	A solution of sulphuric acid found in batteries.
Elevation:	Height.
Elm:	European and American cross grained timber good for bending and durable for marine use.
Elmo's fire, St.	A form of lightning or static discharge sometimes seen as a glowing halo around ships' rigging.
El Niño:	The La Niña and El Niño are phases of the South Pacific's oscillation cycle. During La Niña the SE Trades drive warm water westwards and north including the coast of Australia, allowing the cold Humboldt Current and its fish productive waters to surface along the South American Coast. El Niño sees the weakening of the winds and the eastwards return flow of the warmer sea water. This brings drought to Australia (due to the cooler less evaporative coastal seas) and flooding to the South American West Coast. The Southern Oscillation Index is a measure these changes.
Embankment:	A dirt or stone structure making a wall to contain a waterway.
Embayed:	To be trapped in a bay due to adverse conditions.
Emergency phase:	SAR term based on the level of concern for the safety of persons or craft that may be in danger. The three levels of emergency are classified as Uncertainty, Alert, and Distress.
Emergency situation:	Any occurrence such as press of weather, equipment failure, rupture of containers, or failure of control equipment that may or does result in the threat of danger.
E.M.S.:	Environmental management system.
E.M.S.A.:	European Maritime Safety Authority.
End:	General term for a piece of rope at hand.
End for end:	To reeve a rope in the opposite direction through a tackle in order to put an unworn section over the pulley.
End guide assembly:	One of the four pulley units that guide the cable of a vehicular cable ferry across the ferry (also called pedestal).
End-of-service-life indicator (E.S.L.I.):	A system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.
End plate effect:	The interruption of air flow underneath the foot of a sail by sheeting close to the deck or deck structures.
End seizing:	A seizing at the end of a wire or rope.

Engine bed:	Supports for the engine to be bolted onto.
Engine control room:	A space next to the engine room where engine room systems are controlled.
Engine logs:	Longitudinal supports for the engine to be bolted onto.
Engine room:	A compartment for the boat's propulsion machinery and/or auxiliaries.
Ensign:	The flag designating the nationality of a boat.
E.N.S.O.:	El Niño-southern oscillation. See El Niño.
Enterprise:	Class of 12 foot sailing dinghy.
Entrance:	The way into a harbour. The shape of the submerged bow sections as presented to the onrushing water. It can be fine or bluff.
Endurance:	The maximum time in hours or day that a vessel/plane can operate performing its intended role before replenishment.
E.P.:	Estimated position.
E.P.A.:	Environmental protection agency.
Epoxy resin:	A type of resin used in glass fibre construction or for gluing where waterproofing is required It is durable, strong and has good adhesion qualities; more expensive than the polyesters.
Equator:	An imaginary parallel of latitude given the value of zero degrees that separates the Northern from the Southern Hemisphere.
Equatorial trough:	The low pressure zone around the equator.
Equinox:	The moments when the sun crosses the equator in its yearly cycle from being over the Tropic of Cancer to being over the Tropic of Capricorn.
Equatorial current:	Westerly setting currents above and below the equator of the North and South Pacific, Indian and Atlantic Oceans. See Equatorial counter currents.
Equatorial counter currents:	Easterly setting currents along the equator in the Pacific, Indian and Atlantic Oceans.
Escape-only respirator:	A respirator intended to be used only for emergency exit.
Escarpment:	The plunging vertical edge of high flat country.
Estimated position:	Charted position calculating for set, rate and drift.
Estuary:	An arm of the sea subject to river outflow and tidal influence at the entrance of a river.
E.T.A.:	Expected time of arrival.
Etch primer:	Primer paint containing Phosphoric Acid.
E.T.D.:	Expected time of departure.
Etesian:	A dry north Aegean Sea wind from mid-may to mid-september affecting Greece and Turkey.
E.T.R.:	Expected time of return.
Eurus:	Easterly wind of ancient Greece. See classical winds.
Euronotos:	See classical winds.
Evaporate:	Change from liquid to gas.
Evaporator:	This is a cooling unit where heat from the refrigeration plant evaporates liquid refrigerant, turning it into gas.
Even-keel:	When a vessel is so trimmed that she sits evenly, parallel to her intended load waterline.

Exhaust gases:	Gases given off by the combustion process.
Exhaust manifold:	A chambered casting, bolted to a combustion engine, for collecting exhaust gases from each of the cylinder ports and feeding them to the exhaust pipe.
Expansion:	To get bigger. Draftsman's term for drawing a part of a vessel plan in more detail.
Expansion joint:	A flexible join to allow for expansion due to flex or heat.
Expansion trunk:	A section of free space above the top of a oil cargo tank allowing for expansion of the oil with minimal free surface consequences.
Extinguishing agent:	The substance which puts out a fire.
Eye:	The forward spaces below the upper decks abaft the stem through which hawse pipes run.
Eye bolt:	A bolt with a head formed in a eye, or drilled with a shackle eye.
Eyebrow:	Rim over a port hole to deflect drips.
Eye of a vessel:	The extreme forward part.
Eye splice:	A permanent loop formed in the end of a line by splicing. 
Eyot:	Islet.

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F



F:	Code flag; I am disabled, communicate with me.
Face plate:	A stiffening plate welded along the edge of a frame. A removable plate threaded onto the arbour of a lathe for work piece attachment.
Factory ship:	A prolonged endurance vessel for processing fish products supplied by smaller whalers or fishing vessels.
Fagged:	When the end of a rope is untwisted.
Fahrenheit:	Imperial scale of temperature. $Fahrenheit = ((9 \times Celsius) \div 5) + 32$
Fairing:	The process of bevelling the stem, chine, sheers, keel, and frames so that the planking will have flat surfaces to glue and fasten to. A "fair" hull is one with no dips or bumps in the longitudinal lines of the hull. Fairness is checked by sighting down the longitudinal lines.
Fairlead:	A smooth guide clear of obstructions for rope, wire or chain.
Fairwater:	Any casting or plating fitted to a hull in order to promote a smooth flow of water.
Fairway:	Main navigation channel.
Fake:	A turn of rope on a coil. To fake (or flake) down is to spread coils along the deck in such a way that the rope will run out freely without fouling.
Fall:	That section of rope in the tackle to which power is applied in hoisting.
False alarm:	Distress alert initiated for other than an appropriate test, by communications equipment intended for alerting, when no distress situation actually exists.
False alert:	Distress alert received from any source, including communications equipment intended for alerting, when no distress situation actually

	exists, and a notification of distress should not have resulted.
False keel:	A sacrificial surface bolted onto the outside of the main keel in order to protect it from grounding damage.
Fantail:	A rounded counter stern extending past the after perpendicular.
Fastenings:	A general term for all nails ,screws, bolts, etc. See coach bolts, lag bolts, hanger bolts, drifts, spikes, treenails.
Fathom:	The imperial unit of depth measurement of six feet. There are 3.25 feet to a metre.
Feather:	To turn the oar blade of a rowing boat horizontally with the top forward as it comes out of the water, so to skim above the water for the return stroke. To point a sail boat higher into the wind to reduce pressure from the sails in a gust.
Feeder service:	Cargo from regional ports transferred to a central hub port for a long-haul ocean voyage.
Feeder vessel:	Vessel operating a feeder service.
Felibote:	Spanish name for Dutch Vlieboot.
Felloes:	Sections of wood from which the rim of a wheel is built up.
Felluca:	Twin masted lateen rigged sailing and rowing craft.
Fen:	Low lying liable to flooding.
Fender:	Packing material to protect the sides of a boat from rubbing against an object; made from canvas covered cork, flexible air filled plastic or plaited rope.
Fender board:	A board, suspended horizontally so as to span fenders and spread the wear or increase the effective fender surface.
Fend off:	To push off.
Ferry:	Generally used as a term for a passenger carrying vessel on a short and regular route, but described in the NSW Passenger Transport Act as any vessel with more than 8 persons aboard.
Fetch:	The area of sea to windward over which the wind is able to build up waves.
Fend off:	To push a hull away from an object or another boat.
Fid:	A tapered tool for separating the strands of rope when splicing.
Fiddle:	A frame or railing on a boat's table to keep dishes, etc. from falling off in rough weather. Fiddles are frequently left open at the corners for drainage
Fiddle-block:	A long shell block, with one sheave above the other, the lower smaller than the upper, rather than side to side.
Fiddlers green:	Mythical land of plenty for seaman. The antithesis of Davy Jones's locker.
Fidley:	The deckhouse over the boiler tops that the funnel sits on.
Figurehead:	A carved effigy of a person or creature attached under the bowsprit of a vessel.
Figure of eight:	A knot used as a hand hold or to prevent a ropes end from running through a pulley.
File-rail:	A rail around a mast.
Fill:	The thread that runs across sail cloth from edge to edge.
Filler:	A paste applied to fill the grain of wood before applying varnish or paint.

Fillet:	A fillet is a cove shape made with putty on an inside corner. The term is most often used in reference to Stitch-N-Glue boat building. A fillet is made with activated epoxy resin, thickened with various fillers, to a putty consistency. The putty is "globed" into place and smoothed with a rounded tool. (See Boatbuilding Methods: Stitch-N-Glue.)
Filter:	A screen or barrier for separating foreign matter from a liquid or gas.
Fine:	No rain or precipitation. A sharp hull shape.
Fiord:	An inlet or enclosed area of deep water formed from a flooded glacial valley.
First R.C.C.:	RCC affiliated with the shore station that first acknowledges a distress alert, and which will accept responsibility for all subsequent SAR coordination unless and until coordination is transferred to another RCC.
Fish:	A marine animal. To catch fish. To hoist the flukes of an anchor up on the gunwale. To strengthen a spar by fastening on other pieces.
Fishing:	For the purposes of the NSCV Part B, fishing operations means: a) the farming, taking, catching or capturing of fish for trading or manufacturing purposes; b) the processing or carrying of the fish that are farmed, taken, caught or captured; or c) activities in support of fishing operations, including— i) the feeding, storage or transport of fish farmed, taken, caught or captured by the fishing vessel; ii) the provision of food, fuel and other supplies to the fishing vessel while it is engaged in fishing operations; iii) the transport of crew members or special personnel to and from the fishing vessel while it is engaged in fishing operations; and iv) the maintenance of fish farms.
Fish farm:	Where fish are reared by man as food.
Fishing vessel:	For the purposes of the International Regulations For Preventing Collisions At Sea, 1972, the term vessel engaged in fishing means any vessel fishing with nets, lines, trawls or other fishing apparatus which restrict manoeuvrability, but does not include a vessel fishing with trolling lines or other fishing apparatus which do not restrict manoeuvrability. For the purposes of the NSCV Part B, fishing vessel means: a) a vessel that is used for fishing operations; or b) a vessel that- i) is in the course of construction; and ii) is intended to be used for fishing operations.
Fishmeal:	Dried and ground fish used for animal feed or fertilizer.
Fish plate:	See fish tail plate.
Fisherman's staysail:	A fore and aft triangular sail set on the triatic stay between the two mast heads of a ketch or schooner.

Fish stakes:	Piles driven out from the shore used to trap fish or suspend nets.
Fish tail plate:	A dovetail shaped joiner plate usually recessed into timber so as to resist movement.
Fitting out:	Preparing a boat for its intended operations.
Fix:	A determination of position, found by the intersection of two or more lines/arcs of position.
Fixed costs:	Operating expenses that continue despite lower levels of income producing activity.
Fixed fire fighting system:	A dedicated extinguishing system fitted to an engine room.
Flake or fake:	A turn of rope on a coil. To flake (or fake) out is to spread lengths of line along the deck so the rope will run out freely without fouling. A stage for fish drying.
Flag:	A coloured piece of cloth (bunting) hoisted where best sighted, used as a symbol or signal. See code flags. To highlight an item or occurrence for consideration.
Flags of convenience:	The flag representing the nation under whose jurisdiction a ship is registered. Sometimes referred to as flags of necessity; denotes registration of vessels in foreign nations that offer favourable tax structures and regulations.
Flagstaff:	A flag pole.
Flag State:	The nation of a vessel's registration.
Flame arrestor:	A screen capping a fuel line as a barrier to flames from vapours. A screen placed over a carburettor intake to prevent backfire from igniting bilge vapours.
Flare:	A pyrotechnic device for signalling or distress. The concave curve of a vessel's sides or bow. The opposite to tumble-home. It keeps decks dry.
Flash:	Smart. Sudden. See flashing.
Flash Flood:	A short duration flood.
Flashing:	A light repeating a regular rhythm that is more often off than on.
Flash point:	Temperature at which there is sufficient vaporisation of a flammable material to permit ignition.
Flat:	A deck built without curvature.
Flat bottom:	A hull shape that is flat such as a barge etc.
Flat of keel:	This is the amount of flat bottom plating on each side of the centre girder.
Flatten sheets:	To pull the sheets of sails tight.
Fleet:	A large number of ships with common ownership. To change the position of blocks and tackles for a subsequent lift.
Flemish coil:	To coil a rope in a neat spiral on a deck.
Flemish down:	See flemish coil.
Flinders bar:	A soft iron bar, vertically mounted in the fore and aft plane of the binnacle to reduce the compass error of coefficient induced B.
Flinders, Matthew:	19 th century British naval officer and explorer known for the first circumnavigation charting of Australia, and the popularisation of

	that new name. Also the namesake of the flinders bar.
F.L.I.R.:	Forward-looking Infrared. An imaging system, mounted on board surface vessels or aircraft, designed to detect thermal energy (heat) emitted by targets and convert it into a visual display.
Floating drydock:	A semi submersible craft that can be placed under a vessel and then de-ballasted to lift it clear of the water for slipping works.
Flood:	The rising tide. When excessive, temporary water covers normally dry land.
Floodable length:	The length of the hull that can flood without immersing the margin line.
Flood warning:	Advance notice of the potential for flooding at a named location.
Floor:	The bottom of a vessel.
Floor plate:	Reinforcement to floors.
Floors:	The structural members of a boat that tie the frames together across the keel. Not to be mistaken for the cabin sole that you walk on.
Floor timbers:	Timbers in the bottom of a vessel, laid across the keel that support the frames.
Flotilla:	A small fleet.
Flounder:	An edible flatfish. To thrash about.
Fluitschip:	See fluyt.
Flukes:	The triangular plates at the ends of the crown of an anchor, terminating with a point, the bill.
Flush:	Level with.
Flush deck:	A vessel design where no accommodation protrudes above deck, and the deck beams extend full width.
Flushing plug:	A fitting at the lower unit of an outboard motor to enable a hose to be attached for flushing the cooling system.
Flute:	See fluyt.
Flux:	A surface coating medium applied during brazing and welding in order to limit impurities in the hot metal resulting from oxidation.
Fluyt:	Dutch 17th century flat bottomed cargo sailing ship.
Flyboat:	English name for Dutch Vlieboot.
Flying bridge:	A control station on top of a deckhouse that providing high visibility for the helmsman.
Flying jib:	Middle staysail - the outer most foresail set on a sailing ship. Sometimes called a yankee.
F.M.:	Frequency modulation.
F.O.B.	"Freight on board", or that the shipper will put the freight on a truck, but the consignee pays shipping charges.
Fo'csle:	See forecastle.
Fodley hatch:	A hatch around the smokestack.
Foehn:	Air that having risen over a mountain and lost moisture by precipitation descends on the lee side as a dry, warm wind.
Föhn:	The katabatic dry mountain wind that raises air temperatures over the Alps into Central Europe.
Fog:	A dense mass of small water droplets causing restricted visibility. See Advection fog, Radiation fog, and Arctic smoke.

Fog-bound:	A vessel when forced to be idle due to fog.
Fog horn:	A sound signal device.
Following sea:	Seas travelling in the same direction as the vessel.
Foot:	The lower end of a sail or mast.
Footing:	Tack to windward less fine than close hauled to optimise sail thrust and consequent overall speed.
Force Majeure:	A common clause in contracts, exempting the parties for their obligations as a result of conditions beyond their control, such as earthquakes, floods or war.
Force P:	The fore and aft component of vessel's permanent magnetism.
Force Q:	The athwartships component of vessel's permanent magnetism.
Force R:	The component of vessel's permanent magnetism toward or away from the keel.
Ford:	A shallow spot to cross a river.
Fore:	The forward part of a vessel, or structures forward of amidships; fore mast, fore hatch, foredeck. The opposite to aft or after.
Fore-and-aft:	Lying in the lengthwise line of a boat.
Fore-and-aft rig:	The sailing rig, with sails bent to masts, booms, and stays parallel to the centreline of a boat, allowing closer hauled courses to be achieved.
Forecastle:	The raised part of a ship's hull forward. The crews forward accommodation.
Forecastlehead:	The deck over a forecastle.
Forefoot:	The forward bottom of the keel.
Foresail:	A general term for fore and aft sails set ahead of the foremast. The lowest square sail set on the foremast of a sailing ship.
Forestaysail:	The first foresail set on a sailing ship closest to the foremast, inside the fore-topmast staysail, the inner jib, outer jib and middle staysail.
Foreshore:	The zone between high and low tide.
Fore-topmast staysail:	The second foresail set on a sailing ship inside the inner jib, outer jib and middle staysail.
Fore triangle:	The area forward of the forward mast in which sails can be set. A sail that fills that area.
Forge:	A furnace for the purpose of melting metal. To move onward with momentum.
Forged:	Metal hot worked by hammering, bending or pressing.
Former:	A jig to bend or shape timber upon.
Forward:	In front; at the front of the vessel.
Forward perpendicular (FP):	A perpendicular line drawn to the waterline at a point where the foreside of the stem meets the Summer Load Line.
Foul:	To be obstructed, tangled or covered. The opposite of clear.
Foul ground:	Sea bottom littered with obstructions that render anchoring difficult.
Foul hawse:	The two anchor cables crossed over.
Found:	To be equipped. To fit firmly.
Founder:	Sink.
Fox, Uffa:	Renowned British yachtsman and racing dinghy designer.
F.P.:	See forward perpendicular.
Fragata:	Spanish 16th century pinnace used to assist mother ship in battle.

Frame:	Supporting skeleton of a vessel.
Frames:	Either in timber sawn, laminated, bent or in metal riveted or welded, they are the transverse construction members that create the base for the planking or plate to clothe.
Frap:	To lash with many windings of line. To lash lines around a sail to keep it from blowing loose. To lash ropes around a damaged vessel.
Free:	A sailing course that is reaching or running. A vessel is free, when she has a fair wind. A freeing puff allows sheets to be eased, or the sail boat to be pointed higher. When the water has been pumped out of a vessel and she is no longer encumbered.
Freeboard:	The distance from the load waterline to the lowest watertight deck. Colloquially, the distance between the waterline and the deck line.
Freeboard deck:	The uppermost complete deck open to weather and sea, and which has permanent means of closing all openings.
Freeboard depth (D):	The moulded depth measured amidships, from the top of the keel to the top of the freeboard deck beams at side, plus the thickness of the stringer plate if no wooden deck is fitted. If a wooden deck is fitted: $D = \text{Moulded depth} + (T(L - S)) \div L$ T= the mean thickness of exposed deck clear of deck openings, L= the freeboard length, S= total length of superstructures.
Freeboard length (L):	Taken as 96% of total water-line length, situated at 85 % of the least moulded depth or, if greater, as the length from the fore side of the stem to the axis of the rudder stock on that water-line.
Free fall lifeboat:	A lifeboat designed for rapid release (notably in tankers) by being dropped into the water down a launching railway.
Freeing ports:	Openings in the bulwark to allow any water on the deck to flow out quickly.
Freeze:	Change from a liquid to a solid.
Freight:	The cargo carried or the charges assessed for its carriage.
Freighter:	Any vessel carrying freight.
Freight rate:	The charge made for the transportation of freight.
Freight tonnage:	The total cubic capacity of a ship available for the carriage of cargo. When expressed as a weight, 1.13 m ³ are taken as 1 ton.
Frequency modulation:	The varying of frequency to the radio carrier wave to enable encoding for the simulation of audio messages.
Fresh:	A sudden flood.
Freshen:	To increase in strength (wind). To renew or ventilate.
Frigate:	Historically a 28 to 60 gun three masted warship, smaller than a Ship of the Line, designed for cruising. Now used more loosely it is the general purpose warship of modern navies.
Front:	The boundary of two dissimilar parcels of air masses having different characteristics. See Cold, Warm or Occluded front.
Frost:	Ice crystals or frozen dew formed during freezing weather.

F.S.A.:	Formal safety assessment. See SMS.
F.S.W.R.:	Flexible steel wire rope.
F.T.C.:	Radar term, fast time constant, an anti-rain clutter control.
Fucus:	A type of seaweed with leathery, flat fronds.
Fuel injection:	The process where fuel is injected under pressure into the engine cylinder.
Fuel/oil ratio:	The mix of fuel and oil which is used in most two stroke outboard engines.
Fuel tank:	A tank or tanks for the vessels fuel.
Full and by:	Sailing close to the wind but with the sails full.
Fully rigged ship:	Three masted vessel with square sails on all masts.
Funnel:	An external casing through which engine exhaust ducting is routed into the atmosphere.
Furl:	To roll and secure sails on their yard or boom.
Furrings:	Strips of timber applied to frames in order to fair their faces for attachment of cladding.
F.V.	Fishing vessel.
F.W.A.:	Fresh water allowance. The number of millimetres by which the draft changes when a vessel moves from fresh to salt water.
F.W.A.D:	Fresh water arrival draught.
F.W.D.D:	Fresh water departure draught.

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G



G:	Code flag; I require a pilot. By fishing vessel - I am hauling my nets. Sound signal; I intend overtaking on your starboard side.
G flag + three numerals:	Code flags; Longitude.
Gaff:	A spar, to which the head of a mutton head or quadrilateral fore-and-aft sail is bent. A hook on the end of a pole.
Gain:	Radio wave amplification.
Gale:	Wind blowing at over 34 knots and up to 47 knots.
Galizabra:	Spanish 16th century race built galleon used as treasure transport ships from the Spanish New World.
Galleas:	An ancient many oared vessel from the Mediterranean. A lug sail coastal trading vessel with a diminutive after mast.
Galleasse:	A Baltic trading schooner.
Galleon:	Spanish or Portuguese 16th century large and highly decorated merchantman or warship. Used as treasure transport ships from the Spanish New World.
Galley:	A vessel's kitchen. Historically a many oared fighting vessel.
Galliot:	Barbary Corsair's 16th century lateen rigged oared vessel.
Galvanic scale:	The relative electrical activity of differing metals within an electrolyte. Some, being noble will resist corrosion, but others are less noble and more likely to corrode.
Galvanizing:	The process of hot or cold surface coating a metal with a zinc film in

	order to increase its resistance to corrosion.
Galway hooker:	An esteemed but coarsely built small Irish sailing cutter.
Gammoning:	Securing lashings for the inboard end of a bow sprit.
Gangway:	A temporary bridge structure to join ship to shore. That area of a vessel where people pass off and on.
Gantline:	A rope rove through a masthead block used to haul aloft. A line run overboard by a gangway for an emergency line.
Gantry:	An above deck structure typically supporting a lifting apparatus.
Garboard-strake:	The first planks on each side of the keel.
Garvey:	A hard chine hull in which the chines do not join on the stem centreline.
Gas carrier:	A ship designed for the transport of liquefied gases.
Gas free:	A space tested by a gas detector as not containing any hazardous gases or residues.
Gaskets:	Lines or tapes used to secure a sail when it is furled.
Gather way:	To pick up speed.
Gauge:	A marine marker that displays the changing level of the sea water by increments.
G.D.O.P:	See DOP.
Gear:	Rigging or equipment.
Gearbox:	A system of gears which alter the ratio between the revolution of the engine and the propeller shaft. By using a gearbox the engine and the propeller shaft will revolve at different speeds
Gear case:	A housing for the gear train of a motor.
Gel coat:	The surface resin coating of a fibreglass lay-up, containing the colour pigment.
Gel time:	The delay for a resin to solidify after the catalyst has been added.
General arrangement:	A detailed naval architects plan of the layout of a vessel.
Genoa:	A large, overlapping fore sail.
Geodetic datum:	A European and North American uniform system of reference of latitude and longitude for setting out and drawing charts.
Geographic position:	A vessels latitude and longitude, or the position of a celestial body directly overhead expressed in declination and Greenwich hour angle (GHA).
Geostrophic wind:	The wind flowing parallel to straight isobars, where the Pressure Gradient force and Coriolis force are balanced.
G.H.A:	Greenwich hour angle is the celestial longitude measured from Greenwich to 360 degrees westward.
Ghosting:	Sailing slowly in light wind.
G.I.:	Government issued.
Gib:	A metal fitting that holds members in place.
Gig:	A small, oared, fast ship's boat.
Gilguy:	An object for which the correct name is forgotten.
Gill:	The respiratory organ of fishes.
Gill net:	A fishing net that catches fish by their gills.
Gimbals:	A vertically and horizontally hinged mounting in which a compass sits to keep it level.
Girder:	In steel construction, a term for a heavy duty fore and aft placed strengthener.

Girth:	The distance measured on any frame line, from the intersection of the upper deck beam end around the body of the vessel to the corresponding point on the opposite side. The half girth is from the keel centre line to upper deck beam end.
Glacier:	A slowly moving river of ice formed from the accumulation of years of previous snow falls on the mountains above.
Glass:	A barometer.
Glass fibre:	Glass spun into fine flexible threads that can be chopped strand mat or woven. The glass mats are formed in a mould and solidified by the addition of a resin. The process is called Glass Reinforced Plastic (polyester), GRP.
Global radiation:	Short wave radiation reaching the ground from the sun and scattered downwards by clouds, dust particles etc.
Glory hole:	Steward's quarters.
G.M.:	The initial transverse metacentric height, measured in metres from the ships centre of gravity to its metacentre. A large GM indicates a stiff ship.
G.M.D.S.S.:	Global Maritime Distress and Safety System, a Convention of the IMO. A global communications service based upon automated systems, both satellite-based and terrestrial, to provide distress alerting and promulgation of maritime safety information for mariners.
G.N.S.S.:	Global Navigation Satellite System Worldwide position and time determination system that includes one or more satellite constellations and receivers.
G.N.:	Grain capacity.
Go about:	To luff into a wind and turn on the opposite tack.
Goes adrift:	To break loose.
Godown:	Means a warehouse in Eastern ports.
Gooseneck:	A fitting for the lower part of a boom for attaching to the mast.
Goosewing:	To set the mainsail and the foresail on opposite sides of the mast.
Gouge:	A rounded chisel.
Gorge:	A narrow steep sided valley.
G.P.S.:	Global positioning system.
Grab rails:	Rails provided for use as hand holds.
Gradient:	Angle of slope.
Gradient wind:	A wind curving across isobars due to imbalance between the pressure gradient force and Coriolis forces.
Granny knot:	An improperly tied knot, similar to a reef knot.
Grapple:	An anchor with many claws.
Grating:	A perforated covering plate. Used to cover hatches in good weather, to let in light and air or provide a non slip deck surface.
Graveyard watch:	The middle watch.
Graving:	To scrape down the hull of a vessel.
Graving dock:	A dry dock.
Great circle sailing:	A navigational technique of stringing successive rhumb line courses together to approximate a great circle track .
Great circle route:	The shortest course between two points on the surface of a sphere.
Greek winds:	See classical winds.

Greenheart:	Tough American hardwood timber with high marine durability, prized for keels, etc.
Greenhouse effect:	The process by which the Earth's atmosphere limits the reflection of solar heat back into space. The increasing proportion of carbon dioxide in the atmosphere is increasing the Earth's heat retention, and threatening climate change.
Green sea or water:	Solid unbroken water that is shipped aboard.
Greenwich:	The historic London observatory and suburb through which 0° longitude passes.
Gregale:	Strong cool north easterly wind - one of the eight traditional traders winds of the Mediterranean Sea, notably the West Mediterranean.
Gridiron:	A support (usually a bed of logs) for a vessel to take the bottom in large tidal areas to dry out and enable underwater repairs.
Grids:	Strainers around the inlets of sea cocks or propeller thrusters.
Gripe:	The outer forefoot timber fastened to the lower stem. A vessel gripes when her tendency is to come up into the wind.
Gripes:	Lashings to hold a boat down onto the vessels deck.
Grommet:	A brass eye pressed into a sail edge, sack, or canvas to take the wear of a line inserted. An eye formed by opening up a strand.
Gross registered tonnage:	A formula for measure of the internal volume of a vessel (less certain excluded spaces) in volumetric tons where 1 ton = 100 ft ³ .
Gross tonnage:	A measure of the under-deck tonnage with the addition of 'tween-deck spaces and enclosed spaces above the upper deck. Certain spaces are exempted from measurement. The size of most ordinary merchant ships is quoted in terms of gross tonnage. As a measure of the total internal volume of a vessel. GT= k x V K= factor 0.22 - 0.32 V= volume in cubic metres If factor information is unavailable, the following formula will give an approximation to the gross tonnage of an ordinary passenger or cargo ship with medium erections. GT = (L x B x D) ÷ 3.5 tons L = LPP in metres B = Breadth moulded, metres D = Depth moulded to upper deck, metres
Ground:	Applied to the electrical potential of the earth's surface. It can be established by a connecting the earth to a live conductor, including any metal area which forms part of the wetted surface of a vessel's hull that may be live.
Grounding:	An unintentional contact with the seabed.
Ground speed (G.S.):	The speed an aircraft is making relative to the earth's surface.
Ground swell:	A swell that on reaching soundings of half its wavelength, rises and becomes shorter and steeper.
Ground tackle:	Anchors, cables, warps or springs used for securing a vessel at anchor.
Groundways:	Timber baulks that are laid across the keel blocks to support a vessel on a slipway's cradle.
Groupage:	The consolidation of several compatible consignments into a full

	container load.
Group flashing light:	A light showing at regular intervals a group of two or more flashes.
Group occulting light:	A light showing at regular intervals a group of two or more sudden ellipses, the periods of light being longer than the periods of dark.
Groyne:	Walls of stone or timber constructed down into the shallow water at right angles to the foreshore to minimise coastal erosion and sand drift from alongshore currents.
Grown chock:	A triangular bracket or knee that is sawn from the bow of a tree so the grain follows the shape, thus providing the greatest strength.
G.R.P.:	Glass reinforced plastic - fibreglass.
G.R.T.:	Gross registered tonnage.
Guard zone:	A user determined area of the radar screen, within which the presence of an echo causes an alarm to sound.
Gudgeons:	A rudder attachment fitting. A metal eye attached to the transom of boat to take the pintle (pin) of a rudder; alternatively, gudgeon (eye) may be fitted to a rudder to accept the pintle (pin) on a transom.
Guest warp:	A forward leading rope from an accommodation ladder or gangway to assist vessels in coming along side.
Gulf:	A very large area of water contained within a fold of coastline and/or islands.
Gulf Stream:	The Ocean current setting Northerly along the North American East coast then Easterly across the North Atlantic, bringing a temperate climate to Northern Europe from the Caribbean.
Gunkholing:	Cruising in shoal water or overnighting in small coves.
Gunmetal:	Alloy of approximately 88% copper and tin.
Gun port:	Openings in a ship's side through which gun barrels can protrude.
Gunter rig:	Version of gaff rig where the gaff is hoisted tight to the mast to form a mast extension. Often the rig can stow within the boats deck length.
Gunwale:	A support and strong longitudinal along the outer deck edge of a vessel.
Gusset:	A scab that joins the side and bottom frame members at the chine.
Gust:	A sudden, stronger wind of short duration.
Gut:	Narrow deep inlet.
Gutter ledge:	A bar laid across a hatchway to support the hatches.
Gutterway:	A trough along the shelter deck's edge which disposes of runoff from the deck wash.
Guy:	A line leading aft from the outboard end of a spinnaker pole to control its fore-and-aft position. A fore guy controls the up and down movement of the outer end of the pole.
Guyot:	Tablemount.
Gybe:	To turn a sail boat so that the change from port to starboard tack occurs by presenting the vessel's stern to the wind. The momentum of the booms travel from loose sheeted on one side to loose sheeted on the other side can cause damage if poorly executed.
Gybe-ho:	Warning cry of imminent gybe manoeuvre.
Gyro compass:	A spinning compass that always remains pointed in the direction that it was first spun (true north).

Gyroscope:	A spinning wheel. A free gyroscope possesses great directional stability while rotating, and this quality is used as the basis of the gyro compass.
G.Z.:	The length of the righting arm in ship stability calculation.
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H ● ● ● ●	
H:	Code flag; I have a pilot on board. Sound signal; I have a pilot on board, in restricted visibility.
Hachures:	Shading lines on charts to indicate hill slopes.
Haddock:	An edible marine fish; N. Atlantic.
Hague Rules:	Rules identifying the rights and responsibilities of carriers and owners of cargo, published in 1924 following an international convention that was adopted by many maritime nations.
Hague-visby Rules:	Amendments to the Hague Rules published in 1968.
Hail:	Precipitation of falling ice particles (hailstones). To call out to another vessel or person.
Half-breadth plan:	Plan that shows the waterlines of one side of a vessel only.
Half deck:	The cadet's quarters in a merchant ship.
Half mast:	The position of a flag when raised halfway up a mast.
Half model:	A model equivalent to a half-breadth plan that is used in building for the shipwright's visual guidance, or can be dismantled to provide accurate stencilling templates to facilitate drawing a naval architect's lines plan.
Half tide:	Between high and low tide.
Halibut:	A large edible marine flatfish; Atlantic.
Halliards:	See halyards.
Halny:	A destructive Foehn wind of Southern Poland and Slovakia.
Halyards:	Ropes used for hoisting or lowering gaffs and sails. They are attached to the head of sails.
Hamburg Rules:	Rules governing the rights and responsibilities of carrier and cargo interests which may be incorporated into a contract for the carriage of goods by sea either by agreement of the parties or statutorily. These rules were adopted by the United National Convention on the Carriage of Goods by Sea in 1978.
Hamilton jet:	New Zealander and his company that developed the marine jet propulsion unit.
Hamsin:	A hot and dusty North Africa and Arabian wind in March and May.
Hand:	A crewman. To hand a sail; to furl it. Bearing-a-hand; make haste. Lend-a-hand; assist. Hand-over-hand; hauling a rope by alternating use of both hands.
Hand lead:	A hand lead line for determining depth.
Hand rope:	A grab rope.
Hand over:	To transfer responsibility. Contractually to provide exclusive, unencumbered and vacant possession.
Hand taut:	As tight as can be pulled by hand.

Hand the log:	Retrieve an impellor log so that it does not become entangled.
Handsomely:	Slowly and with care.
Hand spike:	A bar used as a lever.
Handy billy:	Double purchase tackles with a short fall. The blocks have hooks or tails for ease of attachment; used for a vang on a boom to tension a sail.
Handymax:	A dry bulk carrier type of less than 50,000 tonnes and 12 mtr draught, popular for its efficiency and flexibility.
Handysize:	A bulk carrier type 40,000-65,000 tonnes.
Hanger bolts:	A screw thread on one end and a nut and bolt thread on the other enables machinery easily to be removed or adjusted when using this bolt.
Hang from the yards:	A historic death sentence; to publicly hang from the yard arms.
Harbour:	Protected waterway suitable for vessel mooring.
Harbour dues:	Charges to vessels entering a harbour, to cover its maintenance.
Harbour master:	An officer that administers the entire shipping movements that take place in and within reach of the port he is responsible for.
Hard patch:	A plate over placed to cover a hole/damage.
Hanks:	Attachments for a sail to run along a stay.
Hard:	Solid area of ground used for parking boats onshore.
Hard chine:	Where the side of a vessel meets the bottom at a sharp angle.
Harden:	To trim sheets of a sail tighter to create a flatter sail.
Hard over:	Extremes of helm position, usually 35 degrees to either side.
Hardwood:	A description applied to woods from deciduous broad-leafed trees (Angiosperms). The term has no reference to the actual hardness of the wood.
Harmattan:	Often dust laden dry winter wind that blows across the Sahara into the Atlantic African coast and Gulf of Guinea.
Harness cask:	A cask for salted meat.
Harpin:	A sheer sawn to shape as opposed to being bent to shape around the frames. The harpin may be only a portion of the sheer (usually the forward section) or the complete sheer.
Harpings:	The fore parts of the wales of a vessel surrounding the bows and thickened to withstand plunging.
Has its cable:	A term used to indicate that the anchor is holding
Hatch:	The cover of a hatchway.
Hatchway:	An opening on the deck.
Haven:	Protected waterway suitable for vessels to enter and moor in all sea conditions.
Hauling part:	The falls on a tackle.
Hawse:	See hawse pipe.
Hawse buckler:	An iron covering plate for a hawse pipe.
Hawser-laid:	A rope constructed with three strands.
Hawse pipe:	A pipe or casting in a vessel's hull through which the anchor cable runs.
Hawser:	A mooring rope or cable.
Hazmat:	Hazardous material.
Hazmat code:	Signage table to assist fire fighting involving hazardous materials.
Hazardous material	A document detailing the nature, labelling, storage and medical

safety data sheet:	treatment applicable to hazardous materials used or stored in the workplace.
H.B.W.:	Radar term, horizontal band width, the width of the radar pulse.
H.C.F.C.:	Hydrochlorofluorocarbons (typically ozone depleting compounds)
H.D.O.P.:	Horizontal dilution of precision-the inaccuracy of a GPS fix due to position lines (satellite derived) at too narrow an angle of intersection. See DOP.
Head:	Peak of a sail to which the halyard is attached. The toilet. High promontory of land.
Heading:	The direction in which a craft is pointed.
Head board:	Stiffener inserted at the head of a mainsail.
Head log:	The vertical stem plate connecting the bottom to deck of a square-stemmed barge.
Head room:	The deck head (roof) height below decks.
Headreach:	See advance.
Head sails:	Sails set forward of the foremast.
Head sea:	Waves coming from the direction that a ship is steaming.
Head-to-wind:	With the bow headed into the wind.
Head-up:	A radar mode in which the heading of the vessel is displayed at the top of the radar screen, also called Ships Head Up.
Headway:	The distance forward that a vessel will travel once propulsion has ceased. See advance.
Heart:	The central filament in a wire rope.
Heat exchanger:	A device for using seawater to cool the oil in a marine engine or for cooling a closed circuit water circulation system in the engine.
Heat wave:	A period of abnormally hot weather.
Heave, heaving:	The movement of a vessel being lifted by a wave or sea.
Heave in:	To pull in.
Heaving line:	A small line thrown first as a messenger for a heavier line later.
Heave short:	When a vessel is pulled up to nearly over her anchor.
Heave taut:	To haul in until strain is apparent.
Heave the lead:	To take a sounding with the hand lead-line.
Heave to:	To stop the vessel making headway in bad weather. To back the foresail so the vessel stands nearly still.
Heavy-lift vessel:	A vessel designed for the loading/discharge and transport of heavy cargoes.
Heavy weather:	Strong wind and rough seas.
Heel:	The after section of the keel. The lower end of the mast or boom. The lower end of the sternpost. The lateral rotation of a vessel under pressure of the wind, wave or turning moment.
Heeling error:	The change in deviation to a vessel's compass when heeled.
Heights:	Charted heights are normally taken from the mean high water spring height (check your chart's datum) to the height of the charted object (the centre of the light with lighthouses)
Helm:	To steer a vessel. The steering machinery of a vessel, i.e.; rudder, tiller, wheel, etc.

	A strong north-easterly Cumbrian wind, (North England).
Helmsman:	The person who steers the boat.
Hemp:	A natural fibre of the hemp plant user for making rope.
Herreshoff, N.G.:	American designer renowned for re-interpreting the lines of fast 19th century Grand Banks fishing schooners into classic racing and cruising yachts.
Herringbone deck:	Opposing diagonally splayed deck planks on each side of the vessels centreline in a decorative pattern.
Hertz (Hz):	The base unit of measure of a radio wave frequency, being one cycle per second (radio wave speed equals 300 million metres per second.) Speed (mtrs per sec) = Frequency (Hz) x Wavelength (mtrs)
Hewed:	Carved or hacked out of timber rather than sawed out.
High efficiency particulate air (H.E.P.A.) filter:	A filter that is at least 99.97% efficient in removing mono-disperse particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100, and P100 filters.
Highest astronomical tide:	The average highest predictable tide in average weather and astronomic conditions.
High latitudes:	Closer to the Pole; generally considered to be the areas of the Earth more than 55 degrees latitude.
High pressure system:	An atmospheric circulation rotating anti-clockwise in the Southern Hemisphere, associated with light winds and fine weather.
High water:	The highest point of the tide in a tidal cycle from low tide to high tide.
High water full and change:	The average interval at any place between the moon's transit and the next following high water on the day of full or new moon.
Hillock:	Small hill.
Hip towing:	A towing operation where the tug secures a barge alongside.
Hire and drive vessel:	A Class 4 vessel for the purposes of NSCV Part B being any vessel that is let for hire or reward, or for any other consideration whatsoever, and that the hirer uses solely for pleasure.
Hitch:	A loop of rope under itself, used for temporary fastening.
H.M.A.S.:	Her Majesties Australian Ship.
Hobbie cat	Brand of catamaran sailing dinghy.
Hog:	A scrubbing brush used to clean a ship's bottom.
Hogged:	A vessel whose keel, as a result of strain, droops at each end.
Hogging:	Longitudinal distortion of the vessel's hull where the ends are deeper in water than the midships region.
Hoist:	To pull up a sail or flag.
Hold:	The interior space or compartment of a vessel in which cargo is carried.
Hold fast:	A mechanism used to secure an object.
Holiday:	An imperfection in cleaning or painting of a surface.
Hollow & round:	The warp of a sawn plank of timber where its section is concave on one side and convex on the other.
Hollow sea:	Very deep and steep seas.
Hollow spar:	Spar made out of two pieces, hollowed on the inside to reduce weight.
Holystone:	A stone block used to scrub a deck.

Home:	The sheets of a sail are said to be home, when the clews are hauled in tight to the sheet blocks. An anchor comes home when it is weighed and secured.
Home port:	Technically the port of registration of a vessel.
H.M.S.:	Her Majesties (war)Ship.
H.M.A.S.:	Her Majesties Australian (war)Ship.
Hood:	A respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.
Hooping-end:	The ends of a strake that fit into the stem or stern post.
Hooker:	Historically a small Dutch fluyt, but used to describe roughly built beamy working craft with tumblehome.
Hopper barge:	A barge which loads material dumped into it by a dredger and discharges the cargo through the bottom.
Hopper tank:	A bulk carrier's lower side ballast tanks, shaped in hopper form.
Horn:	A signalling device. A bar or timber used to lash and support a scaffold plank.
Horn cleat:	A deck fitting with two horizontal horn-shaped arms to which lines are made fast.
Horn timbers:	The twin structural timbers at the base of the hull between the top of the sternpost and the transom. The rudder post slots between them.
Horse :	A raised track way on which the traveller carrying the lower block of the mainsheet tackle slides.
Horse latitudes:	Sub tropical high pressure zones with fickle winds.
Horsepower:	A standard unit of power derived from a carthorse lifting a nominal 550 pound weight up a mine shaft used as an equivalent to specify engines as brake, continuous input, intermittent, output or shaft power capabilities.
Horseshoe plate:	A plate fitted around the rubber stock for the purpose of preventing water from driving up into the rudder trunk.
Hose test:	The method by which a seam or weld is tested for watertightness, by applying a jet of water from a hose from one side, and checks made from the other side for any seepage, or passage of water.
Hot frames:	Frames bent by steaming or boiling.
Hot plug:	A spark plug for low speed operation and heavy duty; the high insulator seat slows the dissipation of heat from the core.
Hounds:	The attachment point on a mast where shrouds are fixed.
Houseboat:	A sheltered waters boat designed for occupation.
Housed:	Secured or stowed.
House flag:	A shipping company's flag flown at the ship's mainmast.
Hovercraft:	An amphibious vessel riding on a cushion of air forced under it.
Hove-to:	A condition the vessel is said to be in when it is heading into the wind and sea but making little or no headway
Hoy:	Small coastal single masted cargo vessel.
H.P.:	See horsepower.
H.S.A.:	Horizontal sextant angle.
Hug:	To stay close to.
Hulk:	A retired vessel often stripped of fittings and used for storage. A large 16th century English cargo ship.

Hull:	The main structure of a vessel.
Hull down:	A vessel below the horizon with only upper works yet in sight.
Hull speed:	The maximum speed to which a hull can be driven before it must climb out of the wave of displaced water that its movement has created. To move beyond that speed requires exceptional power or fine lines suited to planing. Hull speed is limited to a factor of approximately 0.8 to 1.5 times the square root of the waterline length in feet.
Humboldt (Peru) current:	A cool South Pacific current.
Humidity:	The amount of water vapour in the air.
Hummock:	Small hill.
Hurricane:	Northern Hemisphere name for a tropical revolving storm with winds in excess of 64 knots causing widespread devastation and filling air with driving foam and confused percussive seas, also called a typhoon. Called a cyclone in the Southern Hemisphere.
Hurricane deck:	Continuous deck above the main deck at the level of the bulwarks.
H.W.:	High water.
Hydrology:	The study of water.
Hydrofoil:	A wing with the section of a chord immersed in water. A craft that eliminates friction between the water and the hull by rising above the water at speed on hydrofoil shaped support legs.
Hydrography:	The science of measuring the marine world to produce information for the safe passage of navigators.
Hydrometer:	Instrument for measuring specific gravity (density), commonly used to measure electrolyte quality in battery acid or salinity level of dock water prior to loading cargo.
Hydrometeorology:	The study of the atmospheric processes associated with water.
Hydroplane:	A hull designed to progressively rise over the surface of the water and skim the surface. See hydrofoil.
Hydrostatic test:	A pressure test using a static head of water applied to components.
Hygrometer:	Instrument for measuring humidity.
Hypalon:	Superior grade of rubberised fabric used for inflatable craft –see PVC.
Hyperthermia:	Dangerous rise in body heat.
Hypothermia:	Abnormal lowering of internal body temperature (heat loss) from exposure to cold air, wind or water.

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I:	Code flag; I am altering my course to port. Sound signal; I am altering my course to port.
I.A.M.S.A.R.:	The IMO convention for International Aeronautical and Maritime Search and Rescue that replaces the SAR convention and Mersar manual.
I.B.C.:	Intermediate Bulk Container.
Ice-bound:	Trapped in the ice.
Ice breaker:	A vessel equipped with structural reinforcement in order to strengthen it sufficiently to force its way through ice packs.

Ice doubling:	Additional external planking fitted to vessels engaged in ice bound latitudes.
I.F.R.:	Instrument flight rules. Rules governing the procedures for conducting instrument flight. Also a term used by pilots and controllers to indicate type of flight plan.
I.M.C.:	Instrument meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling less than the minima specified for visual meteorological conditions.
I.M.D.G.:	International Dangerous Goods Code, an IMO Convention to assist in safe carriage of dangerous cargos.
Immediately dangerous to life, health (I.D.L.H.):	An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.
I.M.O.:	International Maritime Organization.
Inboard:	Toward the inside of a vessel's structure. A propulsion system with the motor mounted inside the hull, driving the propeller by way of a shaft.
Inboard-outboard:	A propulsion system with the motor mounted near the stern, coupled by a shaft to an external outboard drive unit. The components of this unit are similar to those of an outboard engine drive, having forward and reverse gears, a vertical shaft, and a propeller shaft.
Incertfa:	A SAR uncertainty phase requiring monitoring and intelligence gathering for more task information.
Inclinometer:	A weighted pointer that indicates the degrees of list/heel of a vessel.
Index error:	Small but persistent sextant error when reading the scale of the angle of arc, needing correction for being either on arc (too high) or off arc (too low).
Indicated air speed (I.A.S.):	The aircraft speed shown on the air speed indicator gauge. IAS corrected for instrument error and atmospheric density is equal to true air speed.
Inducement:	Selecting a port of call on the basis of cargo earning potential justifying the routing costs.
Inert gas:	A gas with limited re-activeness such as carbon dioxide, argon, helium or nitrogen.
Inert gas system:	The prevention of explosion in tankers by replacing the cargo on pump out with an inert gas, often the exhaust of the ship's engine.
Inflammable liquids:	Also named flammable liquids - liable to spontaneous combustion which gives off flammable vapours at or below 80 degrees F. For example, ether, ethyl, benzene, gasoline, paints, enamels, etc.
Ingress:	A means or place of going in.
In irons:	Losing momentum while tacking a vessel through the eye of the wind, the vessel can be temporarily immobilised with the sails stalled. She will have to fall off the wind, get the sails full again and with speed on once more attempt to use her forward momentum to swing through the wind.
Initial position error (X):	The estimated probable error of the initially reported position of a SAR incident.

Inland navigation:	Transportation limited to canals, rivers or lakes.
Inland waters:	Defined by NSCV Part D as non-tidal waters that are open to the public for navigation.
Inmarsat:	International Maritime Satellite Organisation. A system of geostationary satellites for worldwide mobile communication services, and which support the Global Maritime Distress and Safety System and other emergency communications systems.
Innage:	An un-common term for tank capacity (depth of liquid) being the opposite from ullage.
Inner bottom:	A vessels double bottom tank top.
Inner jib:	The third foresail set on a sailing ship inside the outer jib and middle staysail.
Inner shell:	A surface inside the vessels outer shell for the purpose of increased watertightness in the case of exterior plate damage.
I.S.A.:	International Standard Atmosphere is the 'average' atmosphere. Pressure levels have a corresponding altitude called 'pressure altitude' and temperature called the 'ISA temperature'.
Inshore:	The coastal waters where most small craft operate, or close to the coastline. In Australian Domestic regulations defined as within 15 nautical miles of shore.
Inshore traffic zone:	A routeing area between a traffic separation zone and the coast reserved for smaller vessels and those that are not through traffic.
In stays:	A sailing vessels position between tacks, when she is headed into the wind.
In stops:	A flag or sail furled and secured with a weak thread or loose hitch so it can be released by a sharp pull.
Insulator:	An electrical insulator is a material which will not carry electric current. Plastics, rubber, glass, and dry air are examples. A wire is a conductor which will carry current, wrapped in an insulator to prevent it touching other wires or earth/frame. Wire insulation must be tough enough for its purpose and environment. The terms conductor and insulator may also be used to show a materials ability to carry or block heat, that is, thermal conductors/insulators.
Intact stability	Reference from the USL code to the stability information applicable to vessels before the deck edge is immersed. The buoyant volume below the waterline.
Intake manifold:	A casting for distributing fuel and air supply to the intake ports of a petrol engine.
Intake rose:	A grid attached to the vessel's hull which covers the inlet for sea water into the cooling systems.
Integrated tow:	Multiple box shaped barges joined head to toe.
Intercept:	Distance between the CP and a point through which the true position line runs.
Intercostals:	A term applying to longitudinals, beams, girders or stiffeners constituted from short lengths between frame to frame or beam to beam.
Interfacing:	Connecting electronic navigation aids so that information is shared between them.

Intermodal:	Cargo movement by interchangeable but compatible transport equipment by air, sea and land.
Intertidal:	Between the high and low water.
Invertebrate:	An animal without a backbone.
Irish pennant:	A rope or yarn hanging untidily aloft.
Iroko:	African straight grained hardwood timber durable for marine use. Unpleasant and acrid sawdust in processing.
Iron bark:	Australian eucalypt timber suitable for marine sheathing for abrasion protection.
Is.:	Island.
Isherwood system:	A construction method using closely spaced longitudinals and heavy floors.
I.S.M. Code:	The IMO Assembly adopted the International Safety Management Code (ISM Code) in 1993.
Isobar:	Points of equal barometric pressure.
Isobathic:	Points of equal depth.
Isogonic lines:	Lines of equal variation
Isometric drawing:	A perspective drawing method where all lines are drawn to their true scale length using a common angle for diagonals, with no vanishing point, but simulating a three dimensional view.
Isophase:	Flashing light of equal light and dark periods.
Isotherm:	Points of equal temperature.
I.S.P.S. Code:	The International Ship and Port Facility Security Code is an amendment to the Safety of Life at Sea (SOLAS) Convention for minimum security arrangements for ships, ports and government agencies.
Isthmus:	A neck of land joining two larger areas of land.
It.:	Islet.

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J



J:	Code flag; I am on fire with dangerous cargo.
Jack:	A national or variation of a national flag.
Jack tar:	Historic name for a sailor.
Jacobs ladder:	Traditionally the ladder to the top of the topgallant mast. A rope ladder with wooden rungs.
Jack staff:	Flagpole at a ship's bow.
Jamb:	The side members of a doorway's frame.
Jarrah:	A durable Australian red hardwood with fire resisting properties.
Jaws:	The sides of the gooseneck at the inner ends of traditional booms or gaffs that hugs the mast. A popular movie.
Jet:	Common name for a water jet propulsion system. Fine pipes in a carburettor for regulating the fuel supply available for vaporising and mixing with air. A high-speed jet and a low-speed jet are normally fitted to performance petrol motors.
Jet stream:	Fast moving high altitude winds that equalise global atmospheric pressure. They can be harbingers of approaching storm systems.
Jettison:	To toss overboard.

Jetty:	A wharf, usually built out on piles perpendicular to the shore.
Jewel-fish:	A red and green tropical cichlid fish.
Jewfish:	Australian fish.
Jews harp:	The ring bolted to the upper end of an anchor shank to attach the securing shackle. A musical instrument plucked while clasped between the teeth.
Jib:	A working foresail attached to the forestay.
Jibboom:	The removable outer section of the bowsprit.
Jib headed:	In a jib head rig, the forestay does not attach to the masthead, but at a point lower on the mast where the top of the jib meets the mast.
Jib headed sail:	A Bermudan sail; a triangular sail with a pointed head.
Jibe:	See gybe.
Jingadah:	Brazilian Indian seagoing bark outrigger.
Joggle:	To adjust to fit.
John dory:	A spotted, flat (laterally) fish; European.
Joinery:	The fine timber constructions of a vessels interior.
Jolly boat:	A small ship's boat.
Jolly roger:	A pirates' flag.
Jonah:	Old Testament character that is caste into the sea by his storm bound shipmates to quell the seas and is swallowed by a whale.
Journal:	The section of a revolving shaft in contact with its bearing.
J.R.C.C.:	Joint rescue coordination centre responsible for both aeronautical and maritime search and rescue incidents.
Jumbo derrick:	A heavy lift capacity derrick.
Jumboising:	The conversion of a ship that increases its size, usually by inserting an additional central section.
Jumper stays:	Wire stay between foremast and funnel.
Jumper struts:	Timber, metal or plastic rigging spreaders that are angled forward to increase mast support transversely and longitudinally. The stays they support are called jumper stays.
Jump ship:	To leave a ship without authority.
Junk:	The trimmings from damaged lengths of rope reused for twine. An oriental sailing vessel with distinctive multi-battened lug sails. Rubbish.
Jury mast:	A temporary mast, rigged to replace one that is damaged or lost.
Jury rig:	Makeshift rig.

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K



K:	Code flag; I wish to communicate with you.
Katabatic wind:	A wind caused by cooled air falling down a hillside.
Kauri:	Easily worked New Zealand timber very durable for marine planking.
K.B.:	The height above the keel of the centre of buoyancy.
Kedge:	A secondary anchor. To kedge is to warp a vessel ahead using the anchor.
Keel:	The longitudinal backbone of a vessel supporting the frames.
Keelboat:	A sailing boat with a permanent keel as opposed to a centreboard.

Keel hauled:	To be dragged by ropes from one side of a vessel, under the keel and then up on the other side.
Keel cooler:	A water cooling system where hot engine water passes through pipes which run under the vessel's keel and are cooled by the sea water.
Keel rider:	A plate running along the top of a vertical bar keel.
Keelson:	In timber construction, a longitudinal board bolted over the keel and floors. In steel construction, a longitudinal girder over the bottom shell plate and keel. If formed in many sections in order to mate with the floors it is called an intercostal(s) keelson.
Keep a sharp look-out:	A heightened requirement to maintain a lookout.
Kelp:	Large seaweed.
Kelpie:	A Scottish water spirit.
Kelvin:	A unit of temperature. Zero Kelvin is called "Absolute Zero". Kelvin = Celsius + 273.2
Kenter shackle:	A detachable shackle link shaped which is used to join two chain links together.
Kentledge:	A pig iron weight used in a vessel inclining test or as permanent ballast.
Kerf:	The slit left in a material after the waste has been removed by the saw's cut.
Ketch:	A two masted fore and aft rigged vessel with the smaller mast aft but stepped forward of the rudder post.
Kevel (caval):	A two armed metal deck fitting around which a vessel's lines are made fast.
Key:	Sand or coral islet.
K.G.:	The height of the vertical centre of gravity above the keel or base line.
KHz.:	Of frequencies; a thousand Hertz.
Kicker:	A fore guy.
Kicking strap	A tackle attaching the fore end of the boom to the heel of the mast, to prevent the boom rising. Sometimes used as a vang, it facilitates bending the boom to control the flatness of the sail, particularly when the sheets are eased.
Kidd, Captain William:	British pirate that was captured and publically hanged.
Killick:	A jury anchor, usually of timber with a boulder for weight.
King billy pine:	Quality Australian timber with high marine durability used for planking.
King plank:	Central deck plank.
King post:	The main central pillared mooring post of a ship often called a sampson post.
King-spoke:	The upper-most spoke of a steering wheel (in ahead position).
Kink:	A twist in a wire or rope.
Knees:	Crooked timbers with two arms used as a bracket in timber construction, such as, to support the deck beams or thwarts.
Knightheads:	The solid mass of half frames in a schooners bow that supports the inboard end of the bowsprit.

Knock:	Shift in the wind direction to head a yacht when close-hauled and the opposite of "lift".
Knocked down:	When a vessel is listed by the wind sufficiently to lie on her side.
Knot:	A unit of speed of one nautical mile per hour.
Knots:	Methods of joining rope that will not come undone but will undo easily.
Knuckle:	Abrupt change in profile of a surface or structure.
Køppen's classification:	Climate classification based on the mean temperature and precipitation while considering vegetation limits.
Kort nozzle:	A propeller housed in a short tube that optimises thrust, minimises transverse thrust and limits fouling by floating ropes or nets.
K.P.I.:	Key performance indicator (critical statistics).
Kraken:	Legendary giant ship attacking squid.
Krill:	Plankton like crustaceans found in the Southern Ocean.
Kuroshio (Japan) Current:	A warm North Pacific current setting northerly along the far East Asian coast and offshore islands.
Kymograph:	An instrument that records pressure variations of sound waves.

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L



L:	Code flag; You should stop your vessel instantly.
L flag + four numerals:	Code flags; Latitude
Labour:	When a ship is straining under the force of heavy weather.
Labrador current:	A cool North Atlantic current setting Southerly along the Eastern far North American coastline, associated with fog and icebergs.
Lacing:	A line used to lash a sail to a spar.
Lag:	To wrap around (with an insulating barrier for instance) To be later. A work shy person.
Lag bolt:	A screw with a hex or square head.
Lagoon:	A small lake periodically breached by the sea or larger lake.
Larboard:	Historic name for the port side of a vessel.
Laid-up:	Not in service.
Laid-up tonnage:	Vessels not in active service.
Lame duck:	A disabled vessel being an easy target.
Laminar flow:	The smooth flow of a medium (water or air) initially slipping over the forward sections of a hull or wing (hydrofoil or aerofoil). In the after sections of the hull the medium typically breaks away as turbulent flow (eddies) creating drag.
Laminate:	A structure built of successive layers, i.e.; glass fibre, plywood.
Lanby:	A very large offshore light buoy.
Land breeze:	A local offshore night wind caused by a cooling land (falling air) and a relatively warmer sea (rising air). See sea breeze.
Land-fall:	Approaching land from the sea. A good landfall is when a vessel arrives on course.
Landing:	A place suitable for a vessel to engage in disembarkation.
Landing craft:	A flat bottomed vessel designed to be driven onto a beach in order to unload its cargo.

Landing strake:	The strake by the gunwale.
Landlubber:	The seaman's term for a landsman.
Lane metre:	A 1.0 metre in length x 2.0 metre in width area of deck (linear metre) used in assessing capacity of Ro/Ro ships.
Lang's lay:	In this type of lay of rope or wire the strands of the rope are laid in the same direction as the yarns in the strand.
La Niña:	See El Niño.
Lanyard:	A line made fast to an object to hold or secure it.
Lap or overlap:	The distance that one component overlays another, typically with planking.
Lap strake:	Clinker planking, in which planks overlap at the edges, as distinguished from carvel (smooth).
Larch:	European softwood timber that bends and steams well with high marine durability, uses traditionally include clinker planking.
Lash:	Secure with a line.
L.A.S.H.:	A lighter aboard ship. Lighters or barges are loaded and transported with such a ship.
L.A.T.:	Lowest astronomical tide under any predictable astronomical or meteorological conditions.
Latitude (Lat.):	A small circle measured as the angle between a position on the earth's surface, the centre of the earth and the pole. Parallels of latitudes are consequently north or south of the equator (0°) and are used to measure the distance from it.
Launch:	To push a vessel into the water. A small power vessel.
Law of the sea:	An IMO Convention to standardise International maritime law.
Lay	The manner in which a rope is constructed; i.e.; right hand twist, left hand twist, hawser, shroud, plaited etc. The direction or position of; "to lay ahead".
Lay aloft:	An order to crew to ascend the rigging.
Laying out:	Transcribing from plans or patterns the marks required for shaping a component.
Laytime:	Time allowed to load and/or discharge the cargo. It is expressed as a number of days or hours or as a number of tons per day.
Lazarette:	The space above the afterpeak between decks.
Laser:	Mini class of cat rigged sailing dinghy.
Lazy guy:	A rope that prevents a boom from uncontrolled swinging.
L.B.P.:	Length Between Perpendiculars. The length between both the fore and aft perpendiculars, measured along the Summer Load Line.
L.C.B.:	Longitudinal Centre of Buoyancy. The point, on the fore and aft line of a vessel at which the upward force of buoyancy acts. It is measured from amidships either forward or aft.
L.C.C.:	Large crude carrier.
L.C.D.:	Liquid crystal display, an electronic component whose colour can be altered by stimulating it with a voltage.
L.C.F.:	Longitudinal Centre of Flotation. The point about which the vessel tips and trims. It can be referred to as the tipping centre. It is the centroid (the centre of gravity of the waterplane area).
L.C.G.:	Longitudinal Centre of Gravity. The longitudinal point through which

	the weight of the vessel is considered to act.
L.C.L.:	Less than Container Load - that is inefficient to fill a shipping container. It is grouped with other consignments for the same destination at a container freight station.
L.D.L.:	Limiting danger line.
Lead:	The distance between the Centre of Lateral Resistance and the sails of the vessel's Centre of Effort. (pronounced "leed".)
Leading edge:	The forward edge of an object. A sail's leading edge is its luff.
Leading marks:	Objects in transit that mark an entry channel or safe passage.
Lead lights:	Navigational lights placed in transit to mark an entry channel.
Leads in line:	Navigational marks placed in transit that mark a charted feature.
League:	Old English measure of three sea miles of 6,000 feet.
Learners guides:	See workbooks.
Leathers:	Pieces of leather that are stitched and/or tacked around an oar to protect it where it rides in the oar lock. They usually have a stop or "button" to keep the oar from sliding out of the oar lock when left unattended. The button can be a thin strip of leather or knotted twine that is tacked and/or glued in place on top of the leather at the handle end of the oar.
Ledges:	Small timber chocks fitted under the deck that space the beams.
Lee:	The opposite side of a vessel or area from where the wind is coming from. Hence the windward side is called the weather side, and the sheltered side, the leeward.
Leeboard:	These are paddle-shaped boards installed on the outside of the gunwale on each side of a sailboat. The board on the "lee" side is lowered to prevent leeway. Single leeboards are used as a way of converting a non-sailing boat to sail without the necessity of cutting holes in the hull or installing permanent outside keels.
Leech:	Edge of sail between clew and head.
Lee helm:	A tendency to bear off the wind, when the helm must be kept to leeward to hold course. It is a condition of poor balance, caused by having the centre of effort forward of the centre of lateral resistance. Raking the mast tends to correct the trouble.
Lee-ho:	Warning cry of imminent tacking manoeuvre.
Lee side:	The side opposite to that which the wind is blowing upon.
Lee shore:	The shore upon which the wind is blowing. Under the lee of anything, is when you have that between you and the wind. By the lee. A vessel, going free, when she has fallen off so much as to bring the wind around her stern, and to take her sails aback on the other side.
Leech:	After edge of a sail, from head to clew.
Leeway:	The deflection from a vessels intended course due to drifting to leeward from windage.
Leeward:	The lee side. In a direction opposite to that from which the wind blows, which is called windward. The opposite of lee is weather, and of leeward is windward.
Length between perpendiculars (LPP):	This is the horizontal distance between the forward and after perpendiculars.
Length on the	The length, as measured on the water-line of the ship when floating

designed load water-line (LWL):	in still water in the loaded, or designed, condition.
Length overall (LOA):	This is the length measured from the extreme point forward to the extreme point aft.
Let go:	To drop the anchor.
Letter-of-marque:	Also letter-of-mart. A vessel authorised by a nation state to attack those of another.
Levante:	Easterly wind - one of the eight traditional traders winds of the Mediterranean Sea, notably in the west, and most impressive as a cloud generator over the Rock of Gibraltar.
Levee:	A large river embankment.
Libeccio:	South westerly wind - one of the eight traditional traders winds of the Mediterranean Sea – persistent in Northern Corsica.
Liberty:	Shore leave.
Libonotos:	See classical winds.
Lifeboat:	A rigid-hulled survival craft.
Lifebuoys:	Buoyant rings that can support 4 persons in water.
Lifejacket:	A buoyant life preserver that is worn. Personal floatation devices are graded PFD 1, (required for commercial vessels), PFD 2 and PFD 3.
Lifelights:	See buoyant lights.
Lifelines:	Lines or wires fitted around a vessel or stanchions to keep the crew from falling overboard in bad weather.
Life raft:	An inflatable survival device.
Lift:	A change in wind direction enabling a yacht to point in a direction that was previously too close hauled. A rope or tackle from a boom to the mast to support and move it for cargo working.
Lift a template:	To construct a template based on measures taken from an existing ship's structure.
Lifting gear:	Lifting and cargo equipment - cranes, derricks, tackles, strops, ropes, wires, shackles and hooks.
Lights:	A general term for the night illuminations of vessels/navigational aids whose specification is found in collision regulations, lists of lights and port information. A thick plate of glass fitted in a vessel's structure to provide a watertight light ingress.
Lightening:	To remove weight.
Lightening holes:	Holes cut into steel vessel's construction plating to reduce weight.
Lightning:	The sudden electrical discharge caused when the negative charge in the lower part of the cloud and the positive charge in the upper part become so great that a discharge takes place.
Lighter:	A flat bottomed barge used to transport goods from a ship to shore and back.
Lightship:	The weight of the hull, engines and spare parts only. A ship that is used as a lighthouse.
Lightship displacement:	The extreme displacement of the ship when fully equipped and ready to proceed to sea, but with no crew, passengers, stores, fuel, water, or cargo on board. The boilers are filled with water to their

	working level and lube oil is to levels.
Lignum vitae:	Very dense oily African hardwood used for propeller shaft bearings.
Lift strakes:	Spray rails. Longitudinal members running fore and aft on the outside bottom of the hull. The purpose is to stabilize and create lift on a deep vee hull when under power.
Limb:	Upper or lower edge of the sun or moon.
Limbers, or Limber holes:	Gaps or holes at the bottom of the floor timbers by the keel that allow water to flow fore-and-aft.
Line:	A light rope.
Line haul:	The movement of freight over a trade route from one port to another.
Liner:	Short for passenger liner (ship) working a scheduled ocean route.
Lines plan:	Ship's plan drawings of waterlines, buttock lines and section lines shown in profile, plan and body (end) views. An additional offset table is often included to enable scaling up for taking off full size templates in the process of lofting.
Line squall:	A brief powerful storm that is heralded by a low rolling cloud stretching across the horizon.
Linkage:	A connecting mechanism.
Lips:	See classical winds.
List:	The inclination of a vessel to one side due to its condition of loading.
Littoral:	Regions lying alongside the coast.
Lizard:	A length of rope with a thimble at one end.
L.K.P.:	Last known position witnessed, reported, or computed DR position of a distressed craft.
L.N.G. carrier:	Liquefied natural gas carrier.
Load displacement:	The total weight of the vessel when floating at the designed summer draft.
Load line:	A hull marking indicating the maximum depth to which a vessel can be loaded also called the Plimsoll mark.
Load line marks:	Marks on a ship's side showing the allowable freeboard for specified ocean area and season of the year.
Load water line:	The plan water line when the ship is loaded.
L.O.A.:	Length overall of a vessel.
Lobe:	The area of a radiation pattern of a radar pulse, between full power and half power points.
Lobster:	A marine crustacean with pincer-like claws. Historical slang for red coated Imperial soldiers.
Local hour angle:	The angle between the chosen position and the geographic position. Measured from the CP to GP in a westward direction.
L.O.P.:	Line of position.
Loch:	Scottish sea lake.
Lock:	A gated water enclosure enabling vessels to pass up or down a canal that has several levels of water containment.
Locker:	A cupboard, chest or box used for stowage. The anchor chain cables are stowed in the chain-locker.
Lockerman:	A steward in charge of (silver, cruet, fruit) lockers.
Locust wood:	Quality American hardwood timber with high marine durability,

	treenails.
Lofting:	Lofting is the process of drawing the hull lines full size from the designer's scale drawings. The intersections of the contours of various horizontal and vertical sections are measured from an imaginary "base line" using an architect's scale. These junctions are then laid out, point by point, in their full size. Because it is difficult to take accurate dimensions from a small drawing, it is necessary to adjust these lines to assure that they are "fair". A listing of these points is called a table of offsets. It takes a lot of space to loft.
Log:	An instrument for measuring the speed of a vessel. Timber girder to support tanks or engines.
Log-book:	A journal that records the daily positions of the vessel, winds, weather, courses, distances and noteworthy occurrences.
Loll:	Neutral equilibrium of an overloaded vessel whose centre of gravity is at or near its metacentre.
Lo-lo:	Lift on-lift-off ship where cargo is handled by cranes.
Longboat:	The largest of a ship's boats.
Longitude:	Large circles that are described as the angle between Greenwich, the centre of the earth and the position of the observer at a place on the earth's surface. They are measured as the angular distance East or West of the prime longitude at Greenwich (0°).
Longitudinals:	In steel construction, a term for light duty fore/aft strengtheners. Those hull framing members that run the length of the boat (i.e. chine, keel, sheer, battens).
Longitudinal centre of floatation:	See LCF.
Longliner:	A vessel engaged in fishing with a string of hooks several miles long, so as to restrict the vessel's manoeuvrability.
Long ship:	A historic Viking oared, sailing ship.
Longshoreman:	Stevedore- Individual employed to load and unload ships.
Long ton:	2,240 pounds in weight. Metric tons (2,250 lbs).
Lookout:	The requirement to avoid collision by watching at all times by sight, sound or appropriate electronic means for navigational hazards.
Loom:	The section of an oar between handhold and blade. To partially appear, as in fog or the glow of a lighthouse from below the horizon.
Loose:	To undo.
Loose-footed:	A sail that is only secured at each end of its foot.
L.O.P:	Line of position.
Lough:	Irish loch.
Lower topsail:	The square sail set above the course sails (lowest) of a sailing ship, usually paired with an upper topsail.
Lower unit:	The part of an outboard engine below the power head.
Lowest astronomical tide:	See LAT.
Low latitudes:	Closer to the Equator; generally considered to be the areas of the Earth less than 30 degrees latitude.
Low pressure:	Atmospheric circulations rotating clockwise in the southern hemisphere generally associated with unsettled weather.

Low water:	Low tide.
Loxodrome:	Rhumb line.
L.P.G:	Liquid petroleum gas (LPG) is an alternative fuel to diesel or petrol.
L.P.G. carrier:	A ship designed to carry LPG.
L.P.P.:	See Length between perpendiculars.
L.S.A.:	Life saving appliance.
Lt.:	Light.
Lubber line:	The heading marker on a compass.
Lubrication:	The use of an agent such as oil, to prevent contact between surfaces; reduce friction, wear and heat; and remove foreign materials (metal shavings).
Luff:	The mast facing edge of fore-and-aft sails between head and tack. To put the helm so as to bring the ship up nearer to the wind.
Luffing:	The symptom of the sail shaking through improper trimming or pointing too high.
Luff rope:	Reinforcement rope sewn into luff edge of sail.
Lumber:	Timber.
Lurch:	The sudden heave of a vessel.
L.U.T.:	Local user terminal earth receiving station that receives beacon signals relayed by Cospas-Sarsat satellites, processes them to determine the location of the beacons, and forwards the signals.
Lute:	To apply luting.
Luting:	Glue, varnish or waterproof barrier applied between joining pieces of timber in a construction.
L.W.:	Low water.
L.W.L.:	Length on the Water Line; the designed waterline for the vessel at her loaded displacement, more accurately termed the load water line or summer load line. The later is marked with the loadline marks (plimsoll line) to ensure compliant loading for the intended sea area of the passage.
Lyle gun:	A device to fire a life line to a ship in distress.

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M

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M:	Code flag; My vessel is stopped and making no way. Sound signal; My vessel is stopped and making no way, in restricted visibility.
Mackerel:	Brightly coloured and oily schooling fish.
Madden-Julian Oscillation:	See MJO.
Made fast:	Secured.
Madrepore:	Common perforated coral.
Magazine:	A munitions storage compartment.
Magnetic anomaly:	Localised unusual magnetic error.
Magnetic dip:	The tendency for a compass needle to dip vertically as it points directly at the distant pole rather than horizontally at a tangent to the earth's circumference. See angle of dip.
Magnetic equator:	The regions where a compass needle lies horizontal.
Magneto:	An electro-mechanical device that produces high tension from

	revolving coils in the field of a powerful magnet, used to power the spark plugs in a simple petrol internal combustion engine.
Magnetron:	In a radar it acts as an electronic valve, using a powerful permanent magnet to produce pulses of microwaves.
Magnitude:	The brightness of a celestial body- lowest numbers are brightest.
Mahogany:	Generic term for many varieties of South American decorative timbers with good workability and marine durability. See Brazilian mahogany.
Main beam:	The main longitudinal deck beam on a ship..
Main body:	The bare hull of a vessel.
Main deck:	The principal deck of a vessel.
Main mast:	The principal mast of a vessel.
Main sail:	In all vessels is applied to the principal sail. The lowest square sail set on the mainmast of a sailing ship.
Main saloon:	The principal living area of a vessel.
Main sheet:	The rope controlling the main boom.
Mainsheet horse:	An arched rod that carries the lower mainsheet block clear of the deck and steering gear, allowing it to slide from windward to leeward when tacking.
Make colours:	Hoisting the ensign at sunrise.
Make fast:	To secure a line.
Make for:	To head in the direction of.
Make the course good:	To steer accurately.
Make land:	To reach a landfall.
Make sail:	To set sail.
Make water:	To leak.
Malacca max	Maximum draught of cargo vessel that can transit the Malacca Straits.
Mallet:	A wooden hammer.
Mammal:	A warm-blooded vertebrates producing milk to feed their young.
Manifest:	A document listing the ship's cargo using the bills of lading.
Manifold:	Manifold (bilge). A valve chest connecting suction or discharge pipes to/from spaces and pumps to enable fluid transfers. Manifold (engine). A multi branched pipe connecting several cylinder's discharge ports to the main exhaust pipe.
Manila:	The fibres of the abaca plant used to make rope.
Manganese bronze:	Copper and zinc alloy with traces of aluminium and manganese.
Manger:	The perforated bottom of the chain locker allowing water to flow to the drains.
Mangroves:	Tropical small tree growing on mud and inter-tidal flats.
Manhole:	An opening for a man to gain entry into a tank.
Manning:	The operational crew of a vessel.
Man-of war:	A warship. A type of jelly fish.
Manropes:	Ropes used as handrails for gangways or stairs.
Margin line:	An imaginary line drawn at least 76 mm below the bulkhead deck. It provides a margin of safety to the designer's calculations.
Margin plate:	Strengthening member in steel construction at the turn of bilge.

Margin plank:	Edging plank around deck openings
Marina:	Facility to berth many small vessels.
Marine borers:	Salt water organisms such as the teredo worm, which attack unprotected planking by boring into it causing deterioration and structural collapse.
Marine incident:	Where there is a risk or potential risk to life and property from some event that has caused concern for the safety of the Master and those on board, (with due regard to the operational status of the incident vessel)
Marine notices:	Advice on matters of navigation and safety issued by AMSA.
Marine orders:	Orders (regulations) made under the Australian Navigation Act 2012 as regulated by AMSA.
Marine Safety (Domestic Commercial Vessels) Law Act 2012:	Supersedes State based commercial vessel regulation in Australia.
Mark:	Distinctive object used for navigation.
Marl:	To twist a small rope around another as a protective coating. Crumbly mix of sand and clay.
Marline:	Small two-stranded string, used for seizing and whipping. A finer kind of spun yarn.
Marlin spike:	A pin, sharpened at one end, used to open shackles.
Maroon:	To put a person ashore without hope of returning. An explosive star shell distress signal.
MARPOL:	Convention of the IMO to limit pollution at sea.
Marry:	To join
Marsh:	Wet area of country.
Martingale:	An iron spar below the bow sprit, sometimes shaped as a spear or harpoon, that acts as a tensioning spreader for the bow sprit to stem supporting chain.
Mary Celeste:	19 th century ship found mysteriously abandoned but sailing onward near the Azores.
Mast:	A spar set vertically on the deck, to support rigging, yards and sails.
Mast butt:	The bottom of a mast.
Mast step:	The strengthening structure on the keelson of boat on which the heel of a mast is fitted. See tabernacle.
Mast table:	A support structure around a mast for the cargo boom pivots.
Master:	The title of the captain.
Master-at-arms:	Chief petty officer responsible for discipline.
Master mariner:	A seaman certified competent to be a captain.
Masthead:	The top of a mast.
Masthead light:	A white light visible 112.5° each side of dead ahead carried by a power vessel to indicate that it is underway and making way.
Masthead rig:	Where headsails hoist to the masthead.
Mast partners:	Supporting deck beams housing a mast.
Mast step:	Securing point at bottom of mast.
Mast thwart:	A thwart through which the mast is secured.
Mate:	An assistant to the captain.

Mats:	Wooden support framework constructed on deck in order to distribute the weight of heavy loads.
Maximum use concentration (M.U.C.):	The maximum air-borne contaminant concentration that a particular respirator may be used for protection against.
May:	A legal term requiring voluntary compliance, usually qualified by a stated circumstance or limiting condition – see shall and should.
Mayday:	The international radiotelephony distress signal, repeated three times.
Mayflower:	An early transport ship carrying puritans from England to a new colony in the Americas.
M.C.A.:	Maritime Coastguard Agency (of United Kingdom).
M.C.C.:	Mission control centre of the Cospas-Sarsat system that accepts alert messages from the local user terminals (LUTs) and other mission control centres to distribute to the appropriate rescue coordination centres or other search and rescue points of contact.
M.C.T. 1cm:	The moment required to cause a one centimetre change of trim in the vessel.
Mean:	The average.
Mean high water:	The average high water level.
Measured length:	Typically it is the distance from the fore part of the hull to the after part of the hull, taken at the upperside of the uppermost, weathertight deck, or, in the case of open vessels, at the height of the gunwale. Used as one of the primary determinants for a vessel's manning requirements.
Median:	The middle value.
Mediterranean winds:	The eight winds providing traditional sail traders routes across the sea, being: Northerly – Tramontane North easterly – Gregale Easterly – Levante South easterly – Sirocco Southerly – Ostro South westerly – Libeccio Westerly – Ponente North westerly – Mistral
Medivac:	Evacuation of a person from a location for medical reasons.
Medonca, Christophe:	Portuguese explorer of Java la Grande in 16 th century, claimed by some to be the East and South Coast of Australia.
Medusa:	A jellyfish.
Meltemi:	A northerly wind blowing off Macedonia and into the Ionian Sea.
Menhaden:	A herring-like fish; Atlantic.
Meranti:	Asian timber with good workability. Increasingly fast grown plantation stock requires careful selection to find that suitable for marine durability.
Merbau:	High quality South American timber with good workability and high marine durability.
Mercantile marine:	Merchant marine; commercial shipping.
Mercator sailing:	The navigational technique accurate for short ocean passages

	(approximately 200nm). Courses, distances run, difference/distance in latitude (North–South) and departure (East–West distance covered) can be found by entering nautical tables and/or calculating spherical trigonometry. The difference in longitude resultant from a change in position is calculated by the tables of meridional parts (the varying distance of per degree of East-West meridians dependant on the latitude). For instance, a degree of longitude at the equator is approximately 60nm but narrow to 0 nm at the poles.
Varying distance Merchantman:	Trading vessel.
Merchant navy:	A nation's commercial ships.
Meridian:	A great circle that is also a longitude. (passes through the Poles)
Meridian altitude:	The greatest altitude of a celestial body when crossing the same meridian as the observer.
Mermaid:	A mythical half-woman sea creature.
MERSAR:	Merchant Ship Search & Rescue (manual) now superseded by IAMSAR, International Aeronautical and Maritime Search & Rescue (manual).An Australia version is published as NATSAR, National Search & Rescue (manual).
Messenger:	A small line used to heave in a heavier one.
Mess gear:	Eating utensils.
Messman:	A steward who serves meals to the crew.
Mess room:	A crew's dining area.
Metacentre (M):	In the case of a vessel's change in heel (transverse) or change in trim (longitudinal), the virtual centre point from which the vessel with its centre of buoyancy (B) can be considered to rotate. (for initial angles of inclination only).
Metacentric height (GM):	The position of M being a large distance above G (centre of gravity) is an indication of the GZ (righting lever) that a vessel will develop on heel and hence its potential stability.
Meteograms:	Weather outlooks presented as a graph.
Meteorological visibility:	The maximum range at which a large object, such as landmasses or mountains, can be seen. Also referred to as Meteorological Range.
M.F./H.F.:	Medium/high frequency radio transmission.
MHz.:	Of frequencies; a thousand Kilohertz or a million Hertz.
Middle body:	The sections around midships.
Middle staysail:	Flying jib - the outer most foresail set on a sailing ship.
Mid latitudes:	The areas between 30 degrees and 55 degrees latitude.
Middle latitude sailing:	A navigation approximation averaging of difference in latitude from one waypoint to another to convert a departure to difference in longitude.
Midships:	The middle section of a vessel.
Midship section:	The transverse section of the ship amidships. Amidships may be midway between the ends of the LWL.
Midship section area coefficient (CM):	The ratio of the immersed area of the midship section to the area of the circumscribing rectangle having a breadth equal to the breadth of the ship and a depth equal to the draught. $CM = AM \div (B \times T)$

	CM values range from about 0.85 for fast ships to 0.99 for slow ships.
Mile:	A nautical mile is equivalent to 1 minute of latitude, 6080 feet or 1853.18 mtrs.
Minesweeper:	Vessel designed to clear an area of sea mines, usually constructed of timber or GRP to overcome magnetic detonators.
Mirage:	An optical illusion often appearing as low lying water.
Mirror dinghy:	Small easily managed sailing boat designed for safety, simplicity and cheapness.
Miss-stays:	Fail to complete a tacking manoeuvre successfully.
Mist:	Light fog, with visibility more than a kilometre.
Mistral:	Strong, cold and often persistent north westerly wind, blowing down the Southern France river valleys and into the Mediterranean Sea. One of the eight trading winds of the Mediterranean Sea.
Mizzen:	A sail set on the mizzen mast, the aftermost mast of a sailing vessel.
Mizzen staysail:	A fore and aft sail hoisted on the mizzen. It is tacked down forward, overlapping the mainsail, to the weather side of the deck and sheeted to the end of the mizzen boom. It must to be lowered when tacking or gybing.
M.J.O.:	The Madden-Julian Oscillation is a 30-50 day wave of periodic rainfall enhancement over the Australian tropics signalling a burst in monsoon activity during the tropical wet season.
M.O.B.:	Man overboard, revised as P.O.B – person overboard.
Modulator:	A radar component that controls the magnetron, causing it to fire at full power, continue for the pulse duration, and cease instantly.
Module workbook:	A student textbook.
Mole:	A breakwater and landing pier.
Mollusc:	An invertebrate with a soft body and hard external shell; snails, oysters, mussels, etc.
Monkeys fist:	A rope terminal on the end of a heaving line to make it heavier.
Monkey island:	A flying bridge over a pilothouse.
Monkey tail:	A curved bar used as an attachment for the rubber pendants.
Monocoque:	A structure in which the outer covering (planking) carries all or a major part of the stresses.
Monohedron:	From the Greek word hedron (a geometrical figure having any number of planes). The theoretical ideal shape for planing over the water surface is one of constant (mono) section. Thus monohedron describes a hull that has a running surface of constant section; in practice the sections may not be exactly the same.
Monsoon:	Seasonal winds (December to March) that create an inflow of moisture-laden winds from the Indian Ocean and southern Asian waters producing convective cloud and heavy rainfall over northern Australia. The North-Queensland coast also receives rainfall during the cooler months.
Moonraker:	Smuggler.
Moon sail:	The sail above the highest square sail yard of an extreme clipper, with the point uppermost. See raffee.
Moor:	To secure a vessel to the shore or sea bottom.

Mooring:	The anchor, chain, buoy and pennant by which a boat is permanently anchored.
Mooring lines:	Lines used to secure the vessel to the jetty or another vessel etc.
Moraine:	The debris of gravel and rock deposited by a glacier.
Morass:	Bog or extreme marsh.
Mother Carey's chickens:	A stormy petrel (sea bird) foretelling bad weather and bad luck.
Motor sailor:	A sailboat, with minimal rig and powerful motor, ideal as a live aboard.
Motor well:	A watertight box in which an outboard motor is fitted.
Moulded base line:	The lowest extremity of the moulded surface of the ship. At the point where this line cuts the midship section a horizontal line is drawn, and it is this line which acts as the datum for all hydrostatic calculations. This line may, or may not, be parallel to the LWL depending on the ship type.
Moulded breadth:	The internal extreme breadth of a vessel amidships, from inside the plank, plate of ceiling.
Moulded depth:	The internal extreme height of a vessel from the top of the keel to the underside of the deck.
Moulds:	The patterns taken from a vessel's lofted plans used as templates to shape its component and structures.
Moult:	To shed feathers.
Mouse:	To secure the open mouth of a hook with yarn or wire, or seize the pin of a shackle so it will not come undone.
Morse code:	Signalling system of dots and dashes.
Mozambique current:	Warm ocean current setting southerly along the east African southern coastline east of Mozambique.
M.S.D.S.:	Material safety data sheet –information sheet for the safe use and stowage of a material.
M.S.I.:	Marine safety inspector.
M.S.L.:	Mean sea level. Maximum securing load.
M.V.:	Motor vessel
M.T.B.:	Motor torpedo boat- a light, unarmoured, fast attack vessel.
M.T.C. 1cm:	The moment required to cause a one centimetre change of trim in the vessel.
Mud:	Sediment with grains of less than 0.06 mm diameter.
Mud scow:	A boat used to transport the mud from a dredge.
Multi-chine:	A many chined hull shape. See chine.
Mullion:	The vertical divider in the lights of a split window.
Mushroom anchor:	A mushroom shaped anchor without a stock.

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N



N:	Code flag; No (negative).
Na-ak wala:	Large seagoing Polynesian canoe.
Nail sickness:	Progressive working of the holes around nails in timber plank which makes them loose and leaky.
Nak:	Banks Island canoe.

Nantucket sleigh ride:	A term Nantucket whalers' used to describe a whaleboat's wild tow by the harpooned whale until it tired and was subdued.
Narrows:	Narrow part of a channel.
Narrow Seas:	The English Channel and Irish Sea.
Narwhal:	A small Arctic whale with a spiral tusk.
National Law:	Casual term for the Australian Marine Safety (Domestic Commercial Vessels) Law Act 2012 that supersedes State based commercial vessel regulation.
Nautical mile (nm):	The International nautical mile of 1852 metres (6076.12 ft) being the average linear distance over 1 minute of latitude arc at 45° latitude at sea level.
Nautical twilight:	The period between the end of civil twilight and the time when the sun's centre is at 12° below the horizon in the evening, and the period between the time when the sun's centre is at 12° below the horizon and the beginning of civil twilight in the morning.
Naval architecture:	The designing of ships by naval architects.
Naval brass:	Alloy of approximately 60% copper, 39% zinc. See Admiralty brass.
Navicular:	Boat-shaped.
Navigation:	The exercise of moving a vessel from one position to another. The science of determining a vessels position and art of planning and plotting a safe passage to another position, with due consideration of the many variables.
Navigation charts:	A nautical chart is a graphic portrayal of the marine environment, used to lay out courses and navigate by the safest route.
Navigational hazards:	Include partially submerged wrecks, containers, floating debris and reefs
Navigation lights:	The lights that a vessel under way must exhibit between sunset and sunrise so that she may be identified.
Navarea:	One of 16 areas into which the International Maritime Organization divides the world's oceans for dissemination of navigation and meteorological warnings.
Navtex:	Telegraphy system for transmission of maritime safety information, navigation and meteorological warnings and urgent information to ships not supported in Australia.
Navy:	A state's ships of war, their equipment, supply and manning.
N.B.D.P.:	Narrow-Band Direct Printing. Automated telegraphy, as used by the NAVTEX system and telex-over radio.
NC:	International code - Negative Affirmative – signifies distress.
Neaped:	See be-neaped
Neap tides:	The lowest range of tides that occur when the sun and moon are in opposition (the moon's quadrature).
Near Coastal:	A non specific term. Used in Australian National Domestic Vessel Law to describe a claimed jurisdiction, the Exclusive Economic Zone, within 200nm.
Negative pressure respirator (tight fitting):	A respirator in which the air pressure inside the face piece is negative during inhalation with respect to the ambient air pressure outside the respirator.
Negative surge:	Lower than predicted tide.
Nelson, Lord Horatio:	Inspirational 18 -19 th century British naval warrior.

Nesting:	Cargo that stacks.
Non-bulk cargo:	Cargo such as timber, steel, and vehicles.
Neptune:	Ancient Roman God of the sea.
Net or register tonnage:	NRT- a ship's gross tonnage after approved deductions, i.e. non freight earning spaces. A register ton represents 100 cubic feet.
Névé:	The area of accumulation of snow on the mountain tops that will form the ice of a glacier.
Nip:	A turn in a rope. A small measure of alcoholic spirit
Nitrogen:	The most abundant gas in air (78%); colourless and odourless.
N.M.E.A.:	The National Marine Electronics Association; USA organisation defining the standards interfaces of marine electronics.
N.M.S.C.:	National Maritime Safety Committee.
Nodal point:	Minimum point of tidal range.
Non-passenger vessel:	For the purposes of NSCV Part B it is a vessel that is not— a) a passenger vessel; b) a fishing vessel; or c) a hire and drive vessel. A non-passenger vessel may be certified to carry up to 12 passengers.
Northern rivers:	The majestic valleys of the North Coast of New South Wales whose rivers disgorge into the Pacific Ocean, notably, the Hunter, Manning, Hastings, Maclean, Clarence, Richmond and Tweed.
North-up:	A radar mode in which the display is compass stabilised and rotated so that north is top of the screen.
Norske Veritas:	N.V. - Norwegian classification society.
North Atlantic Drift:	A moderately warm North Atlantic current setting easterly as the tail end of the Gulf Stream.
North Pacific Drift:	A moderately warm North Pacific current setting easterly.
Notices to mariners:	Updates to charts and sailing directions regularly published by the Australian Hydrographic Office.
Notos:	Southerly wind of ancient Greece. See classical winds.
Not under command:	A vessel's status when unable to manoeuvre due to exceptional circumstances.
Novel vessel:	For the purposes of the NSCV Part B, a vessel for which the hazards and risks are not adequately addressed by the requirements for conventional vessels contained in Parts B to E of the NSCV, and that are not, apart from Part F Section 3, otherwise specifically addressed in Part F—Special Vessels of the NSCV. NOTE: Requirements for novel vessels are contained in Part F Section 3 of the NSCV.
N.S.C.V.:	National Standards for Commercial Vessels –with Marine Orders, are the underpinning standards for Marine Survey and Certification for the Australian Marine Safety (Domestic Commercial Vessels) National Law Act 2012 and Regulations.
N.U.C.:	Not under command; a vessel that due to exceptional circumstances has lost command, e.g. loss of steering, etc.
Numerals:	See Code flags numerals.
Nuwangk nalae:	Vanuatu (Southern Malekula) sailing canoe.

Nuwangk parus:	Vanuatu (Southern Malekula) rowing canoe.
N.V.O.C.C.:	Non-vessel-operating common carrier, a ships agent that conducts business for the ship but does not operate the vessel.
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 O — — —	
O:	Code flag; Man overboard.
Oak:	European timber, very durable for marine use due to high tannin and knurled grained, used for frames, chocks and knees. American variety is straighter grained and more easily split and not as durable.
Oakum:	The loose fibres of old hemp rope used for caulking the seams of vessels.
Oar:	A wooden pole with a flat end, the blade, used to propel a small boat through the water.
Oarlocks:	Rowlock; a device for holding an oar in place when rowing or steering. Most oarlocks consist of a "socket" and a U-shaped or round "horn". Traditionally other systems have been used. See Thole.
Oarweed:	A large marine alga that grows along rocky shores.
Oasis:	Fertile place in a desert.
O.B.O. ship:	A multipurpose ship that can carry Ore, heavy dry Bulk goods or Oil. They can make return journeys with cargo rather than empty as single-purpose ships often must.
Observed position:	Position found by observing heavenly bodies.
Obstruction:	An unspecified danger to navigation.
Ocean:	A large expanse of sea called the North Atlantic, South Atlantic, North Pacific, South Pacific, Indian, Arctic, or Southern Ocean.
Oceania:	The islands of the Pacific.
Oceanic:	Of the ocean.
Oceanography:	Study of oceans.
Occluded front:	When a cold front moving faster than a warm front overtakes it to form a combined front.
Off and on:	Alternately steering toward the land and then off again.
Offline:	Distance from shore.
Offing:	Distance to shore or offshore feature.
Offsets:	Measurements supplied by a designer for the builder in order to lay down the lines of the hull.
Offshore:	The coastal waters seaward of inshore waters. See inshore.
Offshore operations:	For the purposes of NSCV Part B, operations within a limit of 200 nautical miles to seaward of the coast; or within such lesser limits as may be specified.
Off the wind:	Any point of sailing other than close hauled.
Officer of the watch:	The duty officer in charge of the watch.
Ogee:	A timber moulding of composite concave and convex curves shaped like an S.
Ohm:	A unit of electrical resistance opposing the electric current (flow) resulting from a voltage (pressure). Compared to a water circuit, resistance is like a restricting jet. Voltage is dropped across the

	resistance, just as water pressure is lost after a jet. Ohms = Volts ÷ Current
Oil bag:	An oil filled bag used for creating a slick in a stormy waters (to smooth breaking seas).
Oilskins:	Waterproof clothing.
Oily record book:	A log where discharge or escape of oil is recorded.
Oil tanker:	A ship for carriage of bulk oil consisting of many tanks.
Oily water separator:	This is a filter unit which separates oil and water.
Old man:	The captain. A Z shaped metal gig used to hold a drill against the work piece to be drilled.
On report:	Under a warning after being in trouble.
On-scene endurance:	The amount of time a facility may spend at the scene engaged in search and rescue activities.
On the wind:	Sailing into the wind.
Open:	Two marks that are not quite in transit.
Open circuit:	Is an electric circuit that is broken by a broken component, disconnected wire, etc. Electric current will not flow in an open circuit. In the above image, the switch in the off position is an open circuit.
Operational areas:	For the purposes of NSCV Part B the following apply: Seagoing vessels A Unlimited domestic operations –greater than 200nm B Offshore operations – to a limit of 200nm C Restricted offshore ops-within 30nm-See restricted offshore Sheltered waters vessels D Partially smooth water operations- See partially smooth E Smooth water operations- See smooth
Operational instructions:	Involving strategic and operational planning and resource allocation decision-making.
Ordinance:	Unexploded bombs, artillery shells, mines etc.
Ordinary or regular lay:	In this type of lay of rope or wire the strands of the rope are laid in the opposite direction as the yarns in the strand.
Ordinary seaman:	The initial grade of the deck crew.
Ore carrier:	A large ship for the carnage of ore. Because of the high density of ore, carriers have a high centre of gravity to prevent them rolling heavily with stress to the hull.
Oregon:	American straight grained red softwood timber properly called Douglas Fir. Recently quick grown Oregon is found with large knots, rendering it structurally unreliable in thinner board thicknesses.
Ore-oil carrier:	A vessel that carries either ore or oil in bulk.
Orlop deck:	The lowest deck of a cargo ship.
Orthodrome:	A great circle track.
O.S.C.:	On-scene coordinator Is a person designated to coordinate search and rescue operations within a specified area.
Osmosis:	Progressive degradation of fibreglass.

O.S.T.A.R.:	The Observer (Newspaper) Single-handed Trans Atlantic (sailing boat) Race.
Ostro:	Warm, humid and rain bearing southerly wind - one of the eight traditional traders winds of the Mediterranean Sea.
Otolith:	Particles of calcium carbonate in vertebrates inner ears involved in sensing gravity and movement.
O.T.S.I.:	Office for Transport Safety and Investigation.
Outboard:	A freestanding engine assemblage mounted on the transom. A position at the extreme seaward edge of a vessel.
Outer jib:	The fourth foresail set on a sailing ship inside the middle staysail.
Outfall:	The seaward termination of a sewer pipe.
Out-haul:	Any rope used to pull outwards. A rope or tackle used to stretch the clew of a sail.
Out of trim:	Not on an even keel.
Outrigger:	A spar lashed in the way of another hull, giving stability to a canoe.
Over-all:	A vessel's extreme longitudinal measurement, with overhangs.
Over board:	Over the side of a vessel and in the water.
Over carriage:	The transportation of cargo beyond its intended port of discharge.
Overfalls:	Turbulence or breaking waves caused by tidal/current streams.
Overhand knot:	Used to temporarily stop a rope end from fraying.
Overhang:	The distance that the bow and stern project beyond a vessel's waterline.
Overhaul:	To separate the blocks in a tackle by feeding some slack line into the sheaves from the fall. To examine and repair equipment. To overtake another vessel.
Overtaking:	Status of a vessel when she is bearing down on, passing and until well clear another vessel.
Overtide:	The duration of a tidal cycle.
O.W.S.:	Oily water separator.
Oxidation:	The process in which a material combines with oxygen in the air, releasing heat.
Oxter plate:	The plate in the curve between the shell plating and the top of the stern post.
Oxygen:	The second most abundant gas in air, (21%). Colourless and odourless.
Oxygen deficient atmosphere:	An atmosphere with oxygen content below 19.5% by volume.
Oyashio (Kamchatka) current:	A cool North Pacific current setting southerly along the East Siberian and Northern Japanese coast.
Oyster bed:	On the sea bottom where oysters breed.
Oyster tray:	A man made stage where oysters are bred.
Ozone:	Component atmospheric gas that limits solar radiation penetration.
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P • — — •	
P:	Code flag; All to report aboard, the vessel is about to sail. By a fishing vessel, my nets are fast on an obstruction
Pacific rim:	The regions bordering the Pacific Ocean.

Packet:	A ship carrying mails or dispatches.
Paddle wheel effect:	See transverse thrust.
Pad eye:	A metal eye permanently secured to a vessel's structure.
Painter:	The fitted bow line of a small craft.
Paints:	Protective surface coatings.
Pair trawler:	One of twin trawlers that spread the same net over a wide track spacing.
Pallet:	A flat tray on which goods can be stacked to facilitate their movement by the use of forklift trucks.
Palm:	A leather band that fits in a sail maker's palm that holds a metal plate used to push the sewing needle through tough canvas. The fluke of an anchor.
Pampero:	A strong squall of the Pampas (Argentina and Uruguay grasslands) between October and January. It is associated with temperature drop, rain, thunderstorms and following colder conditions.
Panamax:	A vessel designed to be the maximum dimension that will fit through the Panama Canal.
Pan-pan:	The international radiotelephony urgency signal. When repeated x 3, indicates uncertainty or alert, followed by nature of urgency.
Panting:	In-and-out movement of the shell plating resulting from variations in water pressure as the vessel pitches in a seaway.
Panting beams:	Found forward of the collision bulkhead found athwartships attached to the panting stringers.
P.A.P.R.:	An air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.
Parachute flare:	A pyrotechnic intended as distress signal for initial detection with a visibility range of 25 miles at night. The flare is fired 200mtrs into the air and float down slowly on a parachute.
Parachute spinnaker:	A billowing sail of light material used for sailing downwind.
Parallax:	Shift in an objects apparent position due to oblique observation.
Parallel circuit:	A parallel circuit has the components connected in parallel, one beside the other, with the same wires going to each.
Parallel middle body (LP):	This is the length over which the midship section remains unchanged.
Parallel of latitude:	Small circle on the earth's surface parallel to the equator.
Parallel rules:	Twin rulers hinges side by side that can be used to walk from one line on a chart to another that is parallel. Used for plotting a position or a course line on a chart
Parallel sailing:	The ancient ocean navigator's technique of making an East West track (by maintaining a constant altitude of a heavenly body) for a determined distance by dead reckoning, before deviating North or South to reach a known port on a parallel of latitude.
Paravane:	A hydrofoil dragged in mine clearance to drag a wire away from the minesweepers hull. Twin hydrofoils hung from a trawlers side booms to stabilize and reduce rolling.
Parbuckle:	A hoisting method using a strop of rope fastened to the boat with the two ends passed down and around the object in the water and back up to the hauling point- hence mechanical advantage is

	achieved.
Parcel:	Part of the process of protecting a wire or rope by worm, parcelling and serving. Small tarred stuff is wound into the grooves of the lay to give the rope a smooth surface (worming). Tarred canvas is then wound around the smooth surface (parcelling) Finally a tarred seizing of thin wire or twine is tightly wound around all using a serving mallet to apply tension (serving).
Parrels:	Rollers that attach a yard arm or boom to a mast while allowing its height to be adjusted.
Parrotfish:	Tropical fish with a mouth like a parrot's bill.
Part:	To break a rope or for a fitting to break loose.
Partially smooth waters:	Sheltered waters Class D area - for the purposes of the NSCV Part B, operations within specified geographical limits designated by the (State) Authority as partially smooth waters, typically is waters where the significant wave height does not exceed 1.5 m from trough to crest for at least 90 per cent of the time.
Partners:	Supporting deck beams housing a mast or deck structure.
Passage:	Sailing from one port or place to another.
Pass a line:	To send a line to another vessel or ashore.
Pass a stopper:	Holding the strain on a line with a stopper to transfer between make fast points.
Passenger:	For the purposes of the NSCV Part B, any person other than: a) the master and other members of the crew; b) a person designated as special personnel; or c) a child under one year of age.
Passenger vessel:	For the purposes of the NSCV Part B, a vessel which carries, or is certified to carry, more than 12 passengers.
Patent anchor:	One that can be partially winched up into the hawse.
Patent log:	A trailing impellor log. See Walkers patent log.
Patent slip:	A slipway using a railway and cradle.
Path:	The intended route of a ship or cyclone as compared to the route it actually takes, the track.
Pay:	To cover over with tar or pitch. Monetary remuneration for work done.
Pay a seam:	To fill a join between planks with pitch.
Pay-off:	A vessel's head drifting off from the wind.
Pay-out:	To allow a cable or rope run out. To receive settlement of wages due at the voyage end.
P. code:	High accuracy and restricted access code in GPS positioning.
Peak:	The outer end of the gaff (boom). The summit of a hill or mountain.
Peaks:	Enclosed spaces at each end of the vessel.
Pendant:	A length of wire or rope attached to a tackle.
Per diem:	By the day.
Pelagic:	Performed on the open sea.
Pelican hook:	A hook with a sprung quick release gate latch.
Pelorus:	A dumb compass from which relative angles to the ships heading

	can be sighted.
Pennant:	A long streamer of decorative flag bunting. A broad pennant is square and its insignia indicates the owner, club or personage on board.
Perigee:	The point in the moons orbit that brings it closest to the earth.
Perihelion:	The point in the earth's orbit that brings it closest to the sun.
Periplus:	A ancient Greek navigational document that uses text only, sometimes rhyming, to describe in a sailing direction. See rutter.
Permeability:	The relationship of the volume of a space to the volume of water that will fill it when flooded, due to it containing machinery, cargo or buoyant tanks and articles. The degree to which cargos that can become waterlogged (rice is high) or may be watertight (drums have no).
Petrol engine:	Uses the ignition of a petroleum and air mixture as a fuel.
P.F.D.:	A personnel floatation device, graded as PFD1, 2 or 3 dependant of its area of usefulness.
Phoenicians:	Renowned ancient seafaring civilisation originating from the east Mediterranean.
Phonetic alphabet:	International radiotelephonic names for letters of the alphabet.
Phosphorescence:	Bioluminescence
Phytoplankton:	Microscopic floating plant life of the ocean.
Pier:	Supports of a bridge.
Pig and whistle:	Crew persons' bar.
Pigs, pig iron:	Lumps of iron used for ballast.
Pile:	Heavy timber baulk driven into the seabed.
Pilot:	A person who is qualified to assist the master of a ship to navigate when entering or leaving a port.
Pilotage:	The act of a pilot assisting the master of a ship in navigation when entering or leaving a port. Sometimes used to define the fee payable for that service. The process of navigating inshore waters.
Pilot house:	The enclosed space on the bridge from which a ship is controlled.
Pin:	The axle on which a sheave revolves. A length of wood or iron used to secure halyards and sheets.
Pinch:	To sail so close to the wind that sails only just fill.
Pink, pinkie:	Sometimes applied to a sharp sterned skiff, but more properly to a stern projection of the gunwales to a sharp point above a narrow transom, originally to carry a coat of arms or other decoration.
Pinnace:	Swift lightly armed ships boat used for reconnaissance and ceremonial duties.
Pintle:	A pin, which slots into the hole of a gudgeon to create a hinge as on a rudder.
Pipe berth:	A bed constructed of a metal pipe frame stretching a canvas base.
Piragua:	Large West Indian canoe.
Pirate:	A thief on the sea.
Pitch, pitching:	The fore and aft rock of a vessel caused by encounters with waves from head on or astern. Natural tar/mastic used to caulk timber decks.
Pitch pine:	Resinous European softwood timber of high durability for planking

	in marine use.
Pitch-pole:	To revolve a vessel end over end.
Pitpan:	Two person shallow draught Moskito Indian canoe.
Pitting:	Visible signs of corrosion.
Pixel:	A picture cell, one of thousands of pinpoints of light that make up the picture on a raster scan radar display.
Plain sailing:	All is going well. Sometimes less correctly used to mean Plane Sailing, see below.
Plane:	To drive a vessel fast enough to rise up and over the wave of its own displacement so that it skims over the water surface.
Plane sailing:	The navigational technique sufficiently accurate for short ocean passages (less than a few hundred nautical miles) of regarding the earth's surface as a flat plane. Single courses, difference/distance in latitude and departure (East–West distance covered) can be measured or calculated by trigonometry. However, without a chart, the difference in longitude resultant from a change in position must be calculated by Mercator Sailings or Great Circle Sailings (using tables based on spherical trigonometry).
Planks:	Wide boards used to make a watertight external covering.
Planking methods:	Carval - the planks are laid edge to edge, attached to the ribs to form a smooth exterior. Clinker or lapstrake - the edges of the planks are overlapped to form a stepped exterior, as in a house's weather boarding. Sheet plywood – a simple planking method. Stitch and glue – sheets of plywood sewn together with copper wire. Double diagonal or cold moulded - uses strips of plywood or solid wood veneers laid over the hull in layers of opposite diagonals, glued preferably with epoxy. Strip planking - uses strips fitted, glued, and fastened on edge with an optional fibreglass sheath on the outer surface.
Plankton:	Microscopic organisms drifting in water.
Platypus:	A fresh water, egg-laying mammal; Australia.
Play:	Looseness, freedom of movement.
Plimsoll mark:	Marks painted on the outside of a ship (corresponding to the seasons of the year/salinity of water) that are used to limit the loading of a vessel to its stability specifications.
Plot:	To accurately draw a line on a chart, paper or glass surface that represents a course, bearing or vector of a vessel's movement i.e.; plotting a vessel's position or completing a radar plot.
Plotter:	A navigational instrument that incorporates its own compass rose and is used for plotting. A feature of a GPS/electronic navigator enabling a chart like display that records a vessel's movements.
Plotting a position:	One of the most fundamental chart skills is being able to plot a position of known latitude & longitude, or, to determine latitude & longitude of a given position on the chart.
Plough anchor:	See CQR.
Plug:	A tapered cylinder fitting into a hole to seal a compartment.

	The pattern on which the GRP mould for a hull is laid.
Plug spanner:	A dedicated socket wrench used for fitting spark plugs.
Plunging:	When ship's bow dips suddenly due to wave action.
Pod:	A small herd of marine animals.
P.O.B:	Person overboard. See M.O.B.
P.O.D.:	Probability of detection of a search object being detected, assuming it was in the areas that were searched. POD is a function of coverage factor, sensor, search conditions and the accuracy with which the search facility navigates its assigned search pattern. Measures sensor effectiveness under the prevailing search conditions.
P.O.E.O.:	Protection of the environment operations
Point:	To taper the end of a rope. One of the 32 of 11.25 degree divisions of the compass card.
Pointing:	Sailing into the wind.
Polacre:	Historic French Mediterranean three masted ship with a peaked bow carrying lateen and squaresails.
Polar front:	A low pressure frontal system born in high latitudes.
Polarity:	How the current in an electrical circuit passes from the positive to the negative pole of a battery or generator.
Pole mast:	A mast constructed of a single piece of timber.
Pollywogs:	A first time initiate tried before King Neptune's crossing the line pantomime court, later renamed a shellback after successfully completing the courts initiation challenges.
Polyethylene:	A cheap and widely plastic used for lower quality ropes. It floats, and is available in bright colours
Ponente:	Mild westerly wind - one of the eight traditional traders winds of the Mediterranean Sea.
Pontoon:	Flat bottomed floating structure.
Pontoon hatch cover:	A heavy hatch cover made as a single piece.
Poop:	The after (raised) deck area of a vessel.
Pooped:	A sea that breaks onto a vessel from astern.
Poppets:	Pieces of timber at bow and stern fixed perpendicularly between the ship's bottom and the bilge in order to support during launching.
Port:	The left side of a boat, looking forward. A harbour.
Port hole:	Windows in the side of a vessel. Called scuttles in the navy.
Port lids:	The covers of gun ports.
Port of call:	Port where a ship discharges or receives traffic.
Port of registry:	A vessel's home port in the country under whose flag it is registered.
Portolan:	A medieval chart that included directional information often drawn on animal hide. See rutter.
Port side:	The left hand side of a ship looking forward.
Port tack:	When the wind comes from the port side, and the fore and aft sails are displaced to the right hand of the vessels centreline.
Possibility area:	(1) The smallest area containing all possible survivor or search object locations. (2) For a scenario, the possibility area is the smallest area

	containing all possible survivor or search object locations that are consistent with the facts and assumptions used to form the scenario.
Position fixing instruments & systems:	Any combination of these methods of determining a line of position permits fixing the position of a craft. Fixes may be arrived at by cross bearings, by a bearing and distance of the same object, by a bearing and a sounding taken simultaneously, by horizontal sextant angles, and by two bearings of a single object taken at different time intervals but adjusted for time lapse when plotted known as a running fix.
Position line:	A line drawn on a chart representing a direction from an object derived from a compass bearing, transit or other observation.
Poseidon:	Ancient Greek God of the sea.
Posh	Port out - Starboard home. The cooler side for the journey from Europe to India and return in the days of the steam packet. The consequently more expensive rate for those cabins provides the slang term used to describe social status.
Positive pressure respirator:	A respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.
Pound, pounding:	When a vessel rises over a wave and falls back to strike hard on her forefoot with jarring force.
Pouring oil on troubled waters:	Heavy-weather practice of pouring oil on the sea to form a surface film that minimises the seas from breaking. To smooth out some difficulty.
Powderhorn sheer:	A rise in the sheer towards the bow (at the shoulder) and a smaller rise at the stern to promote dryness.
Power-driven vessel:	Means any vessel propelled by machinery.
P.P.I.:	Plan position indicator; the most common type of radar display in which contacts appear in plan form.
Pratique:	Licence of a ship to trade having been declared in good health.
Pram:	A dinghy with a transom at the bow and stern.
Precipitation:	All of the forms of water particles, liquid or solid that fall from a cloud and reach the ground; drizzle, rain, hail, snow, sleet.
Pressure demand respirator:	A positive pressure atmosphere-supplying respirator that admits breathing air to the face piece when the positive pressure is reduced inside the face piece by inhalation.
Pressure gradient:	A measure of the rate of change in atmospheric pressure with distance. The closer the isobars are together, the higher the pressure gradient is and the stronger the winds will be.
Preventer:	A line or spar used to limit the free movement a sail, cargo hook or boom.
P.R.F.:	Pulse repetition frequency of a radar pulse, the number of pulses transmitted per second.
Pricker:	A small marlinespike.
Primary fixing method:	The science of navigation is divided into Four Principal Techniques: (1) so-called Dead Reckoning which is derived from the phrase deduced reckoning, and estimates the approximate position of a craft solely from its course and speed; (2) Piloting, which involves guiding the craft by frequent reference

	to geographical landmarks and navigational aids and by use of soundings; (3) Celestial Navigation, which uses the observation of celestial bodies to determine position on the surface of the earth; (4) Electronic Navigation, the most important and advanced system of navigation today, using radio and electronic equipment.
Primary swell:	The swell with the greatest height from trough to crest.
Prime meridian:	The meridian of Greenwich.
Prime vertical:	A vertical circle passing through East and West points on the horizon.
Prismatic coefficient (CP):	This is the ratio of the volume of displacement of the ship to the volume of the circumscribing solid having a constant section equal to the immersed midship section area AM, and a length equal to the LPP $CP = \nabla \div (AM \times L)$ The CP is a measure of the longitudinal distribution of displacement of the ship, and ranges from about 0.55 for fine ships to 0.85 for full ships.
Privateer:	A person authorised by one Nation to attack and plunder the vessel's of another.
Privileged vessel:	The vessel that must be given way to in a meeting situation.
Proa:	Sailing canoe with a crab claw shaped sail.
Probability area:	The area in which a missing craft and/or survivors are most likely to be found taking into account possible errors in the navigation of the missing craft and of the search craft.
Product carrier:	A smaller tanker used to carry refined oil products. Four different grades of oil may be handled simultaneously.
Profile plan:	Elevation of the longitudinal shape of a hull; sheer plan.
Prolonged blast:	A ship's signalling blast of from 4 to 6 seconds' duration.
Prop rider:	A hydroplane design in which the propeller serves as point of support when planing.
Propeller:	A propulsive device consisting of a boss (hub) carrying radial blades.
Propeller shaft:	The shaft connecting the propeller to the gear box.
Prow:	The part of the ship's bow above the water.
Psi:	Pounds per square inch.
Puddening:	Yarns, matting or oakum wound around ropes used to prevent chafing. Lime mortar used to seal the spurling pipes and hawse pipes during a protracted sea passage.
Pulpit:	A guard rail structure at the bow of a vessel.
Pulse:	A duration of transmission of radio waves or microwaves.
Pulse length:	The duration of transmission of radio waves or microwaves.
Punt:	A flat-bottomed boat.
Purchase:	A system of blocks and tackles.
Purser:	A ship's officer who is in charge of accounts on a passenger ship.
Push pit:	A guard rail structure at the stern of a vessel.
Push rod:	A steel rod that when displaced by the camshaft moves the rocker arm of an overhead valve engine.

Pusser's pound:	The 18 Century Royal Navy purser was allowed to profit by 2 ounces on each pound (16 ounce) of goods he sold to the crew, hence the pursers short pound of 14 ounces.
Put to sea:	To depart from a port.
Putty:	A mastic type filler made from chalk or lime mixed with linseed oil.
P.V.C.:	Poly vinyl chloride. A plastic used for canoe and small craft solid moulded constructions. Also, the rubberised fabric is used for cheaper but less durable inflatable dinghies.

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Q



Q:	Code flag; My vessel is healthy and I request free practise.
Q.F.E.:	The adjusted pressure for a weather station's barometer and its aerodrome's height, assuming International Standard Atmosphere (ISA) conditions. An aircraft's altimeter set to QFE will read zero on the runway.
Q.N.H.:	A weather station's level pressure reduced to mean sea level by assuming the International Standard Atmosphere (ISA) conditions between the station and sea level.
Quadrant:	A semicircular steering component that sits at the top of the rudder stock and spreads the load of the steering cables.
Quadrature:	Half way between full and new moon.
Qualitative fit test (Q.L.F.T.):	A pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.
Quarantine:	Isolation imposed on a vessel with infection aboard.
Quarter:	The after side areas of a vessel.
Quarter berth:	A bed snugly fitted in the narrowing starboard or port quarter of a hull.
Quarter deck:	The raised after deck area of a sailing ship.
Quartering sea:	Waves approaching a vessel on its quarter that typically create an unpleasant motion and require attention in steering.
Quartermaster:	Senior seaman whose duties are to steer and tend the gangways.
Quarters:	Living accommodation.
Quarters bill:	A vessel's station instruction listing the duties of crew persons.
Quay:	Solid structure built to berth vessels to.
Queensland maple:	Australian light coloured hardwood prized for interior decorative furnishing and panelling.
Quick flashing:	Flashing more than sixty times a minute.
Quick freeze:	Rapid freezing of food to preserve its natural qualities.
Quintal:	A weight 100 kg.
Quoin:	A wedge. Can refer to a wedge shaped hill or island.

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R



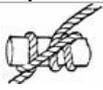
R:	Code flag; No single letter meaning. Sound signal; Additional warning at any time when anchored in restricted visibility.
R with three numerals:	Range or distance in NM.
Rabet, Rabbet:	In timber construction, the shaped rebate along the longitudinal

	backbone of a vessel to receive the square edge of the planks. In ship design and construction, the line of the outside of the planking and the side/face of the stem, keel, after deadwood and stern post. See Bearding line.
Race:	A strong directional current, often with overfalls. A competition between two or more vessels primarily determined on the overall speed achieved over a measured distance.
Rack:	To seize two ropes parallel, with cross-turns.
Racking:	Is the distortion of the vessels shape in a transverse section caused by the accelerations on the ships structure due to rolling
Racon:	A radar transponder beacon (often on a buoy) that transmits an identity trail when activated by a searching ships radar beams.
Radar:	Radio assisted direction and ranging device.
Radar reflector:	A device that reflects the radar echo and enables a vessel to be seen more clearly by another's radar.
Radiation:	The moving of direct/energy heat in all directions
Radiation fog:	Fog occurring on clear nights when relatively warmer air passes over an area of rapidly cooling earth.
Radio bearing:	The direction towards a transmitting radio signal.
Radio direction finder (RDF):	A radio receiver dedicated to receiving low frequency radio beacons. It is fitted with a rotating antenna (often a loop) to establish the direction of a transmitting station from the radio.
Radome:	A fibreglass casing to enclose a radars scanner.
Raffee:	A triangular square sail set at the topmast of some sailing ships.
Raft:	An inflatable lifeboat. An accumulation of floating matter used to cross water.
Rafting:	Securing vessels alongside each other.
Ragworm:	A carnivorous marine worm used for bait.
Rail:	A longitudinal capping board on the top of the bulwarks.
Rail mounted gantry:	A crane used for container stacking operations on a wharf.
Rain:	Precipitation of water in drops greater than 0.5 mm in diameter.
Raised deck:	An elevated full width forward deck providing cabin headroom below.
Rake:	The lean of a structure from the perpendicular, i.e.; inclined mast, funnel, stem or stern.
R.A.M.:	A vessel that due to the nature of her work or trade is restricted in ability to manoeuvre.
Ramark:	A radar transponder beacon (often on a buoy) that transmits a signal that paints on a ships radar display.
Ram bow:	A protruding below the water line bow, used by ancient warships to hole and sink enemy ships.
Range:	The maximum distance a vessel is capable of attaining. The maximum distance of a vessel's anchor scope. A multiple hot plate and oven stove situated in the galley.
Range of tide:	The height difference between low and high tide.
Raster scan:	A type of radar display whose picture is produced as a digital analysis of contacts by the activation of pixels.
Rate of burning:	The speed at which a fire consumes fuel.
Ratlines:	Ropes or timbers running horizontally across shrouds as a ladder.

R.C.C.:	Rescue coordination centre.
R.C.D.S.:	Raster chart display system.
Reach:	A straight section of a river. Sailing a course with the wind on the beam and sails full, i.e.; broad reach, on the beam, close reach, slightly higher into the wind but without the sheets being close hauled.
Reach rod:	An extension arm connecting an above deck valve handle to a below deck valve. A remote shut off mechanism.
Reaching spinnaker:	A flat-cut spinnaker that will not collapse when the vessel is reaching.
Ready about:	An order to prepare for the vessel to tack, followed by "lee ho" as she is steered over.
Reaming:	Enlarging a hole by revolving a cylindrical cutting tool through it.
Reciprocal bearing:	A bearing displaced by 180 degrees from another.
Record book:	A book used to record the daily navigation and maintenance of the vessel.
Rectifier:	An electrical circuit to convert alternating current into direct current.
Red tide:	A discoloration of the sea caused by toxic red dinoflagellates.
Reed valves:	Flap valves that control the flow of vaporised fuel mixture from the carburettor into the crankcase of a small two stroke motor.
Reef:	To reduce a sail's area by lashing a fold in it. A shoal of rock or coral.
Reefer:	Ship principally designed to transport refrigerator or frozen cargos.
Reefer box:	An insulated shipping container.
Reef knot:	A knot to secure sails when reefing. A knot for  ropes of similar sizes.
Reef points:	Places for the attachment of lashing along a sail that are used in reefing it.
Reeve:	To pass a rope through an aperture.
Reference Climate Station (RCS):	A weather station collecting long term data (not less than thirty years) for determining climatic trends.
Refit:	Repair and resupply.
Refrigerant:	A gas/liquid material used in refrigeration systems to absorb heat from the refrigeration plant.
Refrigerator ship:	See reefer.
Relative humidity:	A ratio of the amount of moisture in the air to the maximum amount of moisture which the air could hold at that temperature.
Relief valve:	A connection used in piping or hoses which is forced open by fluid pressure to avoid any dangerous build up of pressure
Regatta:	A series of sail races; a water carnival.
Registry:	A ship's accreditation listing ownership and nationality. A tackle of double and single blocks rove with an endless line used to relieve the strain on the steering in heavy weather/emergency.
Relay:	To signal or communicate. An electrical signalling (switching) device. To transfer containers from one ship to another.
Relief:	A shaped surface. A clearance behind a cutting tool's edge to reduce friction.
Relieving tackle:	A tackle attached to a tiller as an emergency steering control.

Render:	To give or supply. To pass a rope through a component. To cover a surface with a thin coating such as cement.
Rescue:	The (NSW) Act defines “rescue” as the safe removal of persons or domestic animals from threatened danger of physical harm and deliver them to a place of safety.
Research vessel:	A vessel designed for oceanographic/fisheries research.
Reserve buoyancy:	The freeboard of a vessel; the amount of buoyancy in a hull that remains after it has been loaded.
Restricted in her ability to manoeuvre:	A vessel which from the nature of the work is restricted in her ability to manoeuvre as required by the Rules and is therefore unable to keep out of the way of another vessel. RAM
Restricted offshore operations:	For the purposes of NSCV Part B, operations within: a) 30 nautical miles from the seaward limit of a safe haven ¹ , including designated smooth or partially smooth waters (i.e. sheltered waters), or within such lesser limits as may be specified; or b) specified waters designated by the Authority as “restricted offshore” ² . ¹ Restricted offshore operations are based upon the assumption that the vessel will not be required to bear the full force of the weather at sea; i.e. prior to encountering bad weather the vessel can cease operation and seek shelter. For restricted offshore operations, it is assumed that the vessel has access to timely and accurate weather forecast information. ² Contact the relevant State or Territory Authority for details of any areas nominated as designated restricted offshore waters within their jurisdictions.
Restricted visibility:	Any condition in which visibility is restricted by fog, mist, falling snow, heavy rainstorms, sandstorms or any other similar causes.
Return cargo:	A cargo which enables a ship to return loaded to the port where her previous cargo was loaded.
Reverse curve:	A concave curve in the bottom at the chine. The usual purpose is to deflect spray.
Revetment:	A retaining wall.
Rhumb line:	A straight line between two charted positions.
Ria:	An inlet of shoaling sea water formed from a flooded river valley.
Rib:	A bent or laminated piece of timber that forms the skeleton in a vessel’s construction. It is part of the hull framing to which the plank is fastened. Also called timbers.
R.I.B.:	A rigid inflatable boat having a solid bottom supporting inflatable tubes.
Ribbands:	Temporary stringers to hold frames together during timber construction.
Ribs:	See rib.
Ride at anchor:	To be anchored.
Rider bar:	In steel vessel construction, a reinforcing bar that is attached along

	the top of a girder.
Riding chock or bower stopper:	A device to assist in securing the anchor for sea. Normally only on larger vessels.
Ridge:	An extended summit of a mountain. An area of high pressure extending into or penetrating an area of lower pressure.
Rig:	The type of sail arrangement. The act of attaching rigging. See Sail, types of rig.
Rigger:	A tradesman that performs rigging work.
Rigging:	The ropes, wire stays, or chains used to support fixed masts, spars or fittings (standing rigging) or control yards, sails and moving fittings (running rigging).
Right:	To return to an upright position after heeling over.
Right ascension (RA):	Celestial equivalent of longitude, measured in hours anti-clockwise around the celestial equator, starting from the point where the sun moves northward across the equator annually (vernal equinox).
Righting moment:	A mechanical lever formed between the force of weight acting vertically downward (from the centre of gravity) and the displaced force of buoyancy on heel acting upward (from centre of buoyancy on heel). It is a measure of a vessel's ability to return to the upright after heeling. It is termed the GZ lever and is calculated as a weight times a distance (a moment)
Right hand ordinary lay (R.H.O.L.):	Wires laid left handed, strands laid right handed.
Rips:	Current running seaward on a beach. Overfalls.
Ringbolt:	A securing bolt with a ring through its eye.
Rise of floor:	The amount by which the line of the outer bottom plating amidships rises above the base line, when continued to the moulded breadth lines at each side.
Risk:	The chance that one or more hazards will cause something to happen that will have a detrimental impact upon safety. It is measured in terms of the likelihood, duration of exposure and consequences of injury, illness or environmental damage.
Risk assessment:	The process of evaluating the probability and consequences of injury, illness or environmental damage arising from exposure to identified hazards associated with an operation.
Rivet:	A metal pin pushed through matching holes drilled through two or more plates that is hammered into a domed head at each end in order to squeeze the plates together.
Rk.:	Rock.
R.M.S.	Royal mail ship.
R.N.L.I.:	Royal National Lifeboat Institution.
Roach:	The convex curve at a sail's edge that often extends its area outside a straight line from clew to head.
Roads:	Open anchorage adjacent to a port.
Roadstead:	See roads.
Roaring forties:	The geographical belt in 40 degrees south latitude known for the

	prevailing stormy westerlies.
Roberts, Bruce:	Prolific cruising yacht designer noted for DIY catalogue.
Ro-Ro:	Roll on roll off vessel.
Rocker:	A curved keel shape that is lower in the middle than the ends, facilitating tacking.
Rode:	The extent of cable that a vessel is anchored by.
Roll:	A ship's side to side motion of alternately raising and lowering each side of the deck. See six degrees of freedom.
Roller fairlead:	An arrangement with a pulley wheel to minimise chafing on lines pulled onto a vessel.
Roller reefing gear:	Various patented devices to furl a sail by rolling it up.
Rolling hitch:	A hitch that will slip easily in only one direction and can be used as a brake on the fall of a halyard. 
Rolling test:	An approximate method of calculating a vessels GM. $GM \text{ in mtrs} = ((F \times \text{breadth}) \times (F \times \text{breadth})) \div \text{Time in secs}$ $F = 0.78 - 0.98$ dependant on hull shape.
Ro-Pax:	A vessel with combined Ro-Ro and passenger capacity.
Ro-ro, Roll on-roll off:	A ship type using a method of transportation in which vehicles and their loads are driven or towed onto and off a ship using its ramps.
Roman winds and directions:	See classical winds.
Rooster rail:	A plume of water rising behind the propeller stream of a fast moving vessel.
Rope:	Cordage made from laid fibres.
Rope yarn:	Fibres that have been extracted from rope.
Rosie:	Rubbish bin.
Round bilge:	A section of a vessel's hull between the sides and the bottom that has a rounded shape.
Round of beam:	See alternative term, camber.
Round turn:	Winding a line completely around an object to spread the pull of a rope across a larger surface area and enable greater control without jamming.
Round turn and two half hitches:	A hitch which to secure to a ring. 
Round up:	To head into the wind. To haul all the rope through so the blocks in a tackle come together.
Rowlock:	A device for holding an oar in place when rowing or steering. Most oarlocks consist of a "socket" and a U-shaped or round "horn". Traditionally other systems have been used. See Thole.
Royal:	The square sail set above the course sails (lowest), lower topsail, upper topsail and topgallant of a sailing ship.
Rub rail:	Rubbing strake. A protective longitudinal board along a hull to reduce damaged from wharf structures and other vessels.
Rudder:	A hydrofoil that can be turned to defect the water flow around a hull and enable the steering of a vessel.
Rudder bands:	The bands on each side of a rudder blade to brace and tie attach it to the pintles.

Rudder post:	A post that supports the rudder fixings.
Rudder stock:	The rod which is attached to the rudder and is turned to rotate the rudder.
Rudder trunk:	Casing extending from deck on which the tiller or quadrant is situated, to the rudder stock opening.
Rules of the road:	The International Regulations for the Prevention of Collision at Sea.
Run:	The distance a vessel travels in a set time (the day's run). To sail directly downwind. The after part of a vessel's bottom, which rises and narrows in approaching the stern-post.
Runabout:	A small undecked or partially decked powered craft. A small fast luxury powerboat with a highly varnished finish.
Run down:	To collide with a vessel.
Runnel:	Depression running parallel along a beach.
Runner:	See Running backstay.
Running backstay:	One of a set of variable tension stays that support the mast when forward pressure is exerted on the sails in running before the wind.
Running fix:	A navigational plotting method that projects an initial bearing or position line over the course line to intersect with a later position line.
Running lights:	Navigation lights used while under way and making way.
Running rigging:	All adjustable control lines on a vessel rig.
Run on:	The distance a vessel travels after disengaging propulsion (headreach).
Run out:	The ebb tide.
Rust bucket:	An old ship that needs repairs.
Rutter:	An English term for a mariner's handbook of written sailing directions historically compiled before the use of charts. In Portuguese called a roteiro, in French a routier, in Dutch a leeskarte and in German a Seebuch. See periplus.

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S •••	
S:	Code flag; I am operating astern propulsion. Sound signal; I am operating astern propulsion.
S flag + two numerals:	Code flags; Speed in Knots.
S.A.:	See Selective availability (accuracy in GPS positioning)
Sabot:	Mini class of cat rigged sailing dinghy.
Sacrificial anode:	Zinc blocks placed on the vessel's hull, in the engine or in the cooling systems so that the anodes corrode first, reducing the amount of corrosion to the main component
Saddle:	Unbroken part of the wave in surf.
Safe haven:	A place that can reduce the risk to a vessel and those persons on board the vessel by providing shelter from the sea and weather. A safe haven includes a port, harbour, designated sheltered water area and an inlet or river mouth that offers a good anchorage.
Safety management systems:	Plans of vessel management for operations and emergencies.

SafetyNET:	Communications service provided via Inmarsat for promulgation of maritime safety information including shore-to-ship relays of distress alerts and communications for search and rescue coordination.
Safe working load:	Maximum weight permitted to be lifted by a lifting appliance.
Sag:	To drift to leeward.
Sagging:	Longitudinal deformation of a hull that droops at its midships
Sailing free:	Sailing in a direction other than close hauled.
Sail, names of fore and aft:	<p>Foresails - set in front of the foremast, being:</p> <p>Foresail - set on the inner forestay. Genoa - large overlapping fine weather foresail. Jib - primary foresail set on the forestay. Jib, flying- large outermost foresail only hanked at top and bottom, sometimes called a yankee. Jib, spitfire - smallest survival foresail. Jib, storm - small foresail for heaving to. Spinnaker - very large downwind sail. Sometimes called a kite.</p> <p>Others - set behind the mast, being:</p> <p>Gaff topsail - set above a gaff mainsail or mizzen. Main - the largest fore and aft sail set on the primary mast. Mizzen - set on the mizzen mast, sometimes called the spanker in the clipper rigs Staysail - a triangular sail set between masts. Tri sail - a small storm sail.</p>
Sail, names of square sails:	<p>Course - lowest of the square sails, called also by the name of the mast from which they are set, Mainsail, Foresail, Mizzen, etc. Topsail, lower - the lower of the sails set from one of the yards secured nearest the topmast hounds. Topsail, upper - the upper of the sails set from one of the yards secured nearest the topmast hounds. Topgallant - the sails set from one of the yards secured nearest the topgallant mast hounds. Royal - set above the topgallant sail. Skysail - set above royals. Moon scraper - set above skysail. Studding sails- set from extensions of the primary yards to provide more sail area in light winds.</p>
Sail, parts of:	<p>Foot - a sail's bottom edge. Leech - a sail's after edge. Luff - a sail's forward edge. Roach - the part of the sail cloth that extends outside of a straight line between the head and the clew. Starcut - sails in which the panels of cloth radiate from all corners, along the warp.</p>

	<p>Tabling - the folded hem sewn to the edges of a sail to reinforce them.</p> <p>Tack - the lower, forward corner of a sail.</p> <p>Vertical cut - sails in which the panels of cloth run vertically or parallel to the luff.</p> <p>Warp - the threads that run lengthwise in a woven sailcloth across the weft threads.</p>
Sail, types of rig:	<p>Cat rig - a single mast at bow and a single sail. Popular term in America.</p> <p>Cutter rig - one mast, one sail aft of mast, two or more forward. There are at least two triangular sails forward of the mast. The mast is stepped farther aft than a sloop, creating a larger foretriangle.</p> <p>Gaff rig - has a lower boom and a gaff boom that attaches to the mainmast. The sail is a quadrangle. Does not come to windward as well as "modern" rigs but has less windage aloft when sail is reduced, and a powerful full sail when running.</p> <p>Jib head rig - the forestay attaches to point lower on the mast than the masthead.</p> <p>Ketch rig - two masts with the smaller after mast forward of the tiller.</p> <p>Lateen rig - one mast, one triangular sail, two booms.</p> <p>Schooner rig - all fore and aft sails with two or more masts of equal height, or largest aft.</p> <p>Sloop rig - one mast, two sails. The mainsail is aft of the mast and a jib forward of the mast, usually attached to the forestay.</p> <p>Spritsail rig - a sprit is a boom that extends upward from the mast foot to the topmost corner of a quadrangle sail. The rig extends the sail area set from a short mast.</p> <p>Yawl - twin masted with the much smaller after mast aft of the steering tiller.</p>
Sailings:	The description of navigational techniques. See Parallel, Plane, Traverse, Mercator, Great circle sailings.
Sailing vessel:	Means any vessel under sail provided that propelling machinery, if fitted, is not being used according to the collision regulations.
Salacia:	Wife and queen of Roman Sea God Neptune.
Saloon:	The main cabin.
Salted:	Packing rock salt between the frames of a timber vessel to prevent rot from fresh water and condensation.
Salterns:	Natural salt pans.
Salt fish:	Fish preserved with salt solution.
Salvage:	<p>This may mean (1) money paid to those who assist in saving a ship or goods from the dangers of the sea; (2) the goods saved in such a way. Life is not salvageable.</p> <p>The act of salvage must be from property in imminent danger, it must be voluntary, it must be successful (no cure, no pay)</p>
S.A.L.R.:	Saturated Adiabatic Lapse Rate; the rate at which the temperature of water vapour saturated air changes as it ascends or descends. It is taken as 1.5 degree Celsius per 1000ft.
Sampson post:	Stout post mounted at the bow of a vessel for the attachment of

	mooring lines or tow ropes.
Sandwich core:	A “one-off” fibreglass construction method that uses an inner core that is temporarily fastened to a form, covered with fibreglass laminates, removed from the form, and fibreglass laminates applied to the inside.
Santa Ana:	A dry east/northeasterly wind of Southern California, also called the Sundowner.
S.A.R.:	Search and Rescue Convention of the IMO to maintain and promote uniform standards in Search and rescue.
S.A.R. datum buoy:	Droppable floating beacon used to determine actual sea current, or to serve as a location reference.
S.A.R. mission coordinator (SMC):	The suitably trained or qualified official temporarily assigned to coordinate a response to a distress situation. In Australia, the acronym SARMC is also used in some jurisdictions. Some jurisdictions also use the term A/SARMC to describe the SMC's assistants.
S.A.R. point of contact (SPOC):	Rescue coordination centres and other established and recognised national points of contact that can accept responsibility to receive Cospas-Sarsat alert data to enable the rescue of persons in distress.
Sargasso:	Floating seaweed.
S.A.R.T.:	Search and Rescue Transponder
Satnav:	A navigation system that receives information from satellites.
Saturation:	The point when air of a certain temperature carries its maximum water vapour and precipitation will follow.
Sawn chock:	A triangular bracket or knee that is sawn from a plank of timber so the grain is parallel to the outer face, thus limiting splitting.
Sawn frames:	Sawn frames are assembled from separate pieces, either half lapped or gusseted together to form the shape required for the hull. Alternatively, bent frames are bent around a former or into a hull using one or more layers of solid wood.
S band:	A radar with 10cm wavelength transmitting at 3000MHz.
Scale:	Residue or foreign materials which are left behind by water (particularly sea water) and build up within the engine or in pipes.
Scanner:	A rotating radar aerial. A radio receiver monitoring all transmissions over a waveband.
Scantling:	Lengths of constructional timber of a standard size.
Scarf:	The use of a diagonal and overlapping meeting surface in joining constructional components.
Scend:	When a ship pitches with great force into a trough.
School:	A large group of fish.
Schooner:	A fore-and-aft rigged vessel with twin masts of the same height or with the after one (the mainmast) taller.
Scow:	A hull design of a flat bottom. Sometimes used to infer a primitive craft.
Scraper:	A flat bladed tool for removing paint or varnish; sometimes three cornered.
Scud:	A vessel or clouds moving quickly.

Scuttle:	A method of propelling a small boat with one oar by rotating it in figures of eight at the stern.
Scupper:	A pipe between the deck and the side of the hull to allow trapped water to run out overboard.
Scuttle:	To purposely sink a ship.
Scuttle butt:	The crew's cask of fresh drinking water. A tall story.
Scuttles:	Naval term for portholes.
Sea:	A deep stretch of water between large land masses. Waves created by local winds.
Sea anchor:	A device placed in the water at a distance from a vessel and attached by a line. Its resistance to move through the water is used to reduce the drift of the vessel. See 'drogue'.
Seabee:	Sea-barge which uses rollers to move the barges aboard the ship; the self-propelled loaded barges are themselves loaded on board as cargo and are considerably larger than those loaded on LASH ships.
Sea breeze:	A local onshore day wind caused by a heating land (rising air) and a relatively cooler sea (falling air). See land breeze.
Sea chest:	A sailor's trunk. The intake between the ship's side and its sea cock.
Seacock:	A shut off valve through the hull for intake or discharge piping.
Sea current (SC):	The residual current when currents caused by tides and local winds are subtracted from local current. It is the main, large-scale flow of ocean waters.
Sea dog:	An experienced sailor. Reverential term for Queen Elizabeth 1st privateers and Armada victors-Francis Drake, Walter Raleigh, Richard Grenville, etc.
Sea going:	A vessel intended for going to sea.
Sea kindly:	A vessel that is steady in rough conditions.
Sea lawyer:	A seaman who is prone to preach against authority.
Seam:	The join of two pieces of sail cloth. The gap between two meeting planks.
Seamount:	Usually a conical undersea mountain.
Seaplane:	Includes any aircraft designed to manoeuvre on water
Seaquake:	An undersea earthquake.
Search endurance (T):	The amount of "productive" search time available at the scene also known as Available Search Hours (ASH). This figure is usually taken to be 85% of the on-scene endurance, leaving a 15% allowance for investigating sightings and navigating turns at the ends of search legs.
Search facility position error (Y):	Probable error in a search craft's position, based on its navigational capabilities.
Search pattern:	A procedure assigned to an SRU for searching a specified area. Normally an expanding square search, a sector search or a parallel track search is used.
Search radius:	The actual search radius used to plan the search and to assign search facilities. It is usually based on adjustments to the optimal search radius that are needed for operational reasons.

Sea monster:	Variety of imagined creatures, often used to illustrate old charts.
Sea room:	The available manoeuvring area of a vessel.
Seas:	Waves created by local winds.
Sea serpent:	A mythical large snake like sea creature.
Sea shanties:	Sea songs. Often, a verse chanted by a leader, with replying chorus in unison by the work gang that coordinates the group's deck task. For instance, rhythmically hauling in an anchor cable.
Sea trials:	Tests conducted by the builders during which the owner's representatives check if the vessel has met the specifications.
Sea urchin:	A spiny shelled marine creature.
Sea wall:	A wall that prevents encroachment by the sea.
Sea wasp:	A jellyfish with a dangerous sting; Indo-Pacific.
Sea water strainer:	A filtering system which captures foreign materials from entering the cooling systems with fresh sea water.
Seaweed:	Any large alga growing in the sea below the high water mark.
Seaworthiness:	The sufficiency of a vessel in construction, crew and equipment for the trade and sea area in which it is employed.
Secure:	To make fast.
Secure for sea:	To close all weather/watertight hatches/doors and lash moveable items.
Segregation:	A term used in the IMDG Code to describe the stowage separation of incompatible materials and/or chemicals.
Seiche:	Local oscillation of water level, caused by atmospheric pressure variation over a body of water as is found on Lake Geneva and Lake Wakatipu.
Seize:	To tightly bind something.
Selective availability:	An error in accuracy purposely encoded in the publicly available satellite information for GPS receivers. Reduces accuracy to +/- 100 metres, 95% probability level. Sometimes called 'Dithering'
Self-bailing:	A system of draining water that enters a compartment through scuppers or venturi's.
Self-contained breathing apparatus (S.C.B.A.):	An atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.
Self-contained underwater breathing apparatus (S.C.U.B.A.):	An atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.
Self propelled barge:	A barge with its own engine.
Self-steering:	A steering arrangement using wind vanes and gearing or sail trim to maintain a preselected relative course.
Semaphore:	Flag signalling using combinations of arm positions.
Semi-diurnal tide:	A tide that has one high tide and one low water in each half day.
Sennit:	Plait of rope.
Series circuit:	A series circuit is one which has the components connected in a series, that is, one after the other. The example above is also a series circuit.
Serve:	Part of the process of protecting a wire or rope by worm, parcelling and serving.

	<p>Small tarred stuff is wound into the grooves of the lay to give the rope a smooth surface (worming). Tarred canvas is then wound around the smooth surface (parcelling) Finally a tarred seizing of thin wire or twine is tightly wound around all using a serving mallet to apply tension (serving).</p>
Service life:	Means the period of time that a respirator, filter or sorbent or other respiratory equipment provides adequate protection to the wearer.
Settle:	To lower a little.
Set:	To hoist sails. The true compass direction in which a current flows.
Set flying:	A foresail attached only at head and foot.
Set iron:	A soft iron bar used on an anvil or bending slab to shape frames.
Settle:	To sink deeper.
Set-up:	A jig or former on which to built a vessel.
Sextant:	An instrument used to measure the vertical angle of altitude of heavenly bodies and coastal features, and the horizontal angle between coastal features.
S.H.A.:	Sideral hour angle – the angular distance between the GHA of Aries and the GHA of a star (measured in a westward direction).
Shackle:	A bowed metal fitting closed with a pin through the ends, used for ease of attachment of ropes, wires and chains. A 15 fathoms length of anchor chain, sometimes called a shot.
Shadow sector:	An area partially shielded from radar transmissions by part of the ship's structure or high intervening coastline.
Shaft:	A long handle of a tool. A rod connecting the engines drive to the vessel's propeller.
Shaft alley:	The tail shaft covered tunnels in a motor ship.
Shaft horsepower:	The effective horsepower as measured at the engine and propeller shaft coupling.
Shaft log:	The centrally bored timber structure in which the propeller shaft is inserted and held in alignment.
Shaft tunnel:	See shaft alley.
Shakedown cruise:	A cruise to test equipment and machinery.
Shall:	A legal term obliging compliance, mandatory – see should and may.
Shallop:	Ships boat of the 17 century.
Shallow water effect:	The effect that due to the depth of water, the speed of the vessel and shape of the vessels hull causes the vessel to sink deeper in the water especially in shallow water and at high speed.
Shape a course:	To plan and execute a passage plan to a destination.
Shanghaied:	Obtaining a crew by force.
Shank:	The main section of an anchor; the stock is attached at one end, and the crown, arms and flukes at the other.
Sharpie:	"Sharp"-bowed, flat bottomed skiff. A term usually applied to flat bottomed sailing skiffs over 20' in length. All types of rigs were traditionally used.
Shear legs:	Lashed twin or tripod of spars used to raise or lower heavy objects/masts.
Shears:	A cutting tool with two opposing blades.

	Two or more spars lashed together near their raised upper ends; used for hoisting or lowering heavy objects.
Sheathing:	A protective covering on the exterior of a vessel.
Sheave:	The pulley wheel in a block that the rope runs over. Sheave-hole; the orifice in a block for the ropes to reeve through.
Sheep-shank:	A hitch used to temporarily shorten a rope or isolate damage. 
Sheer:	The design profile of a vessel formed by the line of the hull's topsides.
Sheer clamp:	In timber vessel construction, an external longitudinal stringer that joins the frame heads.
Sheer plan:	Elevation of the longitudinal shape of a hull; Profile plan.
Sheer strake:	The plank along the outer edge of the topsides at deck level.
Sheet:	An adjustable rope that controls the trim of a sail by pressure applied to the sail's clew.
Sheet bend:	Used to join ropes of the dissimilar sizes. 
Sheet anchor:	A vessel's emergency anchor (the largest and best).
Shell:	The sides of a pulley block.
Shellbacks:	Those who were tried and successfully completed the initiation challenges before King Neptune's crossing the line pantomime court. See crossing the line.
Shell plating:	The actual steel plating forming the hull and decks of a ship.
Shelter deck:	The main deck. A raised walkway from stem to stern.
Sheltered Waters:	A non specific term for waters protected from ocean swell. For the purposes of NSCV Part B, waters comprising designated smooth and partially smooth waters. See smooth (E) and partially smooth waters (D).
Shift:	Change in wind direction. Movement of cargo.
Shifting boards:	Temporary boards placed between loose cargo to limit its movement in bad weather.
Shims:	Pieces of thin metal used for adjusting alignment positions or clearances in mechanical systems such as steering gear or engine to shaft alignment.
Shingle:	Gravel.
Ship:	Historically a three masted fully square rigged vessel with lateen or gaff mizzen.
Ship chandler:	A company that sells equipment and supplies for ships.
Shippers:	Those who purchase transportation services for their goods or commodities.
Ship's agent:	A person who transacts the business on behalf of shipowners. Also called shipping agent.
Ship's articles:	The contract between the master and the crew concerning their employment.
Ship's demurrage:	A charge for delaying a steamer beyond a stipulated period.
Ship's head up:	A radar mode in which the heading of the vessel is displayed at the top of the radar screen.

Ship shape:	Tidy.
Ship shape and Bristol fashion:	Very tidy, as per the ancient requirements of the City of Bristol.
Ship's manifest:	A statement listing the particulars of all shipments loaded for a specified voyage.
Ship's stability:	The ability of a vessel to return to the upright after heeling.
Ship's tackle:	All rigging, cranes, etc., utilized on a ship to load or unload cargo.
Ship's time:	Was traditionally counted by the half hour, starting at midnight. A half hour past twelve was marked by ringing a bell once, one o'clock, was two bells continuing until four o'clock, or eight bells. The counting then started over again, with half hour past four being one bell.
Shoal:	To shallow or a shallow area.
Shoe:	A timber or metal plate attached to a structure as a protective surface.
Shore:	A prop, stanchion or tom, placed to support a beam. To prop up or reinforce.
Short board:	A short sailing tack or leg; a long board is a long tack.
Short circuit:	Occurs when a positive and negative electrical current intersect, bypassing the proper electrical route.
Shorten:	To reduce the area of sail set.
Shorthanded:	With insufficient crew.
Short stay:	Anchor cable descending almost vertically as the chain's scope is slightly greater than the water depth.
Short ton:	2,000 pounds.
Shot:	Method of measuring chain; see shackle.
Should:	A legal term obliging the intended outcome but allowing for flexibility determined by the circumstances – see shall and may.
Shoulder:	The forward outer sections of a hull.
Shove in your oar:	Contribute to a conversation.
Showers:	Short-lived rainfall.
Shrouds:	Support mast stays on each side of a vessel.
S.H.U.:	A radar mode in which the heading of the vessel is displayed at the top of the radar screen.
Shunting:	Waka canoe method of going about by reversing the bow and stern of the canoe.
Shy:	A spinnaker set with pole rigged forward for reaching.
Side lights:	The vessel's navigation lights displayed at night and in restricted visibility when underway and making way that indicate the aspect that is being viewed. The starboard green light shows an unbroken arc from dead ahead to 112.5° on the right hand side and the port red light shows an unbroken arc from dead ahead to 112.5° on the left hand side.
Side loader:	A truck with lifting gear operating to one side for handling containers.
Side scuttles:	Holes situated in the sides of a ship admitting light and fresh air.
S.I.E.V.	Suspected illegal entry vessel.
Significant wave height:	The mean value of the highest one-third of wave heights measured from trough to crest recorded in a wave time history.

	NOTE: It is probable that one in every 1000 waves will have a height at least 1.86 times the significant wave height.
Silicon bronze:	Alloy of approximately 96% copper and 1.5% silicon.
Sills:	Horizontally placed structural timbers between a vessel's frames that form and secure hull openings. An underwater bank at the entrance to a harbour.
Silencer:	A baffled chamber in an exhaust system that reduces noise emissions.
Simoom:	A dusty desert wind of the Middle East.
Single-handed:	Operation of a boat with one person aboard.
Single screw:	A ship having only one propeller.
Sing out:	To call out.
Siren:	A loud alarm signal. A mermaid of ancient Greek myth that lured seaman to destruction by their irresistible signing.
Sirocco:	A south easterly wind blowing off the North African desert. One of the eight traditional traders winds of the Mediterranean Sea.
Sister hooks:	Twin flat sided hooks reversed to one another.
Sister ship:	Ships built on the same design.
Sitka spruce:	European softwood timber of low weight and straight grain prized for masts.
Sitrep:	Situation reports typically given by a rescue vessel during the course of a rescue.
Six degrees of freedom:	The six vectors of ship movement: Pitching, Rolling, Swaying, Surging, Heaving, and Yawing.
Skeg:	An underwater fin or support structure.
Skids:	Beams laid on the decks for the stowage of heavy cargo.
Skiff:	Flat bottomed sailing dingy.
Skin friction:	The surface resistance of a hull passing through the water.
Skipper:	The master of a small craft.
Skyflyer:	A British yawl built for the OSTAR race.
Skylight:	A glazed hatch to admit air and light below decks.
Sky pilot:	A chaplain.
Skysail:	The square sail set above the course sails (lowest), lower topsail, upper topsail, topgallant, and royal of a sailing ship.
Slack:	Loose, not tight.
Slack water:	The brief interval at the turn of the tide when the water does not move in any direction.
Slalom:	A zigzag course laid out by marker buoys.
Slamming:	Heavy wave impact on the bow of a vessel.
Slapping:	Heavy wave impact under the counter of a vessel.
Sleet:	Falling snow that is melting into rain.
Slew:	To turn something around.
Sling:	A rope with ends spliced together for cargo lifting.
Slip:	To remove a vessel from the water to a slipway. An alternative term for a slipway. To let go a cable or anchor.
Slip rope:	A mooring line led from the vessel to the shore and then back to the vessel. It can be let go and retrieved from on board the vessel as it

	departs.
Slocum, Captain Joshua:	American master, pioneering solo sailor and author of Sailing alone around the World.
Sloop:	A single masted yacht with a single working foresail.
Slop chest:	Stock of merchandise aboard ships for sale to the crew.
Slops:	Work wear.
Slop tank:	A tank into which residues of the ship's cargo of oil together with the water used to clean the cargo tanks (slops) are pumped. They are left to separate out in the slop tank.
Slot:	The air space between overlapping sails
Sluice:	A lower bulkhead watertight door. A strainer across a stepped watercourse.
Smack:	A small sturdy sailing fishing boat.
Smart:	Seamanlike.
S.M.G.:	Speed made good.
Smog:	A fog thickened by smoke or other atmospheric pollutants.
Smothering lines:	Pipes delivering fire extinguishing agent.
Smooth waters:	Sheltered waters Class E area - for the purposes of the NSCV Part B, operations within specified geographical limits designated by the (State) Authority as smooth waters, typically waters where the significant wave height does not exceed 0.5 m from trough to crest for at least 90 per cent of the time.
Snap freeze:	Rapid freezing of food to preserve its natural qualities.
Snatch block:	A block whose side can be opened for a rope to be inserted across the sheave.
Snotter:	A wire or rope with eyes in each end for cargo work.
Snow:	Precipitation of ice crystals. Traditional round hulled sailing vessel where the mizzen mast carries a vertical spar, enabling the mizzen hoops and the mizzen squaresail yard parrel to be lowered to the deck independently.
S.N.R.:	Signal to noise ratio - GPS indicator of satellite signal strength against background electrical noise. Higher numbers represent better reception.
Snub:	To check (temporarily restrain) the movement of a line by taking a turn around the bitts, a cleat or a post.
S.O.I.:	The Southern Oscillation Index is calculated from seasonal air pressure fluctuation differences between Tahiti and Darwin.
S.O.L.A.S.:	Saving of Life at Sea Convention of the IMO to maintain standards of lifesaving at sea.
Soldiers wind:	A fair wind that requires no tacking.
Sole:	The floorboards of a vessel's cabin or hold.
Solstice:	The two days of the year when the sun is at its maximum to the North and the South of the equator.
Solvents:	Liquids that dissolve grease or paints.
SOP's:	Is short for Standing Operating Procedures.
Sound:	An inlet or enclosed area of deep sea water formed in a flooded river valley. To take soundings.
Sounding:	Sounding is the term used for measuring the depth of liquid in a

	tank. The depth of water.
Southern oscillation index:	See El Niño.
Southwester:	A wind from the South West. An oil-skin hat with broad rear brim.
Span:	A wire rope between davit peaks.
Spanish windlass:	Two initially parallel ropes twisted together by length of wood inserted in a loop between them; used to apply tension.
Spanker:	The mizzen fore and aft sail of a square rigged ship.
Sparks:	An electrician.
Spars:	Masts, booms, gaffs or other timber poles that support sails.
Spate:	Full flow of a swollen stream.
Speak to, Speak with:	To communicate with a vessel in sight.
Special personnel:	For the purposes of NSCV Part B, all persons who: a) have knowledge of safety procedures and handling of safety equipment on board; b) are not passengers, or members of the crew, or children under one year of age; c) are carried on board in connection with the special purpose of that vessel, or because of special work being carried out aboard that vessel; and d) are able bodied.
Special purpose vessel:	For the purposes of NSCV Part B, a vessel that is either: a) a non-passenger vessel which by reason of its function carries on board a total of more than 12 special personnel and passengers, or b) a fishing vessel which by reason of its function carries on board more than 12 special personnel. Examples of special purpose vessels may include: Ships engaged in research, expeditions and survey Ships for training of marine personnel Fish factory ships and ships processing other living resources of the sea, or seabed
Speed curve:	A graph comparing engine revolutions per minute and knots of statute miles per hour used to determining speed without the advantage of a log or speedometer..
Speed/length ratio:	A formula used to compare potential speeds of displacement or semi-displacement hulls; not used for full planing hulls. Few hulls reach their theoretical speed-length ratio. Formula: Speed in knots= factor x square root of the waterline length. Factors range from 0.8 (barge) to 1.34 (sailing yacht).
Speed log:	Instrument for measuring ships speed and distance run.
Speed made good:	The vessels speed from one known position over the sea bed position over the sea bed to another known position over the sea bed.
Spencer:	Set on fully rigged ships, the fore and aft mainsail. A gaff sail without a boom.
Spikes:	Pointed fastenings driven into timber.

Spiling:	Bending a batten in a curve as a pattern to mark out the rounded shape required for a component in timber boat building. A method of fitting longitudinal planking junctions.
Spill:	To empty the wind from a sail.
Spinnaker:	A light and large sail used to increase sail area dramatically while running. It is poled out to maintain its set.
Spit:	Low shoal projection into the sea.
Spitfire jib:	A small storm jib of heavy canvas.
Splash Point:	LKP
Splice:	To join ropes by interweaving their strands.
Split in wood:	Separation of the fibres in a piece of wood from face to face.
Split yarn:	A historic method of lashing incorporating a weak point that is easily broken for emergency release, where the alternative of untying knots is considered too slow. For instance an anchor or lifebuoy.
Spoil ground:	Underwater dumping ground.
Sponson:	Rubbing strake. A projection or addition to the side or bottom of the boat to stabilize or provide lift. One waterproof compartment of a multi-hulled vessel.
Spot rate:	A charter contract rate for a particular vessel to move a single cargo between specified loading and discharge ports in the immediate future.
Spotted gum:	Australian durable and flexible timber much sought after for marine use.
Spray rails:	Longitudinal timbers fastened to a vessel to divert and flatten spray or provide a stepped hull shape to optimise wetted surface area in planing craft.
Spreader:	Struts attached to the mast to spread the stays and improve the angle they make with the mast.
Springs:	Mooring lines to counter surging.
Spring tide:	Higher tides at the full and new moon.
Spritsail:	Mainsail of Thames barges held out by a spar (the sprit) and loose footed.
Spritsail yard:	A sprit. See Spritsail.
Sprung:	A member bent & slotted into place under tension during timber construction, or, Timbers that have been forcibly displaced due to pressure.
Spry:	Active and fit.
Spunkie:	A Scottish water spirit.
Spun yarn:	Rope yarns unwound and tarred and used for servings and light seizings.
Spurling pipe:	A steel tube leading from forecandle deck to Chain locker.
Squall:	A violent short storm or wind.
Square sail:	Sails set on spars attached to masts. Being set transversely across the vessel they reach their optimum pulling power with the wind behind the vessel.
Squat:	It is the increase in the vessels draft caused by shallow water effect.
Squeegee:	A rubber bladed implement used for drying decks.

S.R.R.:	Search and rescue region of defined dimensions, associated with the national rescue coordination centre.
S.R.U.:	Search and rescue unit composed of trained personnel and provided with suitable equipment.
S.S.:	Steam ship.
S.S.T.:	Sea surface temperature.
S.S.T.A.:	Sea surface temperature anomalies.
Stack:	The ship's funnel.
Stall:	Stopping of air-flow over a sail or a vessel's movement through the water.
Stabilisers:	Protruding hydrofoils which reduce roll by alternating lift effect phased to counter successive rolls.
Stability:	The ability of a vessel to return to the upright.
Stagger:	To walk with an erratic gait. Arrangement in an alternating pattern.
Staging:	Temporary plank or decking as used in a scaffold.
Stainless steel:	Non rusting alloy of iron and nickel - marine grade 316, hospitality grade 314.
Stanchions:	The vertical posts that support a handrail or guardrail.
Standard compass:	The magnetic compass.
Stand by:	An order to be ready.
Standing:	That part of a rope that is fast or closest to the main coil.
Standing part:	That part of a line or fall which is secured.
Standing rigging:	That vessel's rigging that is fixed and made fast.
Stand of the tide:	Prolonged period when the tidal level remains constant.
Stand on:	The vessel that by the rules is required to maintain its course and speed.
Starboard:	The right-hand side of a vessel.
Stargrazer:	The square sail set above the course sails (lowest), lower topsail, upper topsail, topgallant, royal and skysail of an extreme clipper.
Start:	To ease a sheet.
Starting solenoid:	A heavy-duty relay for opening and closing the circuit to an engine's starter motor.
Station:	One of a series of equally spaced transverse "slices" of the hull, as shown in the lines drawing of the plans. Also called a section.
Station pointer:	Navigational plotting instrument with three adjustable arms that can be aligned to match the relative bearings charted features from a common position.
Staunch:	Steadfast, strong or able.
Staves:	Short reinforcing planks or frames.
Stay:	A wire used to support (particularly fore and aft) a mast or spar.
Staysail:	A triangular fore and aft sail. Set on small craft as the inner foresail. Set on sailing ships between masts, each staysail is named after the stay that it is hanked to, e.g. main royal staysail.
Staysail schooner:	A schooner that sets a staysail between the masts as opposed to a fore and aft foresail on its foremast.
S.T.C.W.:	Standards of Training and Certification of Watchkeepers Convention of the IMO to maintain standards of watchkeeping at

	sea.
Steady:	To maintain a course heading.
Stealers:	Short lengths of plank used to infill at the ends of a hull to avoid wasting much of the otherwise over wide boards required by the even run of the plank.
Steaming:	Heating of timber in a steam chest in order to make it pliable so it can be bent to the required shape for construction.
Steerage way:	The minimum speed through the water that a vessel requires to answer to its helm.
St. Elmo's fire:	See Elmo's, St. fire
Stem:	The outer bow timber of a vessel.
Stemming:	Maintaining control of a vessel by steering into the wind or the tide.
Stem the tide:	See stemming.
Step:	A block of wood on the keel, on which the heel of the mast rests.
Stern:	The after end of a vessel.
Stern anchor:	An anchor carried at the stern; often the kedge.
Stern board:	Progress backwards.
Stern frame:	A substantial structural member at the stern where the shell plating terminates.
Stern gallery:	The highly decorated and balconied transom of historic sailing ships.
Stern gland:	A packing which surrounds the propeller shaft as it passes through the vessel's hull and prevents sea water from entering the vessel through the hole in the hull.
Stern-post:	The after longitudinal timber in a vessel, morticed to the keel, that supports the transom and rudder.
Stern tube:	A watertight metal tube through which propeller shaft is passed for attachment of propeller.
Sternway:	The movement of a vessel going backwards.
Stevedore:	Dock worker employed to load and unload ships.
Stiff:	The resistance of a vessel to heel, the opposite of tender.
Stiffener:	A plate fastened to a surface to make it more rigid.
Stitch and glue:	Planking method using copper wire to sew sheets of plywood together.
Stock:	A bar set perpendicular to the shank of an anchor that ensures that the crown and flukes will not lay flat on the seabed and drag.
Stock anchor:	A historic anchor with a stock set perpendicular to the shank, crown and flukes. Also called the Admiralty anchor.
Stockless anchor:	A ships anchor designed to pull up into the hawse. Also called a dreadnought.
Stocks:	Framework upon which a boat is built. A framework to lash a prisoner for corporal punishment.
Stopper:	Temporary length of rope that is attached to anchor chain or hawser under strain in order that it can be moved from over the windlass to be made fast on a cleat or bollard.
Stops:	Weak bindings of easily broken twine or looped restraining ropes securing a sail that will pull free when sharply jerked.
Stop valve:	A manually operated valve for controlling fluid or gas flow.
Stopwater:	A dowel inserted through a scarf whose end grain will swell to seal

	water entry through the scarf.
Storm:	A storm force wind averages from 48 knots and up to 63 knots.
Storm warning:	An announced warning of winds over 48 knots.
Stove-in:	Smashed.
Stow:	To secure.
Stowage:	The placing of goods in a vessel in such a way so as to promote safety and stability of the vessel.
Stowage factor:	The average cubic space occupied by one ton of cargo stowed aboard.
Stowaway:	An unauthorised person aboard.
Strake:	A continuous line of plating or planking, extending along the shipside from forward to aft.
Strand:	Fibres are wound into yarns. Yarns are wound into strands. Strands are wound into rope. An Irish term for a beach.
Stranding:	Going aground.
Stratosphere:	Layer of the atmosphere between 10 and 50 kilometres high.
Stratus cloud:	Low uniform cloud layer.
Stray-current corrosion:	Corrosion that results when a direct current causes a metal in contact with an electrolyte to become the anode in respect of another metal contacting the same electrolyte.
Stream anchor:	A smaller anchor used with the bower to hold a vessel from swinging excessively in a tideway.
Striker:	A paint brush with a long handle.
Striker plate:	A small doubler plate located just below a sounding pipe, on which the sounding rod/bob strikes.
Stringer:	A small section longitudinal internal timber in a vessel's structure.
Strip:	To completely dismantle.
Strip planking:	Uses strips fitted, glued, and fastened on edge with optional fibreglass on the outside only.
Strongback:	A longitudinal batten along the decking centreline.
Strong wind warning:	Forecasted winds averaging from 26 knots and up to 33 knots.
Strop:	A loop of rope or wire used for slinging weights.
Strum box:	A perforated box at the bottom of a bilge inlet pipe to prevent debris entering the system and clogging the pump.
Strut:	A support fitting for a stay or a propeller shaft.
Strut bearing:	The aftermost bearing for a propeller shaft found in the strut.
Studding sail:	Also Stun' sail. Fair weather supplementary square sails, set by sailing ships at either side of each of the regular square sails.
Stuff:	General term for small section rope or string.
Submarine:	A vessel designed to travel under the surface.
Sullage:	Toilet effluent.
Supercell:	An intense updraught and downdraught within a thunderstorm.
Supercharger:	A blower for forcing air into the intake of an internal combustion engine and increase power output.
Supercargo:	Person employed to supervise cargo handling operations
Supernumery:	Extra person to ships compliment (passenger).
Superstructure:	That part of the vessel that is built on top of the upper deck. These are detached decked structures on the freeboard deck extending

	transversely to at least within 0.04B from the ship's side. The length of a superstructure (S) is the mean length of the part of the superstructure which lies within the length (L).
Supplied-air respirator (S.A.R.) or airline respirator:	An atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.
Surge:	A large, swelling wave. To surge a rope, is to slack it off suddenly from a cleat or winch. To run a line out over a winch unchecked by brake or gearing. The movement of a vessel back and forth along a wharf.
S.U.R.P.I.C.:	Surface picture. A list or graphic display from a ship reporting system of information about vessels in the vicinity of a distress.
Survey:	A thorough examination performed by, or in the presence of a surveyor or an authorised person or society.
S.V.:	Sailing vessel.
Sverdrup:	A unit of measure of oceanic current flow equal to 1 million cubic metres of water per second per square kilometre.
Swab:	A mop.
Swage:	A soft metal collar squeezed over the ends of a loop in S.W.R. to suffice for a spliced eye.
Swageless terminal:	A reusable compression fitting (collet) tightened over the end of S.W.R. to suffice for a spliced eye.
Swamped:	To be filled with water.
Swash bulkhead:	Plates fitted at the base of a bulkhead to reduce free surface effect caused by moving liquids.
Swash plates:	Plates fitted in tanks to reduce free surface effect caused by moving liquids
Swash:	The thin sheet of water that washes up the beach with each breaking wave.
Swashway:	Channel through shoals.
Sway:	The bodily movement of a vessel in & out from a berth.
Sweep:	Short for drag sweep.
Sweep width (W):	In SAR a measure of the effectiveness with which a particular sensor can detect a particular object under specific environmental conditions.
Swell:	Wave movements caused by distant storm or seismic activity.
Swinging circle:	The range of drift in a circular direction normally due to current, tide or wind shift, when a vessel is moored to a buoy.
Swinging straps:	Foot straps in a sailing dinghy to allow the crew to swing out over the side of the boat.
Swing ship:	To obtain compass errors (for making a deviation table) by swinging a ship's head through several headings on transits.
S.W.L.:	Maximum weight permitted to be lifted by a lifting appliance.
S.W.R.:	Steel wire rope.
Syncrolift:	A platform enabling a vessel to be floated over it and then raised by multiple banks of winches.
Synoptic surface weather:	The word "synoptic" being derived from the word synopsis, meaning a summary or outline.

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T

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T:	Code flag; I am engaged in pair trawling. Sound signal; A power driven vessel making way in restricted visibility.
T flag + four numerals:	Code flags; Local time.
Tabernacle:	Seating for a mast at the deck level.
Table of offsets:	See Offsets
Tabling:	Reinforcing pieces on the edges and top of a sail.
Tabloid cruiser:	A small sailing cruiser.
Tachometer:	An instrument that indicates the speed of an engine's revolutions.
Tack:	To turn a sailing vessel through the eye of the wind. The aspect of the vessel to the wind; a port tack with the wind on the port side and starboard tack with it on the starboard. The lower forward corner of a sail. The corner of sail that is attached to mast or spar.
Tackle:	A purchase of one or more blocks and connecting falls used to gain mechanical advantage.
Tackline:	Separating rope line to keep signal flags apart (6 foot long).
Tactical diameter:	See advance.
Taff rail:	The ships rail at the stern of the vessel.
Taffrail log:	The log mounted on the taffrail and consisting of an impellor, a log line and counter. See Walkers patent log.
Tail:	A rope spliced into the end of a wire halyard or brace.
Tail off:	To maintain pressure on the end of a line as it comes off a winch.
Tail shaft:	The section at the aft end of a ship's propeller shaft.
Take a turn:	To pass a turn around a belaying pin or cleat.
Take in:	To furl the sails.
Tall ship:	A large sailing ship.
Tank cleaning:	Removal of all traces of a cargo from the tanks of a tanker by means of high pressure water jets.
Tanker:	A bulk liquid cargo carrier. Oil tankers vary in size from small coastal vessels of 1,500 tons deadweight, through medium-sized ship of 60,000 tons, to the giant VLCCs (very large crude carriers).
Tang:	A metal fitting on a mast to which a stay is attached.
Tare weight:	The weight of the container of the cargo. Gross weight equals the net weight of cargo plus the tare weight of the containing packaging or receptacle.
Tarpaulin:	A natural or synthetic canvas used as a waterproof cover sheet.
Taut:	Tight.
T.C.A.:	Time of closest approach during a satellite pass when the satellite is closest to a signal source.
T.C.P.A.:	Plotted time of closest approach of a radar target.
T.C.T.S.:	True course to steer.
Teak:	Peppery scented straight grained Indo-Asian timber very durable for marine use. Gluing can be problematic due to oily surfaces.
Telegraph:	Af signalling system typically from bridge to engine room.
Temper:	The opposite to anneal. When hardened tool steels are heated and

	cooled slowly they become soft. The tempering process is one of heating the metal to cherry red then plunging it into water to cool quickly.
Tender:	A small boat used in connection with a larger boat; a boat used for ferrying crews to boats or yachts moored in a harbour; also a power boat used for towing a racing yacht.
Tender vessel:	One that is easily heeled due to a high centre of gravity.
Tenon:	The heel of a mast, shaped to fit into the mast step. A squared end to a timber machined to fit tightly into a mortice.
Tentacle:	An animal/insect's flexible appendage used for feeling or moving.
Teredo:	A marine borer that is destructive to wooden planking and wharf piles.
Territorial waters or sea:	Australian Commonwealth up to 200nm, NSW up to 3 nm.
Test head:	A head of water corresponding to the prescribed pressure test for bulkheads, tanks, compartments, etc., watertightness.
T.E.U:	A twenty-foot equivalent unit for a standard container of 20 ft long x 8 ft wide x 8.5 ft high; (6050 x 2440 x 2590 mm).
Texts:	(List of contents of the CD)
Tide pole:	A gauge calibrated to read tide levels.
Tide rip:	See overfalls.
Tide-rode:	A vessel whose bow is swung into the tide.
Tide way:	An area experiencing the full force of the tide.
Tiller:	A bar that acts as a lever for steering, connected to the rudder stock.
Timber hitch:	Used for fastening spars or barrels.
Time signal:	Regular broadcast as an accurate time check.
Time zones:	Twenty four longitudinal zones, each of 15° and each representing one hour of time.
Thames measurement:	Historically $TM = (\text{length} \times \text{width} \times \text{depth}) \div 100$. Latterly $TM = ((\text{length} - \text{width}) \times (\text{width} \times \frac{1}{2} \text{width})) \div 94$.
Thermometer:	Used to measure temperature.
Thermostat:	A temperature sensitive device used to operate a control mechanism. A valve that opens or closes in response to temperature
Thimble:	An eyelet sewn into the corner or along the edge of a sail or canvas cover. A metal insert to protect the inside of an eye splice from chafe.
Thole:	A device for holding an oar in place when rowing or steering. One of a pair of wood or metal pins set vertically in the gunwale of a boat that serve as oar locks. See oarlock & rowlock.
Thrascias:	See classical winds.
Three sheets to the wind:	A ship running free, barely able to keep headway and control. Drunk.
Throttle:	Hand accelerator unit on an outboard engine.
Through-hull connection:	A hull fitting used to connect piping with the atmosphere outside with a watertight connection through the hull.
Thrust bearing:	A bearing designed to absorb the forward thrust of the propeller.
Thruster:	A controllable propeller placed in the athwartships direction to

	provide a transverse thrust to assist a ship in manoeuvring.
Thwarts:	The seats in a small boat.
Thwartships:	At right angles to the fore and aft line of the ship.
Ticket:	A certificate of qualification.
Tidal:	Subject to the tide range.
Tidal bore:	A wave caused by constriction of spring tide as it enters a long narrow shallow inlet.
Tidal wave:	An exceptionally large ocean wave, possibly caused by an earthquake.
Tide:	The regular raising and lowering from mean sea level due to the gravitational effect of the moon and sun (and other planets).
Tide chart:	Is a graphical representation of the range of highs and lows throughout the period with the springs and neaps recorded. Data includes Tide tables, tides, tidal predictions and graphical data for more ports worldwide.
Tide rip:	Rough water caused by tidal currents.
Tide rode:	When a vessel swings at anchor from tidal influence; unlike wind rode.
Tie down:	A line securing an object.
Tie rod:	A through bolt to stop a hull or structure from falling outward.
Tiller:	A handle attached to a rudder for leverage in steering.
Tiller arm:	An arm extending from the rudder stock which can be used to manually turn the rudder.
Timber:	Generally any wooden component in vessel construction. Specifically, bent ribs.
Tinny:	Australian slang for an aluminium dinghy.
Tinny to tanker:	A past AMSA initiative to facilitate seafarers transitioning commercial vessel licenses from small domestic craft to international shipping, no longer being progressed.
T.M.:	Tonnage measurement.
Toe rail:	An edging rail around the weather deck.
Toggle:	A pin inserted through the bight of a bend to keep it in its place; i.e. toggled sheet bend...
Tonnage:	The weight of a vessel.
Tonnage, gross:	The entire internal cubic capacity of a vessel expressed in tons of 100 cubic feet each.
Tonnage, net:	The internal cubic capacity of a vessel remaining after the capacities specified spaces have been deducted from the gross tonnage.
Ton register:	Obsolete unit of ship tonnage, 1 TR =100 Imperial cubic feet.
Tons gross:	Measure of below deck spaces and superstructure of full width.
Tonnes per centimetre immersion:	TPC. The buoyancy created by increasing the draught by 1 cm.
Topgallant:	The square sail set above the course sails (lowest), lower topsail and upper topsail of a sailing ship.
Topgallant mast:	See topmast.
Top-heavy:	Too much weight aloft.
Topmark:	Identification shapes above buoys.

Topmast:	The mast can be in two or three sections, the lower mast, the topmast and the topgallant mast.
Topping lift:	A halyard that supports the after end of a boom.
Topsail:	An additional light weather sail set above a gaff mainsail. The square sail set above the course sails (lowest) of a sailing ship, usually paired as a lower and upper topsail.
Topsail schooner:	A fore-and-aft rigged vessel having two or more masts. The foremast sets both square sails and fore and aft sails.
Topsides:	Sides of the vessel between waterline and deck/rail.
Tornado:	A whirlwind of high speed rotating air.
Torque:	A rotary force, such as that on a propeller shaft; the turning moment from tangential effort.
Torque wrench:	A wrench designed and to transfer an exact degree of tightness. To prevent thread stripping and comply with manufacturers specifications.
Total drift error (De):	Sum of the individual drift errors from the time of a SAR incident until datum. Used when determining Total Probable Error (E).
Total probable error (E):	The estimated error in a SAR datum position. It is the square root of the sum of the squares of the total drift error, initial position error, and search facility position error.
Tow:	To pull a vessel through the water.
Towing becket:	Used to attach a towline to a towing bridle.
Tonnes per centimetre (TPC):	The mass which must be added to, or deducted from, a ship in order to change its mean draught by 1 cm. If the ship changes its mean draught by 1 cm and if AWm^2 is the area of the water- plane at which it is floating, then: Change of volume = $AW \times 0.01 \text{ m}^3$ Change of displacement = $AW \times 0.01 \times 1.025$ tonnes in salt water $TPC = AW \times 0.01025 = AW \div 97.5$ or $TPC = AW \times 0.01$ tonnes fresh water = $AW \div 100$
T.P.C.	Tonnes Per Centimetre. Tonnes required to change the vessel's mean draft by one centimetre.
Track:	The actual route taken by a vessel or cyclone.
Tracker ball:	A sphere built into the control panel of electronic instruments to control the movement of a cursor, similar to a computer mouse.
Track spacing (S):	In SAR the distance between adjacent parallel search tracks.
Trade winds:	Sub equatorial zones of prevailing S.E. wind in the Southern Hemisphere and N.E. wind in the Northern Hemisphere.
Traffic separation zone:	A routeing measure to separate the flow of vessels in areas of high traffic density, usually the approaches to busy harbours. Vessels should enter and exit the zones at their termination points.
Training wall:	A wall to contain a rivers flow.
Tractor propulsion:	A system of vertical blades used to propel tugs and ferries, also called a cyclonic system due to the way the blades turn.
Trammel:	A marking gauge for drawing a radius.
Tramontane:	Cold dry northerly wind off the alps - one of the traditional eight traders winds of the Mediterranean Sea.
Tramp ship:	Vessel operating without a fixed itinerary or schedule or charter contract.

Transfer:	See advance.
Transship:	To transfer goods from one transportation line to another, or from one ship to another.
Transit:	Two or more objects sighted in line. To be moving.
Transom:	A stern that is cut off, square or sloping, at the waterline.
Transom cutout:	An aperture in a transom used to mount an outboard or give access for boarding.
Transom knees:	Knees bracketing the transom to the after timbers.
Transverse:	Across a vessel, at right angles to a line drawn from bow to stern.
Transverse thrust:	The sideways component of a propeller's action (also called the paddlewheel effect). With a right-hand revolving prop in ahead propulsion it causes a vessel's bow to slew to the left, and in astern propulsion it's stern to slew to the left. The opposite is the case with a left-hand revolving prop.
Trap boat:	A vessel engaged in fishing by baiting and retrieving fish traps, so as to restrict the vessel's manoeuvrability.
Trapeze:	A safety harness and wire that in small fast sailing craft allows the crew to counteract the heel by leaning well overboard.
Traverse sailing:	The navigational technique popular in the days of sail of summing many successive course and rhumb line changes due to tacking into a single equivalent rhumb line from first position to last position.
Trawl:	A wide-mouthed fishing net dragged along the ocean bottom.
Trawler:	A vessel engaged in fishing where its nets restrict the vessel's manoeuvrability.
Treenails:	Wooden dowels used as nails, traditionally of locust wood.
Triage:	The process of sorting survivors according to medical condition and assigning them priorities for emergency care, treatment, and evacuation.
Triatic stay:	A stay between mast tops.
Tributary:	A smaller river that joins a larger.
Trice:	To raise up by using a rope.
Tricing line:	A line used for suspending or tying articles up tight.
Trick:	A turn of duty at the steering wheel (usually up to two hours).
Trident:	Three pronged spear of Roman and Greek Sea Gods Neptune and Poseidon.
Trim:	This is the difference between the draughts forward and aft. If the draught forward is greater than the draught aft it is called trim by the head, or bow. If the draught aft is greater, it is called trim by the stern. To adjust the loading conditions of a vessel to put her on her proper lines. To tension a sheet to place a sail at its best shape and angle to the wind.
Trip:	To release. To raise an anchor clear of the bottom. To release a spring-loaded snap-shackle.
Tripping line:	A line used for capsizing an anchor or drogue and hauling it in.
Trireme:	Ancient Greek galley with three banks of oars.

Triton:	Son and messenger of the Greek Sea God and Goddess, Poseidon and Amphitrite.
Troop ship:	A vessel used to carry soldiers to and from a war zone.
Tropical cyclone (TRV):	Tropical revolving storm. An area of intense low pressure which form over tropical waters, usually in the summer.
Trot:	A line of river moorings.
Trough:	The hollow between wave crests. The maximum negative amplitude of a radio wave. Where low pressure isobars are distended outwards from a centre of low pressure.
Truck:	The flat circular section of the mast top.
True air speed (TAS):	The speed an aircraft is travelling through the air mass. TAS corrected for wind equals ground speed.
True course:	The vessel is steering is the angle between true north and the vessel's head. The true bearing of any object from the vessel, is the angle between true north and the line joining the vessel to the object.
Trunk cabin:	A cabin supported clear of the deck by a raised (trunk) housing around the deck opening.
Trysail:	A small triangular sail replacing the mainsail in very heavy weather.
T.S.D.Y.	Twin screw diesel yacht.
T.S.M.V.	Twin screw motor vessel.
Tsunami:	See tidal wave.
T.T.G.:	Time to go - GPS indicator of the time it will take to reach the waypoint at current speed.
Tube nest cooler:	A water cooling system where fresh sea water passes through internal tubing, cooling hot engine water that flows around the tubing.
Tuck:	The after part of a ship's shell plating where the hull narrows due to the shape of the run aft.
Tuft:	Short piece of wool attached to the surface of a sail as an indicator for steering to windward, and to trim, on all points of sailing.
Tug:	A small vessel used to tow or push large ships or barges.
Tumblehome:	The top is closer to the centreline than the bottom. Can be applied to the hull or cabin.
Tumblers:	Rolling cages to encourage rounded shell development where oysters are farmed.
Tupaia:	Tahitian navigator taken aboard to provide pilotage for Captain James Cook's voyage of discovery of the South Seas, New Zealand and the Australian East Coast.
Turbo charger:	The blades of a turbine in the outlet exhaust flow of an engine are driven by the gases flowing over them. Compressor blades at the other end of the same axle are spun in the inlet flow, drawing large volumes of air into the cylinders. This enables faster combustion than naturally aspirated engines and increases power of the engine.
Turn:	Passing a rope around a pin, to increase friction in order to gain greater control.
Turn-around:	The time a vessel stands in a port.
Turnbuckle:	A device that applies tension to ropes or wires by the use of

	opposing screw threaded terminals, tapped into a central frame.
Turn to:	Commence work.
Turn turtle:	To capsize.
Turpentine:	Oily Australian timber used for pilings as it is very durable against teredo infestation.
T.V.M.D.C.:	True-Variation-Magnetic-Deviation-Compass.
Tween decks:	The space between any continuous decks.
Twilight:	Period of time before sunrise and after sunset when some light remains – nautical, civil and astronomical.
Twine:	String thread used for sewing and whipping.
Twin screw:	Fitted with two propellers.
Typhoon:	A North Western Pacific tropical cyclone.

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U



U:	Code flag; You are standing into danger.
U-boat:	First and Second World War German submarine.
U.H.F.:	Ultra high frequency radio transmission.
U.K.:	United Kingdom.
U.L.C.C.	Ultra large crude carrier.
Ullage:	The distance from the top of a tank to its contents top surface.
Ultraviolet:	Electromagnetic radiation with wavelengths between visible light and x-rays.
Umbra:	The shadow cast by the Earth or Moon where the Sun is hidden.
Umbrella:	The cone-shaped shield at the top of the funnel.
Una rig:	Having one sail only.
Unbend:	To untie.
Uncertainty Phase:	A SAR situation wherein doubt exists as to the safety of an aircraft or a marine vessel, and of the persons on board.
Under-deck tonnage:	The total internal capacity of a ship measured in register tons from the top of the floors to the tonnage deck. This includes all spaces above the floors. The tonnage deck is the upper deck in all ships with less than three decks, and the second deck from below in all other ships. Only complete decks are counted.
Undermanned:	Having insufficient crew.
Undertow:	Subsurface current pulling out to seaward.
Underway:	Means that a vessel is not at anchor, or made fast to the shore, or aground.
Undock:	To clear a dock.
Unitization:	Consolidation of a number of cargo articles into a larger whole to ease handling.
Unlimited domestic operations:	For the purposes of NSCV Part B, all domestic operations greater than 200 nautical miles to seaward of the coast.
Unmanned machinery space:	For the purposes of NSCV Part B, a decked propulsion machinery space that under normal operating conditions is not occupied or is intermittently occupied.
Up anchor:	To retrieve the anchor.
Unreeve:	To pull the ropes of a tackle clear of a block.
Unship:	To remove or dismantle.

Unsettled:	Changeable.
Unstable air:	Parcels of air with uneven temperature and humidity mixing.
Up and down:	An anchoring term used to indicate that the anchor cable is leading vertically from the hawse pipe.
Up anchor:	Hoist up the anchor.
Updraught:	A rapid vertically moving parcel of air found in thunderstorms.
Upper berth:	A bunk suspended above another.
Upper topsail:	The square sail set above the course sails (lowest) and lower topsail of a sailing ship.
Upper works:	A vessel's superstructure above the weather deck,
Upriver:	See upstream.
Upstream:	Towards the source of a river; against the flow.
Upwelling:	Water currents rising from the depths.
Upwind:	To windward.
U.S.:	United States of America. Unserviceable; a tag on broken equipment.
U.S.L. Code:	Australian Uniform Shipping laws code, now being updated by N.S.C.V.
U.T.C.	Universal time constant, the time at Greenwich, 0 degrees longitude.

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V



V:	Code flag; I require assistance.
V flag + two numerals:	Code flags; Speed in K.P.H.
Valhalla:	The place of plenty for dead Viking heroes.
Valkyrie:	Handmaidens who service the dead Viking heroes in Valhalla.
Valley:	A geological depression that drains a watershed.
Van Diemen:	Dutch 18 th century explorer who skirted Tasmania (Van Diemen's Land) and the North East coast of New Zealand.
Vang:	A down haul tensioning rope on a sail's spar. A tackle between mast foot and the boom to stop it rising reducing twist developing in the upper sail.
Vapour:	The gaseous state of a substance.
Variation:	The difference between a true and magnetic compass direction, due to the earth's magnetic field not being consistently aligned with the poles.
Varnish:	A transparent surface coating which when applied to natural wood coats it with glossy finish. A sludge that forms in fuel tanks when the fuel is allowed to stand over a long time and become stale.
Vast:	An order to stop.
V-bottom:	A hull formed with V-section from chines to keel, that can plough through the waves.
V.B.W.:	Radar term, vertical band width, the vertical width of the radar beam.
V.C.G.:	Vertical Centre of Gravity. The height of the centre of gravity above the keel.

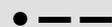
V-drive:	A gear box that reverses the direction of the drive train to allow the use of a standard prop shaft and prop with a rear mounted motor.
Vector diagram:	A plot of directions and speeds, or set and drift, for facilitating leeway and current calculations.
Veer:	The wind veers when the angle that it approaches the observer shifts in a clockwise direction. To veer cable is to ease out more anchor chain under control of the windlass brake.
Vendaval:	A moist and turbulent south-west wind of the Iberian Peninsula during November to April.
Ventilation:	The positive changing of air within a compartment or space, whether produced by natural or mechanical means, through a system of air outlets, exhaust and ducts to induce a flow of air through the compartment or space.
Ventilator:	A duct used to transfer fresh air or exhaust fumes.
Ventilator cowl:	The rotating flange at the opening of a ventilator; a scuttle.
Vernal equinox:	The point where the sun moves northward across the equator each year.
Vertical clearance:	Height above chart datum to the underside of an obstruction.
Vessel:	Includes every description of water craft, including non-displacement craft and seaplanes, used or capable of being used as a means of transportation on water.
Vessel engaged in fishing:	Any vessel fishing with nets, lines trawls or other fishing apparatus which restrict manoeuvrability, but does not include a vessel fishing with trolling lines or other fishing apparatus which do not restrict manoeuvrability
Vessel manifest:	An international carrier is obliged to declare of the ship's crew and contents at the port of departure and arrival in this document.
Vessel traffic management system:	Vessel control system by a maritime authority for safety, protection of the environment and coordination of marine services.
V.F.R.:	Visual flight rules governing procedures for conducting flight under visual meteorological conditions. In addition, used by pilots and controllers to indicate type of flight plan.
V.H.F.:	Very high frequency radio transmission.
Vigia:	Reported deep sea danger in uncertain position.
Vikings:	Scandinavian seafaring civilisation that expanded through European rivers and coastlines principally for trading ventures but also for raids and eventual colonisation. Notable oceanic voyages were undertaken including those to Greenland and North America.
Virga:	Precipitation that evaporates as it falls towards the ground.
Visor:	An awning around the pilot house windows or air ports to exclude the glare of the sun or minimize rain or spray.
V.L.C.C.:	Very large crude carrier -tankers of 200,000 to 300,000 dwt.
V.L.O.C.:	Very large ore carrier.
Vlieboot:	Dutch 16th century shoal draught carrack.
V.M.C.:	Visual meteorological conditions. Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling equal to or better than specified minima.
V.M.R.C.:	Voluntary Marine Rescue Council.

Voice tube:	A communication apparatus consisting of a tube that is spoken into from one part of the ship to another.
Volt:	Volt is the unit of electrical pressure. It can be compared to the pressure from a pump in a piped water circuit. Volts = Amps x Ohms
Voltmeter:	Measures the amount of volts in an electrical systems or device.
Vortex:	The spiral pattern of matter as it swirls towards a central point.
Voyage:	A longer journey.
V.R.M.:	Variable range marker.
V.S.A.	Vertical sextant angle used for determining distance off. Distance off = (Height of object, mtrs x 1852) ÷ S.A. in mins
V-Sheet:	Orange sheet signifying distress in Australian domestic waters.
V.T.M.S.:	See Vessel traffic management system.
V.T.S.:	Vessel tracking system.

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W



W:	Code flag; I require medical assistance.
Wa:	A canoe from Vanuatu.
Waist:	Amidships.
Waka:	Type of Maori canoe.
Wake:	The disturbed water surface a vessel leaves behind her when sailing.
Walap:	Type of Marshallese Island canoe.
Wale:	A fore-and-aft (longitudinal) external structural timber in the framing of a hull.
Walk back:	To pay out more cable by reversing the windlass.
Walkers patent log:	A proprietary log with a spinning impellor towed behind vessel, connected by the spinning line to a counter display on the taff rail.
Walk out:	To let go an anchor under control of the windlass motor.
Wardroom:	A ship's room for use of the officers for leisure and dining.
Warm front:	The boundary where a parcel of lower density warm air (moving towards the pole) rises over and displaces a cold air mass ahead.
Warp, warped:	Using a rope to move a vessel without the aid of propulsion or sail. A rope used for warping or securing a vessel. If a kedge is used to move a vessel it is called kedging.
Wash:	The white water created as a boat progresses.
Washboards:	Additional planking at edge of deck to increase the virtual freeboard.
Wash bulkhead:	A bulkhead normally running forward and aft, designed to reduce free surface effect. The bulkhead has holes in it to allow the flow of liquid from one side to the other in a restricted fashion.
W.A.S.P.:	Weather analysis service provider.
Waste:	Rubbish. Cotton yarn used for cleaning. To become underfed or worn
Watch:	A division of shipboard time. Shift arrangements for manning at sea.

Watch cap:	A canvas cover for a funnel when not in use. A seaman's warm headgear.
Watch officer:	Duty officer of the watch.
Water:	A chemical bond of hydrogen and oxygen; H ₂ O
Water breaker:	A small drinking cask carried in ship's boats.
Water cycle:	The process where water evaporates from oceans, water vapour falls on the mountains as rain and runs back to the sea in rivers.
Waterlines:	On a vessel's profile plan, the horizontal sections drawn parallel with the waterline.
Waterline length:	One of the factors used to determine the speed potential of a displacement boat. The longer, the greater the speed potential. The overall length is irrelevant; overhangs fore and aft do not increase "hull speed" potential.
Waterlogged:	Floating but full of water.
Water-plane area coefficient (CWP):	The ratio of the area of the water-plane to the area of the circumscribing rectangle having a length equal to the LPP and a breadth equal to B. CWP = AW ÷ (L x B) The range of values is from about 0.70 for a fine ship to 0.90 for a full ship.
Watershed:	The demarcation between river basins.
Water spout:	The phenomenon where a cloud forms a funnel shaped path down to the sea and draws up a pillar of swirling water and spray.
Watertight:	So constructed as to effectively resist water seepage to any appreciable degree under continuous exposure to driving rain or solid water.
Watertight bulkhead:	A ships structural partition capable of preventing water flow under pressure from one compartment to another.
Watertight integrity:	The ability of a vessel to maintain its watertightness.
Waterway:	A navigable channel. In timber vessel construction, a longitudinal covering plank that sits over the deck edge to side planking meeting and acts as a curb to direct deck flooding away to the scuppers.
Watt:	A watt is a unit of electric power. Watts = Volts x Amps
Wave:	An undulation on the surface of the water. A regular resonance or vibration in a medium, characterised by a wavelength with amplitude (range of power) and frequency (repetition rate) measured in hertz (Hz). Hertz (cycles per second) = Wavelength x Frequency
Waveguide:	A hollow metal tube in a radar scanner that straightens microwaves.
Way:	Movement of a vessel through the water.
Waybill:	A document issued by a ship or shipping company to a shipper as evidence of the contract of carriage of the shipper's cargo.
Waypoint:	An intermediary position within a passage plan.
Waypoint positions:	A waypoint is a geographical place or mark recorded by an electronic navigation device. In the course of navigating a course the 'next waypoint' might be a place to turn the ship to a new course, a marked fishing spot or it could even be your destination.

	In passage planning, a series of waypoints would be your course with turning points or points of interest. Used in GPS navigation.
Weather:	Meteorological conditions. In the direction from which the wind comes. A vessel has weather helm if she tends to come up into the wind when the steering is not manned.
Weather-bound:	Unable to sail due to the severity of the weather.
Weather deck:	The decks at the sheer that are designed to be watertight.
Weather eye:	To be watchful of the weather.
Weather gauge:	A naval sailing vessel having the tactical advantage over another by being in a position to windward.
Weather helm:	A condition in which the tiller must be held toward the windward side of a sailing vessel in order to maintain course. A slight amount (3 to 7 degrees) is desirable. (See Lee helm)
Weather side:	The side that the wind is blowing on.
Weather tide:	Tide setting against the wind.
Weathertight:	The structure or fitting will prevent the passage of water through the structure or fitting in any ordinary sea conditions.
Web:	Multiple component vertical sections forming a reinforced beam or multiple athwartship sections forming a reinforced frame.
Web frame:	See web.
Wedges:	Chocks used to secure shores. Fillers of wood under the stern of a boat to give the stern more lift and flattening the planing angle.
Weep:	The very slow ingress of water into a space, typically between the seams of a ship's structure.
Weigh:	To retrieve an anchor.
Weir:	A dam that lets excess water overflow across the top.
Weld:	A hot melt method of fusing metals.
Weld bead:	A seam made with molten metal applied by a welding stick.
Well deck:	A lower run of open deck section typically between the forecastle and poop.
Well found:	A well equipped vessel.
West Australian current:	A cool Indian Ocean current.
Western red cedar:	Fragrant, straight grained softwood timber that is notably soft, light and easily hand worked - durable for marine use and suitable for non-structural components.
West Wind Drift:	A cool South Pacific current.
Wet-bulb temperature:	The temperature of a mercury thermometer cooled by evaporation from its wet cloth covering. Comparison with a dry bulb (one not cooling) indicates the rate of evaporation, and consequently the amount of moisture in the air, the humidity.
Wet exhaust:	A system cooled by injecting salt water into the exhaust or a manifold water-jacket.
Wetted surface:	The submerged surface area of a hull.
W.G.S.:	World geodetic system.
W.G.S.84:	World Geodetic System 1984 - the datum (Starting point) used by the GPS system which is a different datum to Australian Admiralty

	Charts. Positions obtained from GPS must have corrections applied before plotting them onto an Australian chart. These corrections can be obtained from the block on the chart titled 'Satellite Derived Positions' See also 'AGD66'
Whale back:	A rounded foredeck designed to give cover to deckhands working below.
Whaleboat:	A thirty foot rowing boat used for chasing whales.
Whaler:	A vessel that catches whales. A large shark; Australia.
Wharf:	A structure to facilitate the loading and unloading of vessels.
Wharfage:	Charge by a wharfinger for use of a wharf.
Wharfinger:	Owner or operator of a wharf.
Wharram, James:	Designer of self build (ply) sailing catamarans in Polynesian style and advocate of free spirited sailing lifestyle.
Wheel:	The rounded and spoked handle attached to the rudder by which a vessel is steered.
Wherry:	A swift sheltered waters rowing boat.
Whirlpool:	An eddy or vortex of water.
Whip:	A purchase composed of a rope rove through a single block. To secure the end of a rope from unlaying by a seizing of twine.
Whisker-pole:	A spar for booming out a foresail when running downwind.
Whiskers:	Cross-trees on a bow-sprit.
White cap:	See white horses.
White horses:	The white foam on the crests of waves.
Whites:	Tropical white uniform.
White squall:	A sudden and extreme wind that is accompanied by loss of visibility.
Wide berth:	Allowing a considerable clearance distance.
W.I.G.:	Wing in ground effect machine that uses the pressurised cushion of proximity to the ground to maintain a skimming flight path.
Wildcat:	A term for a windlass gypsy.
Willy-willy	A whirlwind of high speed rotating air.
Winch:	A winding machine with a shaft and drum.
Wind:	Air moving.
Windage:	The vertical surface area of a vessel that is exposed to the wind and acts like a sail.
Wind-corrected heading:	The actual heading an aircraft is required to fly to make good an intended course.
Wind current (WC):	The water current generated by wind acting upon the surface of water over a period of time.
Wind direction:	The direction from which wind comes, e.g. Southerly wind from the South.
Windlass:	A horizontally mounted winch with warping drums for hawser winding and gypsies for chain winding.
Wind-ride:	A vessel affected by the wind when at anchor.
Wind scoop:	A device used to direct wind or air to ventilate a ship's compartment of a.
Wind shear:	Wind with a vertical directional component.
Wind speed:	Strong wind: Wind speed of 25 knots.

	Near Gale: Wind speed of 28 to 33 knots. Gale: Wind speed of 34 to 40 knots. Strong gale: Wind speed of 41 to 47 knots. Storm: Wind speeds of 48 to 55 knots. Hurricane: Wind speeds of over 64 knots. See Beaufort scale.
Windward:	The direction from which the wind comes. The weather side of vessel.
Wing:	The overhanging parts of a deck.
Wing-and-wing:	When a sailing vessel is dead before the wind, with her foresail on one side and her mainsail on the other.
Wing passage:	A passage below the water line of a warship used for inspection and repairs.
Wing tank:	A vessel's extreme side tank for liquids or fuel.
Winter zone:	Areas of high latitudes, North and South where ships are required to load lighter in order to maintain a safe freeboard. The loadline is marked as the Winter loadline (W) or the Winter North Atlantic loadline (WNA).
Wiper:	An engine room handyman.
Wk.:	Wreck.
W.P.T.:	Waypoint - a geographic position along a course line, of change of course or destination, often stored in a GPS memory for ease of recall.
Work:	When the movement of a vessel in a seaway causes otherwise rigid members of the construction to loosen up. A vessel works to windward when gaining ground into the wind by successive tacks
Worm, parcel and serve:	Protecting a wire or rope by worm, parcelling and serving. Small tarred stuff is wound into the grooves of the lay to give the rope a smooth surface (worming). Tarred canvas is then wound around the smooth surface (parcelling) Finally a tarred seizing of thin wire or twine is tightly wound around all using a serving mallet to apply tension (serving).
Worse happens at sea:	An appeal to a sufferer to weigh an experienced misfortune/tragedy against the alternative potential catastrophes.
Wreckers:	Persons who lure ships aground (by displaying false lights) for the purpose of plundering their cargo.
Wriggle:	Rim over a port hole to deflect drips.
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 X 	
X:	Code flag; Stop carrying out your intentions and watch for my signals.
X:	The traditional signature of an illiterate seaman.
X-band:	A radar with 3cm wavelength transmitting at 10,000MHz.
Xebec:	Historical French Canadian or American armed lateen-rigged vessel, or, Mediterranean swift three masted sailing merchant vessel with lateen and squaretails.
Xenon:	A heavy, colourless and odourless inert gas found in the

	atmosphere.
X.T.E.:	Cross track error - on GPS "steer to screen", the lateral off course error displayed when proceeding to a position.

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Y



Y:	Code flag; I am dragging my anchor.
Yacht:	A recreation vessel or one for ceremonial use by the State.
Yankee jib:	A large loose footed masthead jib.
Yard:	Ship building or repair facility.
Yard arm:	A spar that carries and spreads a sail.
Yarn:	Fibres that are twisted together to form a rope.
Yaw:	The rotary motion of a vessel resulting from her pivot at the centre point. The bow swings successively from left to right.
Yawl:	A vessel with two masts, the smaller aft, stepped behind the rudder post.
Yield stress:	The stress limit of a material at which plastic (permanent) strain under load commences.
Yonker:	Young foremast crewman.

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Z



Z:	Code flag; I require a tug. By a fishing vessel, I am shooting nets. Sound signal; I intend overtaking on your port side.
Zapato:	Small Peruvian rowing boat.
Z bar:	A metal bar with cross section in the shape of a Z.
Z drive:	A propulsion drive train where the prop shafts are horizontal, parallel and driven by a vertical engine output shaft.
Z flag + four numerals:	Code flags; Time UTC.
Zenith (Z):	A point in the celestial sphere directly above a terrestrial observer.
Zenith distance (ZD):	An angular distance from directly above the observer and a celestial body. It is 90 degrees less the body's altitude.
Zephyr:	A light breeze.
Zephyrus:	Westerly wind of ancient Greece. See classical winds.
Zig:	Historic Polish fishing boat.
Zinc (Zn):	A metal used for rust proof plating (galvanising), sacrificial anodes and a component of the alloy of brass (zinc and copper). See de-zincification.
Zodiac:	A belt of the heavens eight degrees each side of the ecliptic divided and named by the ancients into twelve patterns of stars called the signs of the zodiac.
Zonal flow:	Atmospheric circulation following parallels of latitude.
Zonda:	A wind of the eastern slopes of the Andes during May and November. See foehn
Zone:	Defined areas of the globe, being North or South, frigid, torrid or temperate
Zone time (ZT):	The local time on the Earth's surface calculated as plus or minus that at Greenwich, (UTC). The earth is divided into 24 one hour

	zones of 15 degrees longitude each.
Zooid:	Invertebrate that multiplies by budding.
Zoophyte:	Coral or sponge.
Zooplankton:	Microscopic drifting marine animal life.
Zospore:	A fungal or algal spore.
Zulu:	Plumb stemmed with raked sternpost Scottish 19th century sailing but later motorised herring drifter.

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Contributors acknowledged include Peter Clissold Basic Seamanship, the AHO Mariners Handbook, AHO Chart Symbols & Abbreviations, NATSAR Manual 2003, ANTA Learners Guide Glossaries, Hugh Bicheno, National Standards for Commercial Vessels and U.S. Navy.