

C 1) 'Charlie' in international phonetic alphabet. Designated in International Code by square flag with five horizontal stripes, blue, white, red, white, blue. When hoisted in isolation it means 'yes' or 'affirmative'. 2) See Initial Course.

C1 See Initial Course.

C1n See Initial Course.

CABIN 1) Enclosed quarters, room, or compartment on boat for lodging crew or passengers. 2) U.S. Navy or Coast Guard and most merchant ships: captain's quarters. 3) British passenger ships: equivalent of a Stateroom. 4) Older sailing ships: officer's quarters.

CABIN BOY (S) In the days of sail, young boys, often as young as nine years old, would sign on sailing ships as Cabinboys, usually becoming Midshipmen as they got older.

CABIN CRUISER Description generally applied to small to medium sized Yacht, particularly engine driven and designed for inland waterways rather than open Sea.

CABIN SOLE See Sole

CABLE 1) Anchor Line, Chain, very strong fiber, wire rope or combination used to Anchor or to Moor Vessels or Buoys. From Latin, 'capalum', for halter. 2) Measure of distance equal to 120 Fathoms or 720 feet, the standard length of an Anchor Cable for many years. 3) Unit of distance sometimes modified to 100 fathoms, 600 feet, roughly 1/10th of a nautical or sea mile. See Fathom. AKA Cable Length. 4) Name given to the heavy wire system used, especially underwater, for long distance tele-communications. Made up of many individual wires or stranded conductors insulated from each other, in layers, ergo in a sense Cable Laid together with waterproof covering.. 5) Single or multiple insulated conductors with an outer protective jacket.

CABLE BUOY Buoy used to mark one end of Cable being worked by cable Ship.

CABLE LAID Heavy Lines, such as Shrouds and Hawsers, usually made of three, three-Strand ropes, twisted left handed. Cable being of opposite Lay, or twist, to components.

CABLE LENGTH See Cable.

CABLE LIFTER Wheel, provided with five or six large teeth set round rim which engage in links of Anchor chain ensuring it does not slip as it is being hauled in by Capstan and providing sufficient traction to weigh Anchor and Cat it.

CABLE, COAXIAL Two concentric conductors insulated from each other.

CABOOSE 1) Ship's galley, cookroom or deckhouse. From Dutch, 'kaban huis', cabin house. 2) Last or end car of train with eating and sleeping facilities for crew.

CABOTAGE Coastwise trade, coastal navigation, or pilotage, especially relating to various country's laws relating to domestic coastwise trade. From French, 'caboter', coast sailing.

CACIMBO Cooling sea breeze which blows from southwest to port of Lobito on the coast of Angola in western Africa, frequently in July and August.

CADET Student officer in U.S. Coast Guard, Merchant Marine and many foreign navies. Not to be confused with Midshipman. From Latin, 'capitulus', a diminutive of 'caput', head or chief.

CAGE 1) Upper part of Buoy built on top of body of Buoy and used as Daymark or part thereof, usually to support light, Topmark and / or Radar Reflector. AKA Superstructure. 2) Erect gyro or lock it in place by means of Caging Mechanism.

CAGING MECHANISM Device for erecting Gyroscope or locking it in position.

CAIRN 1) Type of shore beacon made of any material in a pyramidal or beehive shape. Mound of rough stones or concrete, particularly one intended to serve as landmark or message location. From Celtic, 'carn', pile of stone.

CAISSON Watertight gate for Lock, basin, etc.

CALASHEE WATCH 1) "All hands on standby". 2) An order to sleep on Deck. From Hindi.

CALCAREOUS Containing or composed of calcium or one of its compounds.

CALCULATED ALTITUDE See Computed Altitude.

PETER'S NAUTICAL TERMS DICTIONARY & GLOSSARY for BLUEWATER SAILING

- CALDERA** Volcanic Crater.
- CALENDAR** Graphic or printed record of time, usually of days, weeks, months, etc., used to refer to future events. Gregorian calendar is in common use today. See Julian Day.
- CALENDAR DAY** Period from midnight to midnight. It is 24 hours of mean solar time in length and coincides with civil day unless time change occurs during day.
- CALENDAR LINE** See Date Line.
- CALENDAR MONTH** Month of Calendar, varying from 28 to 31 days in length.
- CALENDAR YEAR** Year of Calendar. Common years have 365 days and leap years, 366 days. Each year exactly divisible by 4 is leap year, except century years (1800, 1900, etc.) Which must be exactly divisible by 400 (2000, 2400, etc.) To be leap years. Calendar Year is based on Tropical Year. AKA Civil Year.
- CALF** Young Whale.
- CALIBRATE** Determine or rectify scale graduations fo instrument.
- CALIBRATION CARD** See Calibration Table.
- CALIBRATION CORRECTION** Value to be added to or subtracted from reading of instrument to obtain correct reading.
- CALIBRATION ERROR** Error in instrument due to imperfection of Calibration or maladjustment of its parts. AKA Scale Error.
- CALIBRATION RADIOBEACON** Special Radiobeacon operated primarily for calibrating shipboard Radio Direction Finders. These Radiobeacons transmit either continuously during scheduled hours or upon request.
- CALIBRATION TABLE** List of Calibration Corrections or calibrated values. Card having such table on it is called Calibration Card.
- CALIFORNIA CURRENT** North Pacific Ocena current flowing southeastward along west coast of North America from point west of Vancouver Island to West of Baja or Lower California where is gradually widens and curves southward / southwestward to continue as westerly flowng Pacific North Equatorial Current. It is southern branch of Aleutian current, autmented by North Pacific Current and forms eastern part of general clockwise oceanic circulation of North Pacific Ocean. See Mexico Current.
- CALIFORNIA NORTHER** See Norther.
- CALLIPIC CYCLE** Period of four Meteroic cycles equal to 76 Julian years of 27,759 days. Devised by Callipus, Greek astronomer, about 350 BC, as suggested improvement on Meteoric cycle for peirod in which new and full moon would recur on same day of year.
- CALL ME ISHMAEL** First sentence of "Moby Dick".
- CALM** 1) Absence, little or no appreciablewind. Specifically Beaufort Force 0 (less than 1 mile per hour or 1 Knot) 2) State of Sea when there are no waves. 3) In state of calm or without motion.
- CALM BELT** Doldurm sides of Tread winds. AKA Calms of Cancer and Calms of Capricorn.
- CALVING** Breaking away of ice mass from ice wall, ice front, or iceberg.
- CAMBER** 1) Upward or 'thwartships curving or crowning of Vessel's Deck structure, usually higher in center so water can drain off easily. Vertical distance between side of Deck or Scuppers and Deck at Centerline or another specified point. Main Deck of many but not all Vessels curves upward from Gunwales plating to center of Deck. 2) Curvature of Keel. 3) Curvature of Sail when it is drawing. From Latin, 'camur', curved. Not to be confused with a French cheese.
- CAMEL** 1) Type of floating dock used to lift a Ship over shallows on entering or leaving Port. 2) Floating fender, often a log or cluster of logs or beams resembling telephone poles, floating and secured alongside Dock between Ship and her Pier or Quay when Moored to Shore. It keeps a Vessel from rubbing on Dock and assists in maneuvering Vessel around end of Dock. AKA Breasting Float. 3) What you might see transiting the Suez Canal or after a bad hangover (usually pink).
- CAN** Cylindrical Buoy used to mark the Port side of a Channel, colored green and give an odd number in North & South America. From Anglo Saxon, 'canne', a

word for drinking Vessel or tankard. AKA Can Buoy. In Africa, Asia and Europe they are red, even numbered and mark the Starboard side.

CAN BUOY Unlighted Buoy which the upper part of body above waterline or larger part of superstructure has shape of cylinder or nearly so. AKA Cylindrical Buoy.

CANAL 1) Dredged or constructed water course or artificial waterway for navigation. From Greek, 'kanne', ditch or course. 2) Long, fairly straight natural Channel with steep sloping sides. 3) Any watercourse or Channel. 4) Sluggish coastal stream.

CANDELA Base unit of luminous intensity.

CANDELA PER SQUARE METER Derived unit of luminance.

CANDLEPOWER Luminous intensity expressed in Candelas.

CANDY STOWAGE Nickname for a special hold or locker used for perishable or delicate cargo or stores.

CANARY CURRENT Southern branch of North Atlantic Current. It moves south past Spain and southwestward along Northwest coast of Africa and past Canary Islands. AKA Canaries Current.

CANNIBAL Human flesh eaters. Corruption of Carib tribe. See Caribbean Sea.

CANNON Defensive weapon used to discourage pirates. Since word "caliber" was not used in Elizabethan time-period, weight of cannonball was used instead.

CANOE Small, light, double ended boat. From Arawak or Hataian, 'canoa', boat.

CANOPY Overhanging protection or shelter first used by fishermen and boatmen on Nile River as protection against gnats. From greek 'konops', gnat.

CANT Any member of a Vessel's structure which is at an angle. From Greek, 'kanthos', corner.

CANT FRAME Vessel's Frame that is not at right angles or square with the Keel or Vessel's centerline such as at the Forward and After ends.

CANVAS 1) Sails woven from hemp. From the Greek 'kannabis' or 'kaphasis', old fashioned hemp. 2) Firm, closely woven cloth, usually cotton or linen from which Sails, awnings, covers, dodgers, hammocks, etc. were made. 3) Slang for Sails or Sail area. See Sailcloth.

CANYON Relatively narrow, deep depression on sea floor with steep sides, bottom of which generally has continuous slope.

CAP 1) Ring at extremity of Spar. Upper and lower Caps are Fittings at Head of lower Mast through which upper Mast Passes. See Crosstrees, Futtock Plate, trestle Trees, Yoke. 2) See Capped.

CAP CLOUD 1) Cloud resting on top of isolated mountain peak. Cloud appears stationary, but is actually being continually formed to windward and dissipated to Leeward. See Banner Cloud and Crest Cloud. 2) False Cirrus over Towering Cumulus, in form of cap or hood. See Scarf Cloud.

CAPE Relatively extensive land area, head or pointed piece of land that sticks out into the water or juts seaward from continent or large island. It prominently marks change in or interrupts notably the coastal trend. From Latin 'caput' for head. See Peninsula, Point and Spit.

CAPE BRETON CURRENT It originates in Gulf of St. Lawrence and flows southeastward in southwestern half of Cabot strait, and then merges with Labrador Current Extension.

CAPE COD TURKEY Baked codfish.

CAPE DOCTOR Strong southeast wind which blows on South African coast. AKA Doctor.

CAPE HORN Southern tip of South America, first rounded in 1616 by Dutch Schouten who named after 'Hoorn' his birthplace.

CAPE HORN CURRENT Ocean Current that flows continuously eastward close to tip of South American. See Falklands Current.

CAPE OF GOOD HOPE Southern tip of Africa.

CAPPED Rope is 'Capped' when end which

may be subjected to wear has been covered by piece of tarred canvas, leather, or plastic and whipped with yarn or twine

CAPSIZE Turn over, upset, overturn, flip, Heel or tip boat over such that Mast is in water or to turn Hull or Bottom side up. From Spanish, 'capuzan', sink. Not a good thing.

CAPSTAN 1) Large, vertical axis, wheel and axle type Winch or drum head "engine" on Deck used for Hauling such as raising Anchors, handling fiber lines, lowering lifeboats, lifting heavy Cargo from Hold, etc. It can be worked manually or by power to give mechanical advantage. See Anchor Windlass. 2) Also used to handle some Sails, their Yards, Cargo and heavy equipment. From Latin, 'capistrare', to Fasten with Rope.

CAPSTAN CHANTY Slow and sentimental songs sung while the anchor was being hauled aboard. See Chanty.

CAPTAIN 1) Commanding officer of any Vessel. From Latin, 'caput', head or leading officer. 2) Numero uno, the top dog, la grande frommage, the big cheese, etc. The person who can ask the crew dance to naked on Deck as it suits them. AKA Skipper.

CAPTAIN COOK, A Wild pigs of New Zealand. From Capt. Cook who introduced domesticated pig.

CAPTAIN OF THE HEADS Term for individual responsible for keeping lavatories or heads neat and clean.

CAPTAIN'S GIG Boat used personally by Vessel's Captain.

CARAVEL Small merchant Vessel, trading ship or exploration vessel constructed in the Carvel style. From Greek, 'karabos', a light ship. See Carvel.

CARBON FIBER Modern fiber used with epoxies in order to stiffen a component.

CARDINAL 1) Main or fundamental. 2) People who elect the Pope.

CARDINAL HEADING Heading in direction of any of Cardinal Points of Compass. See Intercardinal Heading.

CARDINAL MARK Dangers to navigation are marked by one or more Buoys or Beacons (navigation marks)

established according to quadrants of a Compass to indicate where the danger lies or location of danger to navigation in relation to Mark or its position relative to danger. System is particularly useful for marking dangers in open Sea. Distinguishing features are black double cone Topmarks with bland and yellow horizontal banded poles.

CARDINAL POINTS Any of four main or principal points of Compass; North (N), South (S), East (E), West (W). From Latin, 'cardinalis', principal. See Intercardinal Points.

CARDINAL SYSTEM (OF BUOYAGE) System of Buoyage that relies on direction to indicate danger. Buoys are assigned shape, color and number distinction in accordance with location relative to nearest obstruction. It differs markedly from Lateral System Of Buoyage. It is particularly applicable to region having numerous small islands and isolated dangers. See Lateral System.

CAREEN (ING) 1) Method to deliberately beach or ground ship at high tide, then Heel or place boat on side. Haul over ship or tip Vessel at steep angle so that Bottom or underwater parts come out of water and are accessible for making repairs or work such as scraping barnacles, repainting, caulking, etc. From French 'carene', keel or Latin 'carina', keel. AKA Careening. See Breaming and Caulking. 2) Leaning, swaying or tipping to one side of something while in motion.

CARGO General term for lading or freight carried by a merchant ship. From Latin, 'carricum', load. Remember that most Cargo goes by ships and shipments go by cars, trucks or land conveyances for reasons that are totally obscure. [for some other strange reason, you also drive on a parkway and park on a driveway]

CARGO HATCH Cover over opening used to raise or lower Cargo from Hold. It would be battened down or covered with waterproof tarpaulin to prevent seawater from entering Ship's Hold.

CARGO SHIP Any ship that is not a passenger ship.

CARGO SHIP SAFETY RADIOTELEPHONY CERTIFICATE Certificate issued after inspection of a cargo ship radiotelephone station which complies with the applicable Safety Convention (SOLAS) radio requirements.

CARGO SPACE 1) Cargo hold. 2) Refrigerated

cargo space. 3) Trunk leading to or from a space listed above. 4) Vehicle space. Why does cargo go by ship and shipments go by cars?

CARGO TRANSFER AREA See Cargo Transshipment Areas.

CARIBBEAN CURRENT Ocean Current flowing westward through Caribbean Sea to Yucatan Channel. It is formed by co-mingling of Atlantic North Equatorial Current with Guiana Current.

CARIBBEAN SEA From Carib tribe, one of the few New World peoples to use Sails. See Cannibal.

CARLINS Fore and Aft members of Deck frame or timbers between Deck beams. Longitudinal Beams, which run between Deck Beams and Support Deck. They support Coamings of Cockpit, Cabin trunk sides and Hatch Coamings. 2) AKA carlings and carlines.

CARPENTER Individual responsible for maintenance of all ship's Deck gear, including Boats and fixed rigging. From Latin, 'carpenterius', meaning carriage maker.

CARRACK Large, four Mast type of merchant or trading Ship, often armed.

CARRICK BEND Useful Knot for Fastening two Lines or especially two Hawsers together.

CARRICK BEND Method of Bending a Line to a heavier one.

CARRONADE Special, short, light, Ship's cannon. From Carron Iron Works in Scotland.

CARRY AWAY Break or tear loose, said of Gear that is stressed beyond the strength of its Fastenings.

CARRY ON 1) Keep Sails on or hoist every bit of canvas Yards could carry. "Keep her moving". Officer of the Deck kept Weather Eye constantly on slightest change in wind, so sails could be reefed or added as necessary to ensure fastest Headway. Whenever good breeze came along, order to Carry On would be given. It meant hoist every bit of Canvas the Yards could carry. Pity poor Sailor whose weather eye failed and ship was caught partially reefed when good breeze arrived. 2) Order to proceed, continue or resume work.

CARRYING COALS TO NEWCASTLE Taking things to a place where they already abound. From ship traffic to Newcastle, England, center of the coal trade. See Carry Water To The Sea.

CARRY WATER TO THE SEA, TO Carry Coals To Newcastle.

CARTESIAN COORDINATES Magnitudes defining point relative to two intersecting lines called Axes.

CARTOGRAPHER One who designs and constructs Charts or maps.

CARTOGRAPHIC FEATURE Natural or cultural object shown on map or Chart by symbol or line. See Topography.

CARTOGRAPHY Art and science of making Charts or maps.

CARTOMETER Device consisting of small wheel and calibrated dial used to measure distances on map by following desired route.

CARTOUCHE Panel of map, often with decoration, enclosing title, scale, publishing information, and other notes.

CARVEL 1) Type of wooden Ship construction in which the skin planking is flush and smooth. 2) Another term for Caravel.

CARVEL BUILD In wooden ships, when Hull planking that make up Ship's sides are joined edge to edge to form smooth surface. See Clinker Build.

CASH ON THE NAIL 1) Exchange of money and discussion of business by merchants in front of four brass pillars or 'nails' in the English sea port of Bristol. 2) Immediate payment.

CASK BUOY Buoy in shape of Cask.

CAST 1) Turn a Vessel in her own length. From Norse, 'kasta', warp. 2) To throw a Line. From English, 'casten', to throw. 3) Turn ship to desired direction without gaining Headway or Sternway. 4) Take sounding with Lead.

CAST OFF 1) Act of letting go, loosening, releasing

unfastening or undoing all Lines, Ropes, Mooring Lines or lashings, particularly Sheets when sailing or when leaving the Dock or Mooring. 2) Second hand clothing.

CASTAWAY Sailor deliberately set ashore in a remote place as punishment or because he had gone mad. See Outcast.

CASTING AROUND 1) Before or after running aground, a ship will do this with a sounding line to discover what the bottom is like. 2) Investigate or explore. 3) Searching for another mate.

CAT 1) Short name for Cat O' Nine Tails. 2) Name for sailing collier common throughout northern Europe. 3) Hoist Anchor to or until it hangs vertically from Cathead. 4) Short name for Cathead. 5) Name given to the Rig of a Catboat. 5) Ship's rat catcher.

CAT (TO) Heave ring of stocked Anchor to Cat Head.

CATALYST Chemical used to activate polyester resins and other polymers.

CATAMARAN 1) Multihull craft, sail or power, with two Hulls side by side separated by Deck or crossbeams from which trampoline is suspended. From Tamil, 'kattamaram', logs tied together. 2) Raft consisting of rectangular frame attached to two parallel cylindrical floats and which may be used for working alongside Ship. See Camal.

CATAPULT Device which literally hurls aircraft into air off an aircraft carrier.

CAT BLOCK Lower Block of stout Tackle which carries hook which is engaged in Anchor Ring.

CATBOAT 1) Shallow Draft, very beamy or wide sailboat with Centerboard, only one Mast and Rigged with a large, simple, single Mainsail and no Jib. The one Sail may be Rigged either Marconi or Gaff. From Dutch, 'katboot', a craft with the Mast well forward. 2) Term applies both to boat and rig. Not to be confused with a cathouse.

CATCH A CRAB Oarsman who has slowed down the speed of Boat by either missing water on a stroke or by making poor, awkward stroke that doesn't completely clear water when completed.

CATCH A PACKET Landing in trouble. From packet

ships which had a hard reputation and were not 'sea kindly'.

CAT DAVIT Small Davit in the Bow which postdates the Cathead. Used mainly to assist in housing the Anchor.

CATENARY Curve or sag from a straight Line, chain, uniform cable or rope hanging freely supported only at its ends or run between two points of support due to effect of gravity. In towing, it is the curve of Hawser as it sags between towing Vessel and Vessel or object being towed.

CATHARPINS Lines laced around the Shrouds near the Masthead of a sailing ship, to reduce slack. AKA catharpings.

CATHEAD (S) 1) Stout or strong timber beams or metal supports projecting almost horizontally from Bows of sailing ships on each side of Bowsprit, used in hoisting and housing Anchors. From custom of decorating them with carved or cast lion's heads for good luck. 2) A popular menu item in some overseas food stores.

CATHODE Electrode through which primary stream of electrons enters inter-electrode space. 2) General term for negative electrode. See Anode.

CATHODE RAY Stream of electrons emitted from Cathode of any vacuum tube, but normally used in reference to special purpose tubes designed to provide visual display.

CATHODE RAY TUBE (CRT) Vacuum tube in which instantaneous position of sharply focused electron beam, deflected by means of electrostatic or electromagnetic fields, is indicated by spot of light produced by impact of electrons on fluorescent screen at end of tube opposite cathode.

CATHOLES Nickname for closed Chocks or Hawse holes on the Quarters of older sailing ships and used for heavy Lines. AKA Cat Holes.

CAT O' NINE TAILS Whip or device used for flogging sailors. Nicknamed 'cat' since it scratched the back like a cat. From Egypt where the cat was sacred and had nine lives. Scourging with cat hide passed 'good' from the whip to the victim. It usually consisted of one yard length of rope which was halfway unraveled into three cords which were in turn unraveled into three strands (9 pieces of cord 18 inches long) with knots on end and affixed to short, stiff length of rope used as handle. Number of 'tails' were religiously 3 times the Trinity. Also from Latin 'catonus', scourge loaded with lead. It was never used twice since part of sailor's punishment consisted of having to unweave own flog and there was too great a risk of it passing an infectious disease via bloodstains from the first sailor to the second. See Don't Let Cat Out Of Bag. Making a Rod for Your Own Back and Wearing A Checkered Shirt.

CAT IS OUT OF THE BAG, THE See Don't Let The Cat Out Of The Bag.

CATOPTRIC LIGHT Light concentrated into parallel beam by means of one or more reflectors. See Dioptric Light.

CAT RIG 1) Rig of a Cat Boat. 2) Any similar Fore and Aft Rig with a Mast having a minimum of Standing Rigging and no Headsails. 3) Single or two Masted boat with no Jib. See Catboat.

CATSHEAD Beam extending out from side of ship which allows Anchor to be raised and lowered without striking sides of ship.

CAT'S PAW 1) Puff of wind, light air or breeze affecting small area, during calm that moves silently as cat and causes patches of ripples on surface of water, sometimes indicating coming storm to sailors. 2) Used to Secure a Line to a Hook. Please note that no actual cat appendages are used in the making of this Knot.

CATTED Hoist anchor from water to Cat Head. AKA Cat The Anchor.

CAT THE ANCHOR Keep Anchor clear of ship by hoisting to or hanging Anchor at Cat Head instead of to hoist, where it is hung by a slip on Bow. AKA Catted.

CATWALK Walkway above Deck level, running Fore and Aft, to enable the Crew to avoid 'no man's land' in rough weather. AKA Monkey Bridge.

CAUGHT ABACK With the Sails backed, or Trimmed to Windward.

CAULK Make seams watertight by driving in any one of various appropriate materials. Install cotton or a special plastic compound between planking or in the seams to prevent leaking. From Latin, 'calcare', to force down with pressure. AKA calk or Pay

CAULKING Operation to stop seams of both Hull and Deck planking and thus prevent water leaking through. See Caulking Irons, Oakum, Reeving Beetle.

CAULKING IRONS Used in driving Oakum into Seams along with wooden mallets. See Reeving Beetle.

CAULK OFF Take a nap or sleep. Not to be confused with some type of sexual self satisfaction. From sailor laying down on Deck and having Caulking leave stain on their clothing. AKA cork off.

CAUSEWAY Raised earthen road across wet ground or water. See Bridge and Viaduct.

CAUTIONARY CHARACTERISTIC Unique characteristic of light which can be recognized as imparting special cautionary significance; such as quick flashing characteristic phase indicating sharp turn in channel.

CAUTIONARY NOTE Information calling special attention to some fact, usually danger area, shown on map or Chart.

CAVEL Cleat. AKA Kevel.

CAVER Gentle breeze in Hebrides. AKA Kaver.

CAVIAR Fish eggs.

CAVIL See Kevel.

CAVITATE, CAVITATION Formation of bubbles in liquid or turbulence in water caused by rotation of Propeller. It increases speed while losing thrust as result of coming out of water, sucking air or creating a partial vacuum. Causes Prop to loose bite on water, wear on Prop, noise and reduction in Prop efficiency.

CAY Low, flat, tropical or sub-tropical island of Sand and Coral built up on Reef lying slightly above High Water. AKA Kay or Key.

CBDR See Constant Bearing Decreasing Range.

CEILING 1) Interior planking, inside lining of the Hull or plating affixed to a Ship's frames. From English, 'celen', meaning screen or lining. See Overhead. 2) Height above the ground or earth's surface of the lowest (generally solid) cloud bases covering at least half the sky. It is not classified as thin or partial.

CECIL'S FEAST, A 1) Legislative attempt by William Cecil, Lord Burghley who was Queen Elizabeth's minister to improve fish trade by requiring Englishmen to eat fish and no meat on certain days. Meat eating Britons didn't like the idea and dubbed all fish dinners by this name. 2) Cold hash patties.

CEILOMETER Instrument that measures and records thickness and height of cloud layers.

CELESTIAL Pertaining to heavens.

CELESTIAL BODY 1) Any aggregation of matter in space constituting Unit for astronomical study, such as sun, moon, planet, comet, star, nebula, etc. AKA Heavenly Body. 2) Vision of yourself when you look in mirror.

CELESTIAL CONCAVE See Celestial Sphere.

CELESTIAL COORDINATES Any set of coordinates used to define point on Celestial Sphere. Horizon, Celestial Equator and Ecliptic systems of Celestial Coordinates are based on Celestial Horizon, Celestial Equator and Ecliptic, respectively, as primary Great Circle.

CELESTIAL EQUATOR Primary Great Circle of Celestial Sphere, everywhere 90° from Celestial Poles. It is intersection of Extended Plane of Equator & Celestial Sphere. AKA Equinoctial.

CELESTIAL EQUATOR SYSTEM OF COORDINATES Set of Celestial Coordinates based on Celestial Equator as primary Great Circle. AKA Equinoctial System Of Coordinates.

CELESTIAL FIX 1) Fix Established by means of two or more Celestial Bodies. 2) What you need every day.

CELESTIAL GLOBE See Star Globe.

CELESTIAL HORIZON Circle Formed by

Intersection of Celestial Sphere & Plane Through Center of Earth & Perpendicular to Zenith - Nadir Line. AKA Rational Horizon. See Horizon, Celestial.

CELESTIAL LATITUDE Angular distance north or south of Ecliptic. It is arc of circle of Latitude between Ecliptic and point on Celestial Sphere, measured northward or southward from Ecliptic through 90° and labeled N or S to indicate direction of measurement.

CELESTIAL LINE OF POSITION Line Of Position determined by means of Celestial Body.

CELESTIAL LONGITUDE Angular distance East of Vernal Equinox, along Ecliptic. It is arc of Ecliptic or angle at Ecliptic pole between Circle of Latitude of Vernal Equinox at circle of Latitude of point on Celestial Sphere, measured Eastward from circle of Latitude of Vernal Equinox, through 360°.

CELESTIAL MECHANICS Study of motions of Celestial Bodies under influence of gravitational fields.

CELESTIAL MERIDIAN Great Circle of Celestial Sphere, through Celestial Poles and Zenith. Usually refers to Upper Branch. It coincides with hour circle through Zenith and vertical circle through elevated pole.

CELESTIAL NAVIGATION Total process of Navigation based on position determination by reference to and observation of Celestial Bodies such as sun, stars and moon. Sextant measures Altitude of an observed heavenly body, a highly accurate source of time information is used to determine the time of the sight and pre-computed tables and/or an electronic navigational calculator are used to determine position line. Place where two position lines cross is Fix. See Navigation.

CELESTIAL OBSERVATION Observation of celestial phenomena. Expression is applied in Navigation principally to measurement of Altitude of Celestial Body and sometimes to measurement of Azimuth or to both. Expression may also be applied to data obtained by such measurement. AKA Sight in Navigation usage.

CELESTIAL PARALLEL See Parallel Of Declination.

CELESTIAL POLE (S) Either of two points of intersection of Celestial Sphere and extended axis of earth, labeled North or South to indicate which

Celestial Pole.

CELESTIAL SPHERE Imaginary sphere of infinite radius concentric with Earth on which all celestial bodies except earth are imagined to be projected.

CELESTIAL TRIANGLE Spherical triangle on Celestial Sphere, especially the Navigational Triangle.

CELSIUS (C) TEMPERATURE Metric Temperature scale with 0°C indicating freezing point and 100°C as boiling point of water at standard atmospheric pressure. AKA incorrectly as Centigrade.

CENTERBOARD Retractable, unballasted shaped blade, fin, appendage, board, metal plate or Sailboat Keel, (either the only Keel or supplement to a fixed Keel) attached to underside of Hull. Used to give lateral resistance and keep boat from sideslipping when Vessel is sailing to Windward, thereby affecting and controlling boat's sideways motion through water by increasing area of Keel. It can be moved vertically, pivoted up and down in a Keel slot, raised or lowered in order to increase or reduce both Draft and lateral area of underbody or Hull form of a sailboat. See Daggerboard, Keel.

CENTERING ERROR Error in instrument due to inaccurate pivoting of moving part, such as index arm of marine Sextant. AKA Eccentric Error.

CENTERLINE 1) Imaginary line that runs down the middle of the boat from Bow to Stern.
2) Locus of points equidistant from two reference lines.
3) Line separating Port and Starboard sides of Vessel.

CENTERLINE CONTROLLING DEPTH It applies only to Channel Centerline; lesser Depths may exist in remainder of Channel. See Controlling Depth.

CENTER OF BUOYANCY Geometric center of the submerged or immersed portion of the Vessel's Hull and appendages of floating Vessel. All Buoyant forces may be resolved into one resultant force acting upwards at this point.

CENTER OF EFFORT (CE) Point in Sail plan that is balance or concentration point for all aerodynamic forces exerted by wind upon Sails. Center of sail plan area.

CENTER OF GRAVITY (G) Single point in any body where all the weights of the entire Vessel may be considered to be concentrated and at which force of

gravity may be considered to be concentrated. AKA Center Of Mass in uniform gravitational field.

CENTER OF LATERAL RESISTANCE Point in the Hull's underbody that is the balance point for all the hydrodynamic forces.

CENTER OF MASS Point at which all given mass of body or bodies may be regarded as being concentrated as far as motion is concerned. AKA Center of Gravity.

CENTIGRADE See Celsius.

CERTIFICATE Government paper, such as a boat's license, seaman's or master's license allowing operation of a commercial Vessel. AKA ticket.

CENTRIFUGAL FORCE Force acting on body or part of body moving under constraint along curved path, tending to force it outward from center or evolution or rotation. Opposite of Centripetal Force.

CENTRIPETAL FORCE Force directed toward center of curvature, which constrains body to move in curved path. Opposite of Centrifugal Force.

CENTURION Pilot who has made 100 arrested landings on aircraft carrier. There are double centurions, etc.

CH₂O Semi-scientific notation for liquid you find in the ocean.

CHAFE Damage caused by friction, abrasion, wear or rubbing and a particular problem for sailors. Rub or wear away. From Latin, 'calefacare', to warm (by rubbing).

CHAFING GEAR Guard of canvas, rope, cloth, tape, rubber hose or other similar protective material Secured, Fastened or placed around Spars, Lines or other Rigging to prevent wear or abrasion. Tubing or cloth wrapping used to protect a line from chafing on a rough surface.

CHAIN 1) Interlocking steel or iron links, used for Anchor Rodes, Buoys and, on larger Vessels, certain Rigging parts. See Deadheads, Stud Links. 2) Group of associated stations of radioavigation system such as Loran-C network consisting of a master transmitting station and two to four secondary transmitting

stations.

CHAIN CABLE COMPRESSOR

Apparatus made of metal and set beside path followed by Cable from Chain Locker to Capstan on Port and Starboard quarters of Bows. It can engage links of chain which is then securely shackled. Thus Cable can be held without use of Capstan.

CHAIN GRAB See Cable Lifter.

CHAIN LENGTH 12.5 Fathoms or 75 feet.

CHAIN LOCKER Stowage space or vertical Hold under Decking of Bows for storage of Anchor Cable / Chain when Anchor has been fished.

CHAIN PLATE (S) Fittings or flat Metal plates securely fastened on sides of Hull or outer edges of Sailboat Deck, bolted to side of boat or straps on Hull to which Port and Starboard Shrouds or Stays are Secured, Fastened or attached to support Standing Rigging. From the use of chains attached to plates which were then used to tighten Shrouds and Stays.

CHAINS, THE Leadsman's station or platform over side from which soundings are taken with hand Lead. Named because this station was on a Channel or Chain Wale.

CHAIN STRIPPER See Stripper Bar.

CHAIN WALE An extra thick or built up Plank essential to the securing of the Shrouds.

CHALK 1) Soft earth sandstone of marine origin, composed chiefly of minute shells. It is white, gray or buff in color. 2) Part of ocean bed and shores and composed of chalk such as 'white cliffs of Dover'.

CHALK WATER Term for thin mixture of powdered milk used aboard ships before advent of canned milk in 1850's.

CHALLENGE 1) Signal transmitted by interrogator. 2) Cause an interrogator to transmit signal which puts transponder into operation.

CHALLENGER See Interrogator.

CHALLIHO Strong southerly wind experienced in parts of India during Spring.

CHANCE YOUR ARM Risk losing the good conduct stripes worn on the left arm. 2) Take a risk or behave in a manner likely to prejudice rank and pay.

CHANDLER, CHANDLERY 1) Maker and seller of candles. From French, 'chandelier', candle maker. 2) Marine hardware store, shop or shoreside purveyor to all the needs of a Ship in Port for items of nautical Gear. 3) Items of nautical Gear.

CHANGE OF COMMAND CEREMONY AND TRADITION

It is not specifically prescribed by U.S. Navy Regulations, but is honored tradition. It is wholly Naval custom, without an equivalent in Army or Air Force. Custom has established that this ceremony be formal and impressive--designed to strengthen respect for authority which is vital to any organization. Procedure was designated to ensure only duly authorized officers held command and that all aboard were aware of its authenticity. Command passes upon utterance by relieving officer, "I relieve you, Sir (or Ma'am)." Officer being relieved responds, "I stand relieved." This simple procedure is duplicated hundreds of times daily throughout the Navies of world as each watch officer passes responsibility to their relief in conduct of ship's routine.

CHANGE OF THE MOON Time of new moon. See Phases Of The Moon.

CHANGE OF TIDE Reversal of direction of motion (rising or falling) of Tide. Expression is also sometimes applied somewhat loosely to reversal in Set of Tidal Current. AKA Turn Of The Tide.

CHANNEL (S) 1) Part of body of water, watercourse or water flowing in defined stream, either natural or dredged, with water sufficiently deep enough for navigation or to sail in. Navigable portion of waterway, marked and designated area where there is known depth of water through an area otherwise not suitable. It is usually marked by single or double line of Buoys and sometimes by Ranges or Range Markers. Boats may not normally Anchor in a Channel. From French, 'chanel', watercourse. 2) Deepest part of stream, Bay or Strait through which main Current Flows. 3) Name give to certain large Straits, such as English Channel. 4) Hollow bed through which water may run. 5) Part of Hull of a Sailing Ship. Corruption or contraction of Chain Wale. Serve same purpose on large sailing ships as Chain Plates. 6) Bureaucratically formalized and rigid. 7) Band of radio frequencies

within which radio station must maintain its modulated carrier frequency to prevent interference with stations on adjacent Channels. AKA Frequency Channel.

CHANNEL BUOY Buoy marking Channel.

CHANNEL FEVER Term for the euphoria felt by seamen on the last stretch for home or upon entering the final Channel to their home Port after returning from the sea.

CHANNEL LIGHT Light, either on fixed support or on Buoy, marking limit of navigable Channel.

CHANTY (ALSO SHANTY) Shipboard work song sung in unison while at a specific job to relieve the drudgery of hand hauling and to ensure all Pulled Together. The rhythm was set to the tempo of the work. There were different shanties for different work. Called or led by the Chanteyman. From the French 'chanter', to sing. AKA Chantey.

CHAPELLING Involuntary tacking or going aback in a Square Rigger due to poor steering or a sudden shift of wind. From French, 'faire chapelle'. AKA chappelling.

CHAPELS Grooves in a built up Mast. From English, 'chapelet', meaning support.

CHAPLAIN From French legend that St. Martin divided his coat with poor beggar on cold wintry day outside Amiens. Coat was miraculously preserved and thereby became sacred banner for Kings of France. This cloak or cape, French "chape," was preserved in place of prayer that took the name of "chapelle," or chapel, and person charged with its keeping was called "chapelain."

CHARACTERISTIC 1) Features used to identify each individual Aid to Navigation from other aids. Includes color and shape of Daymark or Buoy or color, rhythm and Period of a light, Morse Code identifying signal transmitted by a lighted aid or radiobeacon, number of blasts and Period produced by a sound signal and Morse code letter transmitted by a RACON. See Characteristic Color and Characteristic Phase.

CHARACTERISTIC COLOR Unique identifying color of a light.

CHARACTERISTIC FREQUENCY Frequency which can be easily identified and measured in given emission.

CHARACTERISTIC PHASE Of a light, sequence and length of light and dark Periods by which navigational light is identified, i.e., whether fixed, flashing, interrupted quick flashing, etc. See Cautionary Characteristic.

CHARACTERISTICS OF A LIGHT Sequence and length of light and dark periods and color or colors by which navigational light is identified.

CHARACTER OF THE BOTTOM See Bottom Characteristics.

CHARGE Place batteries in an unmanned Aid to Navigation.

CHARLEY MORE Symbol for fair or straight dealing or someone who is honest and upright. From Maltese tavern owner's sign.

CHARLIE NOBLE Nickname for galley smokestack or stovepipe fitting in a Cabin top or Deck through which the metal chimney of a boat's cooking or heating stove passes. Usually equipped with a cooling rim of water and a partial cap used to exclude rain and control smoke. Rumored to be named after variety of different people. Sailors named it in resentment after (18th or 19th Century British Admiral, Commodore, Captain or Cook Charles Noble?) who insisted that brass or copper stack be kept polished and brightly shined. AKA Charley Noble.

CHART (S) 1) Seagoing, mariner's or nautical map intended primarily for navigational use by aircraft or vessels. Most are issue by governmental sources, updated periodically and their data is based on surveys of the land and underwater areas, showing depths as well as Buoys and other Aids To Navigation. From Greek, 'khartes', map. 2) Type of map which tells you exactly where you are aground.

CHART # 1: NAUTICAL CHART SYMBOLS AND ABBREVIATIONS Printed by National Ocean Service and contains a completed description of symbology shown on Charts.

CHART AMENDMENT PATCH See Chartlet.

CHART CATALOG List or enumeration of navigational Charts, sometimes with index Charts indicated extent of coverage of various navigational Charts.

CHART CLASSIFICATION BY SCALE

Charts are constructed on many different scales, ranging from about 1:2,500 to 1:14,000,000 (and even smaller for some world Charts.) Small Scale Charts are used for voyage planning and offshore navigation. Charts of large Scale are used as vessel approaches land. Several methods of classifying Charts according to Scale are in use in various nations. See Coast Charts, General Charts, Harbor Charts, Sailing Charts and Scale.

CHART COMPARISON UNIT Optical device used to superimpose plan position indicator radar picture on navigational Chart.

CHART CONVERGENCE Convergence of Meridians as shown on Chart.

CHART DATUM See Chart Sounding Datum.

CHART DESK Flat surface on which Charts are spread out, usually with stowage space for Charts and other navigation equipment below plotting surface. One without stowage space is called Chart Table.

CHARTED DEPTH Vertical distance from Chart Sounding Datum to Bottom.

CHARTED OBJECT Any object that can be recognized both visually and on a Chart.

CHARTER To lease or rent, or the leasing or renting of a ship or boat. From Latin, 'chartula', document.

CHARTER PARTY Master document of Charter agreement. Contract between Ship owner and person hiring whole or any part of it for specific purpose and on agreed terms. From French, 'charte partie', divided document.

CHARTHOUSE Room, usually adjacent to or on Bridge, where Charts and other navigational equipment are stored, and where navigational computations, plots, etc, may be made. AKA Chartroom.

CHARTLET Corrected reproduction of small area of nautical Chart which is pasted to Chart for which it is issued. They are disseminated in Notice To Mariners when corrections are too numerous or of such detail as not to be feasible in printed form. AKA Block, Block Correction, Chart Amendment Patch.

CHART PORTFOLIO Systematic grouping of nautical Charts covering specific geographical area.

CHART PROJECTION See Map Projection.

CHART READING Interpretation of symbols, lines, abbreviations, and terms appearing on Charts. AKA Map Reading when applied to maps generally.

CHARTROOM See Charthouse.

CHART SCALE Ratio between distance on Chart and corresponding distance represented as ratio such as 1:80,000 (natural scale), or 30 miles to an inch (numerical scale). AKA Map Scale when applied to any map. See also Representative Fraction.

CHART SOUNDING DATUM Tidal datum to which soundings and drying heights on Chart are referred. It is usually taken to correspond to low water state of Tide. AKA Chart Datum, especially when it is clear that reference is not being made to horizontal datum.

CHART SYMBOL Character, letter, or similar graphic representation used on Chart to indicate some object, characteristic, etc. May be called Map Symbol when applied to any map.

CHART TABLE Flat surface on which or where Charts are handled, spread out for the purpose of navigating, particularly one without stowage space below plotting surface. AKA Navigation Table. One provided with stowage space is usually called Chart Desk.

CHARYBDIS See Galofaro.

CHASM Deep breach in earth's surface, an Abyss, gorge or deep canyon.

CHECK 1) Reduce or slow Vessel's swing. AKA Check The Swing. 2) Stop run of Rope, Cable or Sheet. 2) How you pay for boat tows.

CHECK BEARING Additional Bearing, using Charted object other than those used to fix position, observed and plotted in order to insure that fix is not result of blunder.

CHEEKS 1) Supports for Trestletrees on Sailing Ship's Masts. 2) Sides of a Block. 3) See Hounds. 4) Most visible portion of a person's anatomy who is bending over the Hawse Pipe.

CHERNIKIEF LOG Impeller type underwater device, usually retractable, to measure speed and distance.

CHEAPSKATE Tightwad. American from 'cheap' and the common fish 'skate'.

CHEATER PIPE Long hollow pipe placed over a something such as steamboat ratchet handle or load binder to increase leverage. AKA cheater bar.

CHERGUI Intrusion of hot air into Morocco in northwest Africa from Sahara Desert areas to the east.

CHESS TREES Short projections from the Topsides of a Square Rigger, with Blocks or built-in Sheaves on their ends, for the leads of the Braces. From French, 'chassis', frame. AKA Chesstrees.

CHEW (ING) THE FAT 1) Much chewing of tough, gristly, salted beef or pork before it could be swallowed. This tough cured, salted beef, along with hard fat due to Brine added to barrels of meat as preservative, was staple diet aboard ship. It was suitable only for long voyages when nothing else was as cheap or would keep as well. It required prolonged chewing to make it edible. Men often chewed one chunk for hours, just as if it were chewing gum and referred to this practice as 'Chewing the Fat'. See Bully Beef. 2) Grumbling about poor food while eating. See God Made The Vittles, but The Devil Made The Cook. 3) Grousing, talk endlessly, idly or aimlessly gabbing for long time. AKA Chew The Rag from English 'rag', scold.

CHIEF Chief Petty Officer.

CHILE CURRENT See Peru Current.

CHILI Hot wind from deserts of North Africa and Arabia which blows over middle and south of Mediterranean. It is name applied when wind passes over Tunisia.

CHIMNEY Label on nautical Chart which indicates relatively small smokestack.

CHINE 1) Intersection of sides or Topside and boats's Bottom on a flat or v-bottomed boat, often abrupt change. AKA Bilges 2) Longitudinal rib like strips on bottoms of various types of modern high speed motorboats. From french, 'eschine', spine or backbone.

CHINE, HARD See Hard Chine.

CHINOOK Dry, warm wind which blows from westerly direction down east slopes of Rockies in North America. Fohn-type wind loses its moisture on windward side and heats by compression as it slides down lee side. Sometimes raises temperature as much as 40°F in 15 minutes, thus its other name 'snow eater'.

CHINSE Temporary caulking. AKA chink. See Devil.

CHIP LOG Device used to measure distance traveled or speed. Piece of wood or chip, often wooden quadrant or quarter circle, weighted on curve so it floats upright in vertical position, fastened to end of long, log line by Bridle with chip anchoring line in water. Allowed to run out over Stern and used to calculate speed by counting number of equally spaced Knots, usually 47 feet 3 inches apart, tied in line that ran out in certain time, usually 28 seconds, which was measured by hour or sand glass. AKA Dutchman's Log. See Log Line.

CHIPS Nickname for the Ships's Carpenter.

CHIT 1) Marker or invoice for goods and services aboard ship. From Hindi or Hindustani, 'chitthi' or 'citthi', letter, note, voucher, receipt or paper money. 2) Mess vouchers. 3) Signed voucher for goods or service. Paper for drawing pay, requesting leave, liberty and special requests. Pass or official letter requesting some privilege.

CHOCK (S) 1) Type of device, Fairlead or metal Fitting usually shaped like a 'U' or an 'O' that is mounted or affixed to Deck or in Toe Rail. It guides, directs, controls or Fairleads Rigging or Lines where they leave the Vessel, such as an Anchor, Docking or Mooring Lines. Chocks are usually U-shaped to reduce chafe and can either be closed (Panama) or open and single or double roller. 2) Wooden wedge that stabilizes Cargo in ship's hold to keep it from shifting while vessel is underway. 3) To secure or render solid, often by wedging any moveable object in order to hold it steady. From French, 'coche', block of wood. 4) Full to capacity. See Chock-A-Block.

CHOCKABLOCK 1) When two blocks (pulleys) in tackle are drawn together as close as possible, close up or hoisted so tightly that they touch, are in contact, cannot move any closer and no more movement of line is possible. 2) Any sail, flag, or gear hoisted fully. 3) Full up, tight, drawn up as far as possible, jammed or locked together. AKA Two Blocked or Chock A Block. See Block, Chock, Overhauled.

CHOCK FULL 1) Ship's hold filled to capacity. From 'choke' or 'chock'. 2) Filled to extreme limit. AKA Chuck Full.

CHOKE See Arse or Breech.

CHOP Short, steep waves.

CHOPPED RESPONSE See Chopping.

CHOPPING Rapid and regular on and off switching of transponder, for recognition purposes.

CHOPPY Description of short, breaking waves.

CHORD 1) Straight line connecting two points on curve. 2) Imaginary straight line drawn between Luff (leading edge) and Leech (trailing edge) of Sail. See Chord Depth.

CHORD DEPTH Imaginary line drawn to the deepest part of the Sail from the Chord. See Draft.

CHOW Sailors word for food, anything edible, a meal or any mixed dish covering a multitude of sins. From Chinese pidgin, 'chow-chow', mixed pickles or food.

CHOWDER Seafood soup. From the French 'chaudiere' meaning a cauldron.

CHRISTENING A SHIP Started by Greeks and Romans using wine to purify ship and by Vikings which broke the back of a prisoner over Stem of vessel in order to transfer strength. Changed to champagne by French.

CHROMATIC ABERRATION See Aberration.

CHROMOSPHERE Thin layer of relatively transparent gases above photosphere of sun.

CHROMOSPHERIC ERUPTION See Solar Flare.

CHRONOGRAM Record of Chronograph.

CHRONOGRAPH Instrument for producing graphical record of time as shown by clock or other device. Chronograph produces double record: first is made by associated clock and forms continuous time scale with significant marks indicating periodic beats of time keepers; second is made by some external agency, human

or mechanical, and records occurrence of an event or series of events. Time interval of such occurrences are read on time scale made by clock. See Breakcircuit Chronometer.

CHRONOMETER Highly accurate clock or timepiece with nearly constant rate, specially made to keep accurate time and used in navigation, serving as Ship's master clock. Invented by John Harrison. It is customarily used for comparison of watches and clocks to determine their errors. It is usually set to show correct Greenwich Mean Time and not reset as Vessel changes time zones and is used in determining ship's position at sea, specifically, her Longitude. From Greek, 'chronos', time and 'metron', measure. See Chronometer Watch.

CHRONOMETER CORRECTION Amount that must be added algebraically to Chronometer Time to obtain correct time. It is numerically equal to Chronometer Error, but of opposite sign.

CHRONOMETER ERROR Amount by which Chronometer time differs from correct time to which it was set, usually Greenwich Mean Time. It is usually expressed to an accuracy of 1 second and labeled fast (F) or slow(S) as Chronometer time is later or earlier, respectively, than correct time. See Chronometer Correction and Watch Error.

CHRONOMETER, HACK One which has failed to meet exacting requirements of standard Chronometer. It is usually rejected but is sometimes used for timing observations of Celestial Bodies.

CHRONOMETER RATE Amount gained or lost by Chronometer in unit of time. Usually expressed in seconds per 24 hours, to accuracy of 0.1 second and labeled gaining or losing, as appropriate, when it is sometimes called Daily Rate.

CHRONOMETER TIME Hour of day as indicated by Chronometer, generally set to Greenwich mean time.

CHRONOMETER WATCH Small Chronometer, especially one with an enlarged watch type movement.

CHUBASCO Very violent squall with thunder and lightning, encountered during rainy season along west Coast of Central America and Mexico, most frequently during May to November..

CHUBBY Short, fat, gravitationally

challenged people from the thick, fat and round cheeked fish named the chub.

CHUNNEL Tunnel under the English Channel.

CHURADA Fierce, severe rain squall in Mariana Islands during Northeast Monsoon, occurring from November to April or May, especially from January through March.

CHURCH PENNANT Only flag ever flown over National Ensign at the same point of hoist. It is displayed during church services conducted by a Chaplain, both ashore and afloat.

CIERZO See Mistral.

CINCUS Discarded and inappropriate pre World War II acronym for Commander in Chief of the United States Navy.

CINDERS See Scoriae.

CINQUE PORTS Five English ports of Hastings, Sandwich, Dover, Romaney and Hythe who were granted special privileges by Crown since they provided men and ships for defense of English Channel. Ports of Rye and Winchelsea were later added. From Latin 'quinque', five.

CIRCLE 1) Plane closed curve, all points of which are equidistant from a point within, called center. See Circle, Great; Circle, Small; Parallel Of Altitude, Parallel Of Declination; Parallel Of Latitude; Azimuth Circle; Bearing Circle; Diurnal Circle; Equator; Hour Circle; Paraselenicircles; Position Circle; Speed Circle; and Vertical Circle. 2) Section of plane, bounded by curve all points of which are equidistant from point within, called center.

CIRCLE, GREAT Intersection of sphere and plane through its center. It is largest circle that can be drawn on sphere. See Great Circle.

CIRCLE OF DECLINATION See Hour Circle.

CIRCLE OF EQUAL ALTITUDE Circle on surface of earth, on every point of which Altitude of give Celestial Body is same at given instant. Center of this circle is Geographical Position of body. Great Circle distance from this Pole to Circle is Zenith Distance of

body. See Parallel of Altitude.

CIRCLE OF EQUAL DECLINATION See Parallel Of Declination.

CIRCLE OF EQUIVALENT PROBABILITY Circle with same center as error ellipse of specified probability and of such radius that probability of being located within circle is same as probability of being located within ellipse. See Circular Error Probable.

CIRCLE OF LATITUDE Great Circle of Celestial Spher through Ecliptic Poles and along which Celestial Latitude is measured.

CIRCLE OF LONGITUDE See Parallel Of Latitude.

CIRCLE OF PERPETUAL APPARITION Circle of Celestial Sphere, centered on polar axis and having Polar Distance from elevated pole approximately equal to Latitude of observer, within which celestial bodies do not set. Opposite of Circle of Perpetual Occultation.

CIRCLE OF PERPETUAL OCCULTATION Circle of Celestial Sphere, centered on polar axis and having Polar Distance from depressed pole approximately equal to Latitude of observer, within which Celestial Bodies do not rise. Opposite of Circle Of Perpetual Apparition.

CIRCLE OF POSITION Circular Line Of Position. Expression is most frequently used with reference to Circle Of Equal Altitude surrounding Geographical Position of Celestial Body. AKA Position Circle.

CIRCLE OF RIGHT ASCENSION See Hour Circle.

CIRCLE UNCERTAINTY Circle having as its center a given position and as its radius the maximum likely error of the position; circle within which vessel is considered to be located. See Circle Of Equal/Equivalent Probability, Circle Of Position, Position Circle.

CIRCLE OF VISIBILITY Circle surrounding Aid To Navigation in which aid is visible. See Visual Range (Of A Light)

CIRCLE SHEET Chart with curves enabling graphical solution of three point problem rather than using three-arm protractor. AKA Sextant Chart,

Standard Circle Sheet.

CIRCLE, SMALL Intersection of sphere and plane which does not pass through its center. See Small Circle.

CIRCUIT Electrical path between two or more points. 2) Conductors connected together for purpose of carrying electric current. 3) Connected assemblage of electrical components, such as resistors, capacitors and inductors.

CIRCULAR ERROR PROBABLE 1) Radius of circle containing 50% of individual measurements being made or where there is 50% probability of being located/. 2) Same definition even if actual error figure is ellipse. AKA circular probable error. See Circle Of Equivalent Probability and Error Ellipse.

CIRCULAR FIX Designation of any one of erroneous fix positions obtained with revolver or swinger.

CIRCULAR VELOCITY Magnitude of velocity required of body at given point in gravitational field which will result in body following circular orbital path about center of field.

CIRCUMFERENCE Distance or boundary line around outside of a circle, other closed plane curve or other limits of sphere or other round body.

CIRCUMLUNAR Around moon, generally applied to trajectories.

CIRCUMMERIDIAN ALITITUDE See Ex-Meridian Altitude.

CIRCUMNAVIGATION Voyage around the world, first accomplished by expedition led by Del Cano (not Magellan who was killed) and single handed by an American, Joshua Slocum

CIRCUMPOLAR Revolving about elevated Pole without setting. Celestial Body is this when its Polar Distance is approximately equal to or less than Latitude of observer. Actual limit is extended somewhat by combined effect of refraction, semidiameter parallax and height of observer's eye above Horizon.

CIRCUMSCRIBED HALO Halo formed by junction of upper and lower tangent arcs of halo of 22°.

CIRCUMZENITHAL ARC Brilliant rainbow-colored arc of about quarter of circle with its center at

Zenith and about 46° above sun. It is produced by refraction and dispersion of sun's light striking top of prismatic ice crystals in atmosphere. It usually lasts for only few minutes. See Halo.

CIRRIFORM Like cirrus. Descriptive of clouds composed of small particles, mostly ice crystals, which are fairly widely dispersed, usually resulting in relative transparency and whiteness, often producing Halo phenomena not observed with other cloud forms. See Cumuliform and Stratiform.

CIRRIPEDA Barnacles and certain other parasitic marine animals.

CIRRO- Prefix used in cloud classification to indicate highest of three levels generally recognized. See Alto.

CIRROCUMULUS Principal cloud type appearing as thin, white patch of cloud without shadows, composed of very small elements in form of rains, ripples, etc. Elements are very small, without shadows. They may be merged or separate and more or less regularly arranged. Holes or rifts often occur in sheet. It is not on the whole fibrous, or both silky and smooth; rather it is rippled and subdivided into little cloudlets.

CIRROSTRATUS Principal cloud type, appearing as whitish veil, usually fibrous but sometimes smooth, which may totally cover sky, and often produces halo phenomena, either partial or complete. Sometimes banded aspect may appear, but intervals between bands are filled with thinner cloud veil. Edge of veil may be straight and clear-cut, but more often it is irregular and fringed with Cirrus.

CIRRUS (CLOUDS) Principal cloud type composed of detached cirriform elements in form of delicate filaments or white (or mostly white) patches, or of narrow bands. They have fibrous aspect and/or silky sheen. Highest level of clouds composed of ice crystals. Because elements are too narrow, they do not produce complete circular halo.

CIRRUS SPISSATUS See False Cirrus.

CISLUNAR Of or pertaining to phenomena, projects, or activity in space between earth and moon, or between earth and moon's orbit.

CIVIL DAY 1) Mean solar day beginning at midnight. See Calendar Day. 2) Day where everyone around you has a good attitude.

CIVIL TWILIGHT Period of incomplete darkness when upper limb of sun is below visible Horizon and center of sun is not more than 6° below Celestial Horizon. See Nautical Twilight.

CIVIL YEAR Year of Gregorian Calendar of 365 days in common years or 366 days in leap years.

CLAM 1) Mollusk. 2) Slang for mouth.

CLAMP Fore and Aft structural member of a Vessel's framing, inboard of the Frames and supporting the Deck Beams. Inner Longitudinal timber or plank in the construction of a wooden Vessel that acts as the bearer for Beams or Joints. From Dutch, 'klamp', Fastening.

CLAMP SCREW Screw for holding moving part in place, as during an observation or reading, particularly such a device used in connection with tangent screw of marine Sextant.

CLAMP SCREW SEXTANT Marine Sextant having clamp Screw for controlling position of tangent screw.

CLAM UP Become silent, refuse to disclose information. From difficulty of opening lips of Clam. See Close As A Clam and Happy As A Clam At High Tide.

CLAP ON 1) Add on more Sail, or make the ship go faster by setting extra sails. From the the crew clapping their hands around the Halyards. 2) Add on more hands on a line, a better Purchase, etc. From Norse, 'klappan', to act quickly.

CLAPPER Heavy pendulum suspended inside bell which sounds bell by striking it.

CLASS (ES) 1) Organized groups of boats with either identical measurements and specifications, or variable measurements to fit a formula, designed to equalize boat performance to some degree and thus put a premium on skill and tactics, usually when racing. Category to which ship belongs,; Schooner, Clipper, Frigate, Cruiser, etc. See Rating. 2) What you would like to have at sea.

CLAW OFF Clear a Lee Shore.

CLAY See Mud.

CLEADING Casing for Buoyancy tanks in a lifeboat.

CLEAN Free from obstructions,

unevenness, imperfections, such as a Clean anchorage.

CLEAN BILL OF HEALTH 1) Certificate or document issued to ship by Port authority or health officer which indicates that Vessel has no serious illness, infection or epidemic on board at time of departure and is in a generally healthy condition. Given to departing Vessel that facilitates her entrance to next Port. Opposite of Foul Bill Of Health. 2) Someone who is freed from blame. 3) Healthy in good shape

CLEAN SLATE 1) Recording the courses and distances made good on log slate and then transferring this information into Deck logbook at end of Watch and then wiping it clean for next watch. See Wipe The Slate Clean. 2) Forgetting what has gone before and starting new or fresh start.

CLEAN SWEEP Effect of a monstrous sea which sweeps everything off the Deck, frequently including the superstructure.

CLEAR (ED) 1) Leave Port or pass safely by an obstruction. 2) RT Proword meaning my transmission is complete and I expect no reply. 3) Rope or Chain is this when it is unsnarled or when any kinks are removed and it can run freely.

CLEARANCE Clear space between two objects, such as nearest approach of Vessel to navigational light, hazard to navigation, or other Vessel.

CLEAR BERTH Berth in which Vessel may swing at anchor without striking or fouling another Vessel or obstruction. See Foul Berth.

CLEAR CUSTOMS Vessel passes examination by customs officers.

CLEAR HARBOR Vessel leaves Harbor.

CLEAR ICE Coating of clear ice, formed when rain freezes on contact with an object. AKA glaze ice.

CLEAR ONE'S YARDARM 1) Slew the Yards or swinging them inboard so their ends would not obstruct the Yards of another ship or quayside building which might have fouled them. 2) Exonerate oneself or to prove innocence.

CLEAR, SAILS Avoiding obstacle or danger.

CLEAT 1) Short piece of wood nailed across a sloping Gangway to provide sure footing. 2) 'T', anvil, hook or horn shaped piece of wood, metal fitting, rigging fitting or plastic. Used to tie off, make fast, secure or temporarily attach Line or wire rope under strain such as Mooring Lines, Sail Control Lines (Sheets and Halyards) and miscellaneous Lines. Two kinds exist; horn and quick action. AKA Cavit.

CLEAT HITCH Distinctive criss-cross or figure eight Hitch used to Fasten (Belay) a Line to a Cleat.

CLEVIS Shackle.

CLEVIS PIN Metal pin that Secures on e fitting or shackle to another or to the boat.

CLEW 1) Bottom corners of square Sail. 2) Aft, lower, bottom, rear point or Leeward corner of fore and aft Sail, Mainsail, Mizzen or Jib where the Sheet is attached. 3) Either lower corner of a Spinnaker at the Dock. 4) Small metal ring fixed into the sail so that a line may be attached. 5) What you may not have when first starting to sail. 6) An indication from the skipper as to what he might do next.

CLEW OR CLEWED UP 1) Order given to stow the sails which was done by furling their clews up to the yards. 2) Any job which entailed tidying up or securing.

CLEW LINES Lines or Ropes employed on square Sails, running from lower corners or Clew to Yard and down to Deck. Used to draw Sails up for Furling.

CLEW (TO) Haul square sail up to Yard previous to furling by means of Clew Lines.

CLIFF Land arising abruptly for considerable distance above water or surrounding land. See Bluff.

CLIMATE 1) Average, prevalent or characteristic meteorological conditions of an area, place or region over a specified period of time. Contrasted with Weather which is state of atmosphere at any time. 2) Climate is what you expect. Weather is what you get.

CLIMATOLOGY 1) Study of climate. 2) Account of Climate of particular place or region.

CLINKER Method of ship and boat construction of overlapping planks or Strakes and developed by the Vikings.. From English, 'klenken', to hold fast. AKA clinker built or clench built. See

Lapstrake.

CLINKER BUILD System of wooden boatbuilding in which Hull planking or Strakes overlap like shingles on roof of house. See Carvel Built. AKA Clinker Built.

CLINOMETER Device or instrument for measuring or indicating degree angle of Roll, Heel, List or Pitch. It may be of pivot arm or bubble type, usually indicating in whole Degrees. From Greek, 'clino', cause to lean and 'metron', measure.

CLIPPER Fast, long, narrow Square Rigged Ship with very fine lines and 'cloud of sails'. Corruption of a very fast and handsome French ship named 'Cleopatra cum Antonio' into 'clipster', then 'clipper' or from 'going at a clip' or from the way the ships 'clip' the waves. AKA Clipper Ship. See Flying Clipper.

CLIPPER SHIP AKA Clipper.

CLOCK Timepiece not meant to be carried on person. See Chronometer.

CLOCKWISE In direction of rotation of hands of Clock.

CLOSE Move or appear to move together. 1) Order is sometimes given by flagship for Vessel to Close to Yards or Miles. 2) When craft moves onto Range, objects forming Range appear to move closer together or Close. Opposite of Open.

CLOSE ABOARD Very Near.

CLOSE AS A CLAM Stingy person, referring to difficulty in opening Clam shell. See Clam Up and Happy As A Clam At High Tide.

CLOSED Said of manned Aid To Navigation that has been temporarily discontinued for winter season. See Commissioned and Withdrawn.

CLOSED SEA Part of Ocean enclosed by headlands, within narrow Straits, etc. 2) Part of Ocean within territorial jurisdiction of a country. Opposite of Open Sea. See High Seas and Inland Sea.

CLOSE HAUL (ED) Sailing with Bows pointing as close to Wind or Hard on Wind as is possible, effective or efficient. It is most Windward point of sail, where Apparent Wind is approximately 30-45 degrees off Bow and Sheets are Hauled tight, enabling Boat to Sail 'against the wind'. AKA Beating, on the wind or sailing upwind.

See Bowline. Opposite of Free A Ship.

CLOSE PACK ICE Pack ice in which the concentration is 7/10 to 8/10, composed of floes mostly in contact.

CLOSE QUARTERS 1) Defensive structure or wooden barriers used in merchant ships and erected across Decks when attacks were expected. Consisted of heavy baulks of timber placed around after Deck or quarters with holes cut (apertures) through so that muskets could fire. See Loopholes. 2) Immediate contact or something done had to had or at close range.

CLOSE REACH Sail upwind at angle less than 90 degrees but not directly into wind, a reach at any heading between 90 degrees to wind and Close Hauled.

CLOSEST APPROACH 1) Event that occurs when two planets or other bodies are nearest to each other as they orbit about primary body. 2) Place or time of event. 3) Time or place where orbiting earth satellite is closest to observer. AKA Closest Point Of Approach.

CLOSEST POINT OF APPROACH Closest distance between two Vessels or between Vessel and land or other object. AKA CPA.

CLOSE WINDED Craft capable of sailing very close to the Wind.

CLOTHING 1) Term for the Rigging holding the Bowsprit in place. 2) Something to cover the nakedness of the human animal.

CLOUD 1) Hydrometeor consisting of visible aggregate of minute water and/or ice particles in atmosphere above earth's surface. It differs from Fog only in that Fog is, by definition, in contact with earth's surface. Formed in free atmosphere as result of condensation of water vapor in rising currents of air, or by evaporation of lowest stratum of fog. See Cloud Classification. 2) Any collection of particulate matter in atmosphere dense enough to be perceptible to eye, such as dust cloud or smoke cloud.

CLOUD BANK 1) Fairly well defined mass of Cluds observed at distance. It covers appreciable portion of Horizon sky, but does not extend overhead. 2) Where you store Clouds which gather interest for future use.

CLOUD BASE For give Cloud or cloud Layer, that lowest level in atmosphere at which air contains perceptible quantity of Cloud particles.

CLOUDBURST Any sudden and heavy fall of Rain greater than 100 millimeteres (3.94 inches) per hour. AKA Rain Gush or Rain Gust.

CLOUD CLASSIFICATION 1) Scheme of distinguishing and grouping clouds according to appearance and, where possible, to process of formation. Classification based on determination of Cloud Genera, Cloud Species, Cloud Varieties and Cloud Supplementary Features And Accessory Clouds. 2) Scheme of classifying clouds according to their usual Altitudes with three classes distinguished as Clouds, High; Clouds, Middle; and Clouds, Low. 3) Scheme of classifying Clouds according to their particulate composition; namely water Clouds, ice-crystal Clouds and mixed Clouds.

CLOUD COVER That portion of sky cover which is attributed to Clouds, usually measured in tenths of sky covered.

CLOUD DECK Upper surface of Cloud.

CLOUD GENERA Ten main characteristic forms of clouds: Cirrus, Cirrocumulus, Cirrostratus, Altocumulus, Altostratus, Nimbostratus, Stratocumulus, Stratus, Cumulus and Cumulonimbus.

CLOUDS, HIGH Cirrus, Cirrocumulus, cirrostratus,, occasionally altostratus and tops of Cumulonimbus.

CLOUD LAYER Array of clouds, not necessarily all of same type, whose bases are at approximately same level. May be either continuous or composed of detached elements.

CLOUDS, LOW Stratocumulus, Stratus, most Cumulus and Cumulonimbus bases and sometimes Nimbostratus.

CLOUDS, MIDDLE Altocumulus, Altostratus, Nimbostratus and portions of Cumulus and cumulonimbus.

CLOUD SEEDING Artificial spraying of, or the addition of chemicals or other agents to, clouds for the purpose of increasing or decreasing precipitation.

CLOUD SPECIES Fourteen peculiarities in shpae and

differences in internal structure of Clouds: fibratus, uncinus, spissatus, castellanus, floccus, stratiformis, nebulous, Ineticularis, fractus, humilis, mediocris, congestus, calvus, and capillatus.

CLOUD SUPPLEMENTARU FEATURES AND ACCESSORY CLOUDS Nine appended and associated minor Cloud forms: inclus, mamma, virga, praecipitatio, arcus, tuba, pileus, velum and pannus.

CLOUD VARIETIES Nine special characteristics of arrangement and transparency of Clouds: intortus, vertebratus, undulatus, radiatus, lacunosus, duplicatus, translucidus, perlucidus and opacus.

CLOVE HITCH Double loop Hitch or Knot, generally used around Piling or Bollard, easily adjusted but it can work loose. One of most common hitches for temporarily securing line to Spar, Stanchion, post or Piling and for fastening Ratlines to Shrouds.

CLUB 1) Any of several short Spars on sailing craft. From English, 'clubbe', cudgel or short staff.
2) Drift in Current with Anchor dragging to provide control. Usually used with word 'down'.

CLUB FOOTED Foot of Sail, such as a Jib or Foresail, supported by a small Boom.

CLUB HAUL Method of Tacking, by letting go Lee anchor as soon as wind is out of sails, which brings ship's Head to wind, and as soon as she pays off, cable is cut and sails trimmed. Only resorted to in perilous situations, and when it is expected ship will miss stays.

CLUMB BLOCK Heavy and rounded single Sheave Block with wide Sheave, especially for use with Headsail Sheets of large sailing Vessel. From English, 'clympre', lumpy.

CMG See Course Made Good.

CN See True Course.

CNG Compressed Natural Gas, a fuel used for cooking and heating.

CO 1) Carbon monoxide, a poisonous gas.
2) Prefix meaning 90o minus value with which it is used. Thus, if Latitude is 30°, Colatitude is 90° - 30° = 60°.

CO₂ Carbon Dioxide, a type of fire extinguishing agent.

COALSACK Any of several dark areas in Milky Way, especially, when captialized, prominent area near Southern Cross.

COALTITUDE Ninety degrees minus Altitude. Term has significance only when used in connection with Altitude measured from Celestial Horizon, when it is synonymous with Zenith Distance.

COAMING Ridge, low wall, vertical piece or raised edge or rim of planking or lip on Gunnel around Vessel's hold, Hatch, Companionway, hatchway or Cockpit that prevents water on Deck from flooding or running below into Boat or Hold. Raised edge around Cockpit of small boat helps prevent entry of water or spray. AKA combing and coming. Often inhabited with the spirits of frisky ghosts who take over the soul of this equipment and who can be heard late at night announcing such conquest with the ghostly muffled cry of "I'm coaming!"

COAST General region of indefinite width that extends from Sea inland to first major change in terrain features. AKA Seacoast. See Seaboard.

COAST AID See Coastal Mark

COASTAL AREA Land and sea area bordering Shoreline.

COASTAL BOUNDARY General term for boundary defined as line (or measured from line or points thereon) used to depict intersection of ocean surface and land at elevation of particular Datum, excluding one established by treaty or by U.S. Congress.

COAST (AL) CHART Classification of Nautical Charts used by National Ocean Survey. Intended for inshore coastwise navigation where Course may lie inside outlying reefs and shoals, for entering or leaving bays and harbors of considerable width, and for navigation large inland waterways. Scales range from about 1:50,000 to 1:150,000. See Chart, Chart Classification By Scale, General, Harbor, Sailing and Special Charts.

COASTAL CONFLUENCE ZONE (CCZ) Harbor entrance to 50 miles offshore or the edge of the Continental Shelf (100 fathom curve), whichever is greater.

COASTAL CURRENT Ocean Current flowing roughly parallel to Coast outside surf zone. See Longshore Current.

PETER'S NAUTICAL TERMS DICTIONARY & GLOSSARY for BLUEWATER SAILING

- COASTAL MARK** Navigation Mark placed on coast to assist coastal navigation. Particularly used with reference to marks placed on long straight coastline devoid of many natural landmarks. AKA Coastal Aid.
- COASTAL MARSH** Area of salt toleratn vegetation in brackish and/or saltwater habitats subject to Tidal inundation.
- COASTAL NAVIGATION** Uses visual, surface reference points to navigate safely. AKA Piloting. See Navigation.
- COASTAL PLAIN** Any plain or strip of flat land running along Coastline which has its margin on Shore of large body of water, particularly Sea and generally represents strip of recently emerged sea bottom separating water and mountain.
- COASTAL REFRACTION** Bending of wave front of radio wave traveling parallel to Coastline or crossing it at acute angle due to differences in conducting and relective properties of land and water over which waves travels, affecting accuracy of medium frequency radio direction finding systems. AKA Coast Refraction.
- COAST AND GEODETIC SURVEY** Mapping, charting and surveying arm of National Ocean Service (NOS), component of National Ocenaic and Atmospheric Administration (NOAA).
- COASTER** Small merchant Vessel engaged in Coasting Trade.
- COAST GUARD** The good guys.
- COAST GUARD LICENSE** License for professional mariner.
- COASTING** Proceeding approximately parallel to coastline (Headland to Headland) in sight of land, or sufficiently often in sight of land to fix ship's position by observations of land features.
- COASTING LEAD** Light deep sea lead (30 to 50 pounds), used for sounding in water 20 to 60 Fathoms.
- COASTING TRADE** Carrying goods from one Port to another, generally in same country.
- COAST IS CLEAR, THE** Vessel that has safely cleared the coast. No coast guards in sight and it was safe to sail in certain waters with probable or possible reference to smuggling.
- COASTLINE** Configuration made by meeting of land and sea.
- COAST PILOTS** Reference books, issued by the U.S. National Ocean Service, listing navigation aids and other information useful in Coastal Piloting, with emphasis on useful material that can not fit onto a Chart, including sailing directions, recommended courses, distances between ports, Channels, Harbors and Anchorages. See United State Coast Pilot.
- COAST REFRACTION** See Coastal Refraction.
- COAST STATION** Station on land that engages in the maritime mobile service.
- COASTWISE** 1) Descriptive of a voyage when a Vessel proceeds from a port or place in the U.S. or her possessions to another port or place in the U.S. and passes outside the line dividing inland waters from the high seas. 2) Route that is not more than 20 nautical miles offshore. 3) By way of Coast; moving along Coast. Coastwise Navigation. Navigation in vicinity of Coast. See Coasting. Opposite of Offshore Navigation.
- COAXIAL CABLE** Transmission cable consisting of two concentric conductors insulated from each other.
- COBBLE** Stone particle between 64 and 256 millimeters (about 2.5 to 10 inches) in diameter. See Stone.
- COBS** Famous Spanish coins.
- COCK** 1) Short form of Cockboat. 2) You know the second definition.
- COCKBILL** 1) Sloping the Yards of a Square Rigger as agesture of mourning or to avoid fouling the spars of another Vessel tied alongside. 2) Hanging the Anchor from the Cathead. See A-Cockbill and Cock Up. 3) Fee for a gigolo.
- COCKBOAT** Small ship's boat or very small rowboat used as ship's tender, often used to row ship's captain to and from ship. From Greek, 'koykn', a type of small boat. See Coxswain.
- COCKED HAT** Error triangle formed by

Lines Of Position which do not cross at common point.

COCKEYED BOB Colloquial term in western Australia for Squall, associated with thunderstorms, on northwest Coast in Southern Hemisphere summer.

COCKPIT 1) Enclosed area in which gamecocks fought. 2) Cramped quarters of junior officers located on lowest Deck. 3) Compartment on warship where wounded and ill were tended. 4) Any small space, opening, working area or well deck for crew to operate or handle Boat. Usually at recessed, lower level than Deck or sunken space in afterdeck which contains or where Tiller or Wheel is located, especially on small craft. It can be located center or Aft and is often watertight or self draining and protected by Weather Boards, Coaming or equivalent.

COCKPIT SOLE Actual floor of a Cockpit.

COCKPIT VESSEL Vessel with exposed recess in weather Deck extending not more than one-half length of Vessel measured over Weather Deck.

COCK UP 1) Untidy custom of leaving Yards on Square Rigger not square and neatly Braced Up but cock-billed or cocked-up at different angles to Masts. Sometimes done so ship could lie close alongside building by pier or as sign of mourning for death of crewmember. AKA Scandalized. 2) When done unintentionally, very unseamanlike practice, something badly done or foul up. 3) There's another definition that we'll not list here.

COCONUT 1) Fruit of life providing food, drink, oil, medicines, fuel and construction materials. From Portuguese 'coco', a grinning face which comes from little indentations at base of nut which looked like eyes. 2) Slang for a head.

COD A fish. From Danish word for 'bag', referring to shape. See Sacred Cod, You Can't Cod Me.

CODE In signaling, any of several systems used to transmit messages visually, by sound or electronically. Alphabet code flags and dot-dash (Morse) systems are most often used.

CODE BEACON Beacon that flashes characteristic signal by which it may be recognized.

CODECLINATION Ninety Degrees minus Declination. When Declination and latitude are same name, it is same as Polar Distance measured from

Elevated Pole.

CODE FLAGS In addition to spelling out words, these are used in combinations to transmit brief phrases or to describe marine situations such as emergency conditions.

COERCIVE FORCE Opposing magnetic intensity that must be applied to magnetic substance to remove residual magnetism.

CODFISH ARISTOCRACY Pretentious, newly rich person. From Boston nouveau riche who made money from codfishing.

CODING DELAY Arbitrary time delay in transmission of pulse signals. In hyperbolic radio-navigation systems of pulse type, it is inserted between transmission of master and secondary signals to prevent zero or small readings, and thus aid in distinguishing between station signals.

CODLING Young codfish. AKA Sprag.

COFFEE GRINDER Large Deck Winch on a modern racing yacht, on which the cranks are on a vertical standard and which resembles an old fashioned coffee mill.

COFFERDAM Empty space or void between two Bulkheads, usually not less than 3 feet apart, that separates two adjacent Compartments. It isolates one compartment from another and prevents liquid from one compartment or tank from entering the other in case either Bulkhead leaks. It also acts as a reservoir for any seepage from the Compartments on either side and may also provide insulation against heat to a flammable or combustible cargo. It permits a visual inspection of both Bulkheads and provides access for making repairs if a leak occurs.

COG 1) 13th-14th century single Masted trading ship, single masted. 2) See Course Over Ground.

COGARD Acronym for U.S. Coast Guard usually used in radio messages.

COHERENCE 1) State of there being correlation between phases to two or more waves, as is necessary in making phase comparisons in radio-navigation. 2) What you hope for after a night on the town.

COIL, COILING 1) Act of winding or arranging Rope/Line in easily manageable loops or to lay it out in a series of rings so it can be stowed. 2) Result of the above. Lay line down by turns of rope circling on top of each other in order to save space and prevent rope from becoming snarled when used. From French, 'coilir', to gather. 3) 113 Fathoms or 678 feet.

COINCIDENCE Condition of occupying same position as regards location, time, etc.

COIN UNDER THE MAST STEP Ancient tradition of placing coin on Keelson under Mast Step to bring good luck.

COIR Cordage made of coconut fiber which floats, is light and has great stretch. From Malya, 'kayen', rope.

COL Neck of relative low pressure between two anticyclones or high pressure areas. 2) Depression in summit line of mountain range. AKA Pass.

COLATITUDE Ninety degrees minus Latidue, angle between polar axis and radius vector locating a point.

COLD AIR MASS Air mass that is colder than surrounding air. Expression implies that air mass is colder than surface over which it is moving.

COLD ENOUGH TO FREEZE THE BALLS OFF A BRASS MONKEY (IT'S) 1) Cannon balls used to be held secure on Ship's Deck and stacked in pyramid or small brackets which were normally iron but were made of brass for ceremonial occasions. Pyramids or brackets were called Monkeys. In very cold weather, different coefficients of metal expansion meant that brass monkey would contract more speedily than iron causing pyramid to collapse and forcing cannon balls to fall off monkey. 2) Extremely cold temperature.

COLD FRONT Term used in Weather reporting / forecasting to describe forward or leading edge, narrow zone or boundary of a mass of relatively cold air mass meeting warmer air. It separates two air masses where cold air is replacing warm air. As the warmer air is forced upward, heavy clouds are formed, often bringing rain and strong winds. Any non-occluded front, or portion thereof, that moves so that colder air replaces warmer are. In the northern hemisphere winds ahead of the front will be southwest and shift into northwest with frontal passage. See Cold Occlusions.

COLD MOLDING Process of bending multiple, thin layers of wood in sequence with glue to achieve a total desired thickness as opposed to forming by steam bending or sawing.

COLD OCCLUSION See Occluded Front.

COLD PIG Wake someone up by throwing cold water on them, a well known and despised practice. AKA cold pie. See Hydrotherapy and To Throw cold Water On (Something).

COLD WATER Water where the monthly mean low water temperature is normally 59° F or less.

COLD WAVE Unseasonably low temperatures extending over period of day or longer, particularly during cold season of year.

COLLADA Strong wind (35 to 50 miles per hour or stronger) blowing from north or northwest in northern part of Gulf of California and from northeast in southern part of Gulf of Californian.

COLLAPSIBLE Now obsolete form of Lfeboat, which had rigid wooden Keel and collapsing or folding canvas sies held up by iron or steel Stays. Made obsolete by invention of inflatable life rafts.

COLLAR 1) Eye of Stay or Shroud that goes over Masthead. 2) Ring on Mast to which stays are secured.

COLLIMATE 1) Render parallel, as rays of light. 2) Adjust line of sight of optical instrument, such as theodolite, in proper relation to other parts of instrument.

COLLIMATION ERROR Angle by which line of sight of optical instrument differs from its collimation axis. AKA Error Of Collimation.

COLLIMATOR Optical device which renders rays of light parallel, often used to determine index error of Bubble Sextant.

COLLISION AT SEA CAN RUIN YOUR ENTIRE DAY Quote from Thucydides, Greek seaman, adventurer and statesman.

COLLISION BEARING Constant bearing maintained while distance between two craft is decreasing. See Constant Bearing Decreasing Range.

PETER'S NAUTICAL TERMS DICTIONARY & GLOSSARY for BLUEWATER SAILING

COLLISION BULKHEAD Bulkhead in the Forward part of the Vessel near the Bow that is designed to prevent flooding as a result of a head on collision.

COLLISION COURSE Course which, if followed, will bring two craft together.

COLLISION MAT Flat sheet or heavy mat used to plug hole damage in the Hull or temporarily stop or reduce the inrush of water through an accidental opening in the Hull below the Waterline.

COLONIAL NAVY American Navy from 1631 to 1776. See Continental Navy and United States Navy.

COLORED LIGHT Aid To Navigation exhibiting light of a color other than white.

COLORFUL ACTIONS Dangerous flight actions by Navy aircraft.

COLOR GRADIENTS See Hypsometric Tinting.

COLORS 1) National ensign or flag. 2) Ceremony or act of hoisting/raising and lowering the Ensign (the flag not the person) and other flags in the morning and evening. From Latin, 'colorem', command.

COLREGS Acronym or U.S. Coast Guard term for International Regulations for Preventing of Collisions at Sea. AKA Navigation Rules of the Road.

COLREGS DEMARCATION LINES Lines delineating waters upon which mariners must comply with International Regulations for Preventing Collisions at Sea 1972 (72 Colregs or 72 IRPCS) (outside lines) and those waters upon which mariners must comply with Navigation Rules for Harbors, Rivers, and Inland Waters (Inland Rules) (inside lines).

COLUBUS' EGG Proverbial tale about Columbus who was asked whether there were other men capable of discovering the Indies. Columbus made no immediate reply but invited others to try and make an egg stand on end. When all failed who attempted the feat, Columbus struck egg upon table so as to break end and left it standing on broken part; illustrating that once he had shown the way, nothing was easier than to follow.

COLUMN Vertical line of anything, such as column of air, column of figures in table, etc.

COLURE Great circle of Celestial Sphere

through Celestial Poles and either equinoxes or Solstices, called respectively, Equinoctial Colure or Solstial Colure.

COMA 1) Foggy envelope surrounding nucleus of comet. 2) What some of your crew may be in after over-indulging the fruit of the vine.

COMBAT CHART Special purpose chart of land / sea area using characteristics of map to represent land area and chart to represent sea area, with special features to make chart useful in naval operations, particularly amphibious operations. AKA Map Chart.

COMBER Deep ater wave whose Crest is pushed forward by strong wind and is much larger than whitecap. Long, spilling breaker. See Roller.

COMBINED SEAS Combination of both wind waves and swell which is generally referred to as Seas.

COME See terms below.

COME ABOUT 1) Tacking to change sailboat's course with Vessel's Bow going through the Eye of Wind and thus changing direction relative to Wind as well shifting wind from one side of Boat to other. AKA Comes Round. 2) A shift of the wind.

COME ALONGSIDE Bring side of Vessel up against side of another Vessel or against Warf or Jetty.

COME DOWN UPON 1) Old Navy term meaning to attack from windward. 2) Censured or lectured by the Boss.

COME HELL OR HIGH WAER No matter what. From 'between hell and high water' which came from Between The Devil and The Deep Blue Sea.

COME HOME Term for Anchor when it drags.

COME OFF WITH FLYING COLORS See Colors.

COME (COMING) UP Turning ship's Bow towards wind. See Bearing Up and Head Up.

COME RIGHT (LEFT) Order given to turn in the direction indicated, often to a specified Bearing.

COMES ROUND See Come About.

- COMES TO** Occurs when Vessel Luffs right into wind.
- COMES UP** Occurs when Vessel overtakes or passes another ship or piece of shoreline.
- COMET** Luminous member of solar system composed of head or coma, at center of which a nucleus of many small solid particles is sometimes situated, and often with spectacular gaseous tail extending great distance from head. Orbits are highly elliptical and present no regularity with their angle to plane of Ecliptic.
- COMMANDER** 1) Officer's rank in the Navy and Coast guard. 2) Title sometimes used in British merchant service for the Captain. 3) Large, heavy mallet used in shipbuilding. See Beetle. From Latin, 'commandare', command or make move.
- COMMERCIAL COMMUNICATIONS**
Communications between Coast Stations and Ship Stations aboard Commercial Transport Vessels (CTVs) or between Ship Stations aboard CTVs which relate directly to the purposes for which the Ship is used including the Piloting or movement of Vessels, obtaining Vessel supplies, and scheduling of repairs.
- COMMERCIAL TRANSPORT VESSEL** Any ship which is used primarily in commerce for transporting persons or goods to or from any harbor(s) or port(s) or between places within a harbor or port area, or in connection with construction, change in construction, servicing, maintenance, repair, loading, unloading, movement, piloting, or salvaging of any other ship or Vessel.
- COMMISSION (ED)** 1) Place a naval Vessel in service or officially placed in operation.. 'In commission' would be a ship in full, active service. Opposite of Decommissioned. 2) Place an Aid to Navigation back in operation after having previously been reported as 'withdrawn', most commonly used to described seasonal aids To Navigation.. 3) Person, car or object is 'out of commission' when not functioning.
- COMMODORE** 1) Special rank in the Navy, senior to Captain. The senior Captain in or controlling a group of ships, regardless or actual rank. 2) Merchant Marine company's senior Captain. 3) The 'president' of a yacht club.
- COMMON ESTABLISHMENT** See Establishment Of The Port.
- COMMON YEAR** Calendar year of 365 days. See Leap Year.
- COMMUNICATION** Transfer of intelligence between points. If by wire, radio, or other electromagnetic means, it may be called telecommunication or if by radio, radiocommunication.
- COMPACTED ICE EDGE** Close, clearcut ice edge compacted by wind or Current, usually on Windward side of area of pack ice.
- COMPACTING** Pieces of sea ice are said to be this when they are subjected to converging motion, which increases ice concentration and/or produces stresses which may result in ice deformations.
- COMPACT PACK ICE** Pack ice in which ice concentration is 100% and no water is visible.
- COMPANIONS** Ladders or stairs.
- COMPANIONWAY** 1) Hatch, entrance or skylight from Deck to Cabin. 2) Covering over Hatch. 3) Stairway, ladderway, Companions or steps leading up or down from Vessel's Deck through hatch to next Deck, cabin or accommodation below or above. From Dutch, 'kamagne, Quarterdeck or Poopdeck and French, 'compagne', pantry and 'compagna', storeroom. 4) A double berth.
- COMPARING WATCH** Watch used for timing observations of Celestial Bodies. Generally its error is determined by comparison with chronometer, hence its name. Comparing watch normally has large sweep second hand to facilitate reading time to nearest second. AKA Hack Watch. See Split Second Timer.
- COMPARISON OF SIMULTANEOUS OBSERVATIONS** Reduction process in which short series of Tide or Tidal Current observations at any place is compared with simultaneous observations at control station where Tidal or Tidal Current constants have previously been determined from long series of observations.
- COMPASS** 1) Navigation instrument for determining and indicating horizontal reference direction relative to earth. It points way magnetically using attached magnetized and graduated Compass Card, needles or bars which Float or pivot in bowl inside in glass dome that directly indicates direction to Magnetic North. Older ones used system of graduated Points while most

modern ones use 0 - 360° Degree system. See Amplitude Compass; Bearing Compass; Compass, Boat; Compass, Deadbeat; Compass, Dry; Compass, Dry; Compass Repeaters, Compass, Radio; Compass, Standard; Compass, Steering; Gyrocompass; and Pelorus. 2) Instruments that electrically points way to True North via Gyroscope. 3) Plotting tool used to draw circles or circular arcs. It usually consists of two legs joined by pivot, one leg carrying pen or pencil and other leg being pointed. See Beam Compass and Dividers. From Latin, 'compassare', circle.

COMPASS ADJUSTMENT Process of neutralizing undesired magnetic effects on Magnetic compass. Permanent magnets and soft iron correctors are arranged about Binnacle so that their effects are about equal and opposite to magnetic material in craft, thus reducing deviations and eliminating sectors of sluggishness and unsteadiness. See Compass Compensation.

COMPASS ADJUSTMENT BUOY See Swinging Buoy.

COMPASS AMPLITUDE Amplitude relative to Compass east or west.

COMPASS AZIMUTH Azimuth relative to Compass North.

COMPASS BEARING Bearing relative to compass north.

COMPASS, BOAT Small compass mounted in box for convenient use in small water craft.

COMPASS BOWL Housing in which compass card is mounted, usually filled with liquid.

COMPASS CARD Part of compass on which direction graduations are placed. It is usually in form of thin disk or annulus graduated indegrees, clockwise from 0° at reference direction to 360° and sometimes also in compass Points. It conforms with magnetic meridian-referenced direction system inscribed with direction which remains constant. V vessel turns, not card. See Pelorus Card.

COMPASS CARD AXIS Line joining 0° and 180° on Compass Card. Extended, this line is sometimes called compass Meridian.

COMPASS COMPENSATION Process of neutralizing effects of degaussing currents on marine

magnetic compass. Process of neutralizing magnetic effects vessel itself exerts on magnetic compass is properly called Compass Adjustment, but expression Compass Compensation is often also used for this process.

COMPASS COURSE 1) Direction as shown by the Compass on your Vessel. 2) Course relative to Compass north.

COMPASS, DEADBEAT Compass which after being deflected, returns by one direct movement to its proper reading, without oscillation. AKA Aperiodic Compass.

COMPASS DEVIATION See Deviation

COMPASS DIRECTION Horizontal direction expressed as angular distance from Compass north.

COMPASS, DRY Magnetic Compass without liquid.

COMPASS ERROR Mathematical sum of Deviation and Variation. It is angle between direction of compass needle or direction and true meridian or angle between axis of compass Card and true meridian. It is expressed in degrees east or west to indicate direction of compass north with respect to true north. See Acceleration Error, Gaussin Error, Gyro Error, Heeling Error, Lubber's Line Error, Quadrantal Error, Retentive Error, and Swing Error.

COMPASS HEADING Heading relative to compass north.

COMPASS, LIQUID Compass having bowl completely filled with liquid. AKA spirit or wet Compass.

COMPASS MERIDIAN Line through north south points of magnetic compass. Compass Card Axis lies in Compass Meridian.

COMPASS NORTH Direction north as indicated by magnetic Compass; reference direction for measurement of Compass directions.

COMPASS POINTS 32 divisions of Compass, at intervals of 11 1/4°. Each division is further divided into quarter points. Starting in order, names of Points (and sometimes half and quarter points) is called Boxing The Compass.

PETER'S NAUTICAL TERMS DICTIONARY & GLOSSARY for BLUEWATER SAILING

COMPASS PRIME VERTICAL Vertical circle through compass east and west points of Horizon.

COMPASS, RADIO Former name of Radio Direction Finder.

COMPASS REPEATER (S) Remote indicating Compass equipped with one or more indicators which repeats at a distance the indications of master Compass. AKA Repeater Compass. See Bearing Repeater and Gyro Repeater.

COMPASS ROSE Circle graduated in Degrees, clockwise from 0° at reference direction to 360° and sometimes also marked in or to show Compass Points. They are printed or placed at convenient locations on Chart or plotting sheet to orient it to north and help or facilitate measurement of direction. See Protractor.

COMPASS, STANDARD Compass designated as standard for vessel.

COMPASS, STEERING Compass by craft is steered.

COMPASS TRANSMITTER Part of remote indicating Compass system which sends direction indications to Repeaters.

COMPASS VARIATION See Variation.

COMPENSATE Counteract an error; to counterbalance.

COMPENSATED LOOP RADIO DIRECTION FINDER Loop Antenna Radio Direction Finder for Bearing determination, which incorporates second Antenna system designed to reduce effect of polarization and radiation error.

COMENSATING COILS Coils placed near magnetic compass to neutralize effect of Vessel's degaussing system on Compass. See Compass Compensation.

COMPENSATING ERROR Error that tends to offset companion error and thus obscure or reduce effect of each.

COMPENSATOR 1) Corrector used in compensation of magnetic Compass. 2) Part of Radio Direction Finder which applies all or part of necessary correction to direction indication.

COMPLEMENT Angle equal to 90° minus given angle. See Explement and Supplement.

COMPLEMENTARY ANGLES Two angles whose sum is 90°.

COMPLEX GALE/STORM Area in which Gale/Storm force winds are forecast or are occurring, but in which more than one center is generating these winds.

COMPONENT 1) See Constituent. 2) Part of Tidal force of Tidal Current velocity which, by resolution into orthogonal vectors., is found to act in specified direction. 3) One of parts into which vector quantity can be divided. For example, earth's magnetic force at any point can be divided into horizontal and vertical Components.

COMPOSITE Composed of two or more separate parts.

COMPOSITE CONSTRUCTION Made with more than one component and of different nature; e.g., plywood and fiberglass.

COMPOSITE GROUP FLASHING Light similar to Group Flashing Light except that successive groups in a Period have different numbers of flashes.

COMPOSITE GROUP OCCULTING Light similar to Group Occulting Light except that successive groups in Period have different numbers of eclipses or occultations.

COMPOSITE SAILING Modification of Great circle sailing used when it is desired to limit highest Latitude. Composite Track consists of Great circle from Point of Departure and Tangent to Limiting Parallel, course line along Parallel, and Great Circle Tangent to limiting Parallel to Destination. It applies only when Vertex lies between Point of Departure and Destination.

COMPOSITE TRACK Modified Great Circle Track consisting of initial Great Circle Track from Point Of Departure with its Vertex on limiting Parallel of Latitude, parallel sailing Track from this vertex along Limiting Parallel to Vertex of final Great Circle Track to Destination.

COMPOUND TIDE Tidal constituent with speed equal to sum or difference of speeds of two or more elementary constituents. They are usually result of shallow water.

COMPRESSED AIR HORN See Diaphragm Horn.

COMPRESSION See Flattening.

COMPULSORY SHIP Any ship which is required to be equipped with radiotelecommunication equipment in order to comply with the radio or radio-navigation provisions of a treaty or statute to which the Vessel is subject.

COMPUTED ALTITUDE 1) Tabulated altitude interpolated for increments of Latitude, Declination or hour angle. If no interpolation is required, Tabulated altitude and Computed altitude are identical. 2) Altitude determined by computation, table, mechanical computer, or graphics, particularly such an Altitude of center of Celestial Body, measured as arc on Vertical Circle of Celestial Sphere from Celestial Horizon. AKA Calculated Altitude. See Altitude, Computed.

COMPUTED AZIMUTH Azimuth determined by computation, table, mechanical device or graphics for given place and time. See Tabulated Azimuth.

COMPUTED AZIMUTH ANGLE Azimuth Angle determined by computation, table, mechanical device or graphics for given place and time. See Tabulated Azimuth Angle.

COMPUTED POINT In the construction of Line Of Position by Marcq St. Hilaire method, the foot of perpendicular from Assumed Position to Line Of Position. AKA Sumner Point.

CON See Conn.

CONCAVE Curving and hollow, such as inside of circle or sphere. Opposite of Convex.

CONCENTRATION Ratio, expressed in tenths, of sea surface actually covered by ice to total area of Sea surface, both ice covered and ice free, at specific location or over defined area.

CONCENTRATION BOUNDARY Transition between two areas of pack ice with distinctly different concentrations.

CONCENTRIC Having same center. Opposite of Eccentric.

CONCRETE BOAT Boat made out of, (you guessed

already), concrete; either to conserve materials or for strength.

CONCURRENT LINE Line on Map or Chart passing through places having same current hour.

CONDEMNATION Confiscation of vessel or her cargo, or both, as decreed by prize court of the belligerent.

CONDENSATION Physical process by which vapor becomes liquid or solid or changing of invisible water vapor gas into visible, liquid water. Opposite of Evaporation.

CONDENSATION NUCLEI Tiny foreign particles in the air which attract water and provide starting points for the growth of water drops.

CONDENSER Large machine that cools steam that has passed through ship's engines and condenses steam back into water so that water can be fed back into boilers again and live steam is not being vented from ship

CONDUCTION Transmission of electricity, heat, or other form of energy from one point to another along conductor or transference of heat from particle to particle through substance such as air without any obvious motion. See Convection and Radiation.

CONDUCTIVITY Ability to transmit electricity, heat, sound, etc. Opposite of Resistivity.

CONDUCTOR Substance which transmits electricity, heat, sound, etc.

CONE 1) Solid having plane base bounded by closed curve and surface formed by lines from every point on circumference of base to common point or Apex. 2) Surface generated by straight line of indefinite length, one point of which is fixed and another point of which follows fixed curve. AKA Conical Surface.

CONFORMAL Having correct angular representation.

CONFORMAL CHART Chart using conformal projection. with correct angular relationship. AKA Orthomorphic Chart.

CONFORMAL MAP PROJECTION Map projection in which all angles around any point are correctly represented. In such a projection, Scale is same in all

directions about any point. Very small shapes are correctly represented, resulting in orthomorphic projection. Terms Conformal and Orthomorphic are used synonymously since neither characteristic can exist without the other.

CONFUSION REGION 1) Region surrounding radar target within which radar echo from target cannot be distinguished from other echoes. 2) Where you think you might be navigating.

CONIC Pertaining to a Cone.

CONICAL BUOY See Nun Buoy.

CONICAL SURFACE See Cone.

CONIC CHART Chart on a Conic Projection.

CONIC CHART WITH TWO STANDARD PARALLELS Chart on Conic Projection with two standard parallels. AKA Secant Conic Chart. See Lambert Conformal Chart.

CONIC MAP PROJECTION Map projection in which surface of sphere or spheroid such as earth is conceived as projected onto tangent or secant Cone which is then developed into plane. In simple conic Map Projection, cone is tangent to sphere or spheroid. See Conic Chart With Two Standard Parallels. In Polyconic Map Projection, series of Cones are tangent to sphere or spheroid. See Lambert Conformal Conic Map Projection, Modified Lambert Conformal Map Projection.

CONIC MAP PROJECTION WITH TWO STANDARD PARALLELS Conic Map Projection in which surface of sphere or spheroid is conceived as developed on cone which intersects sphere or spheroid along two standard parallels, Cone being spread out to form plane. AKA Lambert Conformal Map Projection. Secant Conic Map Projection.

CONJUNCTION Situation of two Celestial Bodies having either same Celestial Longitude or same Sidereal Hour Angle. See Opposition.

CONJUNCTION, INFERIOR Planet is this if it is between sun and earth.

CONJUNCTION, SUPERIOR Planet is this if sun is between it and earth.

CONN (ING) 1) Direct course, speed or movements of Vessel underway, usually by directing helmsman by giving them steering orders to move Helm. An individual or person giving orders to Helmsman (not just relaying orders) is said to be "at the conn", "conning the Ship or to "have the conn". From Latin, 'conducere', to conduct. AKA con and cond. 2) What you will try to avoid when shopping in foreign ports.

CONNING TOWER Navigational bridge on 19th and 20th century Ironclads based on its shape. Term now applied solely to submarines. From 'con', old word for 'to steer'.

CONSIDERATION Economic benefit, inducement, right, or profit including pecuniary or monetary payment accorded to an individual, person, or entity, but not including a pecuniary payment accruing to an individual, person or entity, but not including a voluntary sharing of the actual expenses of the voyage, by monetary contribution or donation of fuel, food, beverage, or other supplies.

CONSOLE 1) Control center on the Bridge where all the devices and instruments are in easy reach. Named after the organ console. 2) Housing of main operating unit of electronic equipment, in which indicators and general controls are located.

CONSOLIDATED PACK ICE Pack ice in which ice concentration is 100% and floes are frozen together.

CONSOLIDATED RIDGE Ridge (line or wall of ice force up by pressure) in which base as frozen together.

CONSORT 1) Any companion vessel sailing with pirate ship or fleet. 2) Your significant other while sailing.

CONSTANT Fixed quantity or one that does not change.

CONSTANT BEARING DECREASING RANGE (CBDR) One potential sign of impending collision with another Vessel, generally considered a 'bad thing'. See Collision Bearing and Steady Bearing.

CONSTANT DEVIATION Deviation which is same on any Heading, such as that which may result from certain arrangements of asymmetrical horizontal soft iron.

CONSTANT ERROR Systematic error of unchanging magnitude and sign throughout given series of observations. AKA Bias Error.

CONSTANT ABERRATION Measure of maximum angle between true direction and apparent direction of Celestial Body as observed from earth due to aberration. It has value of 20.496 seconds of arc. Aberration angle depends upon ratio of velocity of earth in orbit and velocity of light in addition to angle between direction of light and direction of motion of observing telescope. AKA Aberration Constant.

CONSTANT FO THE CONE Chart convergence factor for Conic Projection. See Convergence Factor.

CONSTANT PRESSURE CHART Synoptic Chart for any constant pressure surface, usually containing plotted data and analyses of distribution of height of surface, wind, temperature, and humidity. They are most commonly known by their pressure value; for example 1,000 millibar chart. AKA Isobaric Chart.

CONSTANT PRESSURE SURFACE In meteorology, an imaginary surface along which atmospheric pressure is everywhere equal at given instant. AKA Isobaric Surface.

CONSTELLATION Group of stars which appear close together, regardless of actual distances, particularly if group forms striking configuration. Ancient Greeks recognized 48 covering only certain groups of stars. Modern astronomers recognize 88 which now consider regions of sky having precise boundaries so arranged that all of sky is covered, without overlap.

CONSTITUENT 1) One of harmonic elements in mathematical expression for Tide producing force and in corresponding formulas for Tide or Tidal Current. Each constituent represents periodic change or variation in relative positions of earth, moon and sun. AKA Harmonic constituent, Tidal Constituent, Component. 2) One twenty-fourth part of Constituent Day. AKA Constituent Hour.

CONSTITUENT DAY Duration of one rotation of earth on its axis, with respect to an 'astre fictif' or fictitious star representing one of periodic elements in Tidal forces. It approximates length of lunar or solar day.

CONTACT Any echo detected on radarscope and not evaluated as clutter or as false echo.

See Target.

CONTERMINOUS U.S. forty eight states (excluding Alaska and Hawaii) and District of Columbia.

CONTIGUOUS ZONE Band of water outside or beyond territorial Sea in which coastal nation may exercise customs control and enforce public health and other regulations.

CONTINENT Expanse of continuous land constituting one of major divisions of land surface of earth.

CONTINENTAL BORDERLAND Region adjacent to continent, normally occupied by or bordering shelf, that is highly irregular with depths well in excess of those typical of shelf. See Insular Borderland.

CONTINENTAL CLIMATE Type of climate characteristic of interior of large land mass. Distinctive features are large annual and daily temperature range and dry air with few clouds. See Marine Climate.

CONTINENTAL NAVY American Navy from 1776 to 1794. See Colonial Navy and United States Navy.

CONTINENTAL POLAR AIR See Air Mass Classification.

CONTINENTAL RISE Gentle slope rising from oceanic depths toward foot of continental slope.

CONTINENTAL SHELF Zone adjacent to continent that extends from low water line to depth at which there is usually marked increase of slope towards oceanic depths.

CONTINENTAL TROPICAL AIR See Air Mass Classification.

CONTINENTAL UNITED STATES United States territory, including adjacent territorial waters, located within North American Continent between Canada and Mexico. See Conterminous U.S.

CONTINUOUS QUICK LIGHT Quick flashing light (flashing 50-80 times per minute) in which a flash is regularly repeated and which operates continuously with no eclipses.

CONTINUOUS SYSTEM Classification of navigation system with respect to availability. It gives capability to determine position at any time.

CONTINUOUS ULTRA QUICK LIGHT
Ultra quick light (flashing not less than 160 flashes per minute) with no eclipses.

CONTINUOUS VERY QUICK LIGHT Very quick light (flashing 80- 160 times per minute) no eclipses.

CONTINUOUS WAVE 1)
Electromagnetic radiation of constant amplitude and frequency. 2) Radio waves, the successive sinusoidal oscillations of which are identical under steady state conditions. 3) What surfers are looking for.

CONTLINES Spiral grooves between the Strands of laid Cordage. Corruption of the term Cant line, so named because they are at an angle. See Cant.

CONTOUR Imaginary line on ground, all points of which are at same elevation above or below specified Datum.

CONTOUR LINE Line connecting points of equal elevation or equal depth. One connecting points of equal depth is usually called depth contour, but if depth is expressed in Fathoms, it may be called Fathom Curve or Fathom line. See Form Lines.

CONTOUR MAP Topographic Map showing relief by means of contour Lines.

CONTRA GUIDE 1) Type of Rudder. 2) A possible advisor in El Salvador.

CONTRARY NAME Name opposite or contrary to that possessed by something else, such as Declination has name Contrary to that of Latitude if one is north and other is south. If both are north or both are south, they are said to be Same Name.

CONTRASTES Winds a short distance apart blowing from opposite directions or quadrants, frequent in spring and fall in western Mediterranean.

CONTRAST THRESHOLD Minimum contrast at eye of give observer at which object can be detected. It is property of eye of individual observer. See Meteorological Visibility and Visual Range.

CONTROL 1) Coordinated and correlated dimensional data used in geodesy and cartography to determined positions and elevations of points on earth's surface or on cartographic presentation of that surface. 2) Collective term for system of marks or objects on earth or on map or photograph, whose positions and/or elevations have been or will be determined.

CONTROL CURRENT STATION Current station at which continuous velocity observations have been made over minimum of 29 days. It provides data for computing accepted values of harmonic and nonharmonic constants essential to Tidal current predicitions and circulatory studies. See Current Station and Subordinate Current Station.

CONTROL STATION Appropriate term for small craft's version of Bridge.

CONTROLLING DEPTH 1) Least Depth in approach or Channel to area such as Port or Anchorage, governing maximum Draft of Vessels that can enter. 2) Least Depth within limits of Channel. It restricts safe use of Channel to Drafts of less than that Depth. See Centerline Controlling Depth and Mid Channel Controlling Depth. See Federal Project Depth.

CONTROL STATION See Control Current Station, Primary Control Tide Station and Secondary Control Tide Station

CONVECTION Loss or gain of heat resulting from circulation or vertical movement of fluid or air of nonuniform temperature, due to differences in density and action of gravity. See Advection, Conduction and Radiation.

CONVENTION 1) Body of regulations adopted by IMO which regulate one aspect of maritime affairs. See Geographic Sign conventions. 2) Frequent meeting place of sailors.

CONVENTIONAL DIRECTION OF BUOYAGE
1) Direction taken by Mariner or in which a Vessel normally enters a Channel or approaches Harbor, River, Estuary or other waterway from seaward and proceeds toward head of navigation. 2) Direction determined by proper authority. In the absence of clear route, Conventional Direction of Buoyage follows clockwise direction around land masses.

CONVERGE Tend to come together.

- CONVERGED BEAM** See Fan Beam.
- CONVERGENCE** Flowing together of air from more than one direction, so that more air is flowing in than is going out.
- CONVERGENCE CONSTANT** Angle at given Latitude between Meridians 1° apart. AKA Convergency or Convergence Factor.
- CONVERGENCE OF MERIDIANS** Angular drawing together of geographic Meridians in passing from Equator to Poles. At Equator, Meridians are parallel. Passing from Equator, they converge until they meet at Poles, intersecting at angles that are equal to their differences of Longitude. See Convergence Constant.
- CONVERSION** Determination of Rhumb line direction of one point from another when initial Great Circle direction is known, or vice versa. See Conversion Angle.
- CONVERSION ANGLE** Angle or difference between Rhumb Line and Great Circle directions between two points. AKA Arc To Chord Correction. See Half Convergency.
- CONVERSION SCALE** Scale for conversion of units of one measurement to equivalent units of another measurement. See Nomogram.
- CONVERSION TABLE** Table for conversion of units of one measurement to equivalent units of another measurement. See Nomogram.
- CONVEX** Curving away from, such as outside of circle or sphere. Opposite of Concave.
- CONVOY** To accompany or escort or a group of ships steaming together, usually under protection. From French, 'convoyer', to conduct.
- COOKIE** 1) Cook's helper. 2) A treat. (You might even play with the cook's helper as a treat)
- COOLING WATER PICK-UP** Small vent allows water pump to pull water through lower unit of outboard engine and up into cooling passages of powerhead.
- COOPER** Crew member who made and maintained the barrels for ship's stores, Cargo, powder, whale oil, etc. From Latin, 'cuparius, barrel maker.
- COORDINATE** One set of magnitudes defining point in space. One required for a line, two for surface and three for spatial.
- COORDINATE CONVERSION** Process of changing the coordinate values from one system to another. For example, from Loran TDSs to geodetic coordinates (lat/long.)
- COORDINATES, CARTESIAN** Define point relative to two intersecting lines called Axes. If Axes are perpendicular, they are rectangular Coordinates. If not perpendicular, they are oblique.
- COORDINATES, CELESTIAL** Defined point on Celestial Sphere.
- COORDINATE CONVERSION** Changing coordinate values from one system to those of another.
- COORDINATES, GEOGRAPHIC** See Coordinates, Terrestrial.
- COORDINATES, POLAR** Define pint by its distance and direction from fixed point called Pole. Direction given as angle between reference radius vector and radius vector to the point.
- COORDINATES, TERRESTRIAL** Define point on surface of earth.
- COORDINATED UNIVERSAL TIME (UTC)**
Time scale that is available from most broadcast time signals. It differs from International Atomic Time (TAI) by an integral number of seconds. UTC is maintained within one second of UT1 (see Universal Time) by introduction of 1 second steps (Leap Seconds) when necessary, normally at end of December.
- COORDINATE PAPER** Paper ruled with lines to aid in plotting of Coordinates.
- COOT, TO** Nautical term meaning to copulate. From amorous actions of turtles, commonly called cooters (not to be confused with other female appendages).
- COOTIE** Body Lice. Adapted by sailors from Polynesian word 'kutu' meaning a parasitic insect.
- COPENHAGEN** Surprise attack. From 1807 British surprise attack which destroyed Danish fleet.

- COPLANAR** Lying in same plane.
- COPPER BOTTOMED INVESTMENT** 1)
Referring to copper plating, sheathing used to protect underwater part of ship's hull from teredo and other worms. 2) Secure, sound.
- CORAL** Hard calcareous substance secreted by marine polyp or skeleton of certain tiny sea animals or stony, solidified mass of number of such skeletons. It may be dead or alive. From old Greek word.
- CORAL HEAD** Large mushroom or pillar shaped Coral growth.
- CORAL ISLAND** Island principally made of Coral. It may be full Atoll, solid island or simply an accumulation of debris on Coral Reef.
- CORAL REEF** Reef made up of Coral, fragments of Coral and other organisms and limestone resulting from their consolidation. Coral may constitute less than half of Reef material.
- CORANGE LINE** Line passing through places of equal tidal range.
- CORDAGE** General term for all Rope, Line and small stuff whether made of natural or of synthetic fibers. From Greek, 'khorde', cord.
- CORDILLERA** On sea floor, an entire mountain system including all subordinate ranges, interior plateaus and basins.
- CORDONAZO** Local name for southerly hurricane winds along west Coast of Mexico. Associated with tropical cyclones in Southeastern North Pacific Ocean, occurring from May to November. AKA Lash of St. Francis since it ordinarily affects coastal areas most severely near Feast of St. Francis on October 4.
- CORE** Strand round which other small strands are wound. Wire or fiber center Strand or filler of wire rope around which other Strands are Laid. It gives Rope rounded circumference and helps to keep it pliable. You should never be rotten to the Core.
- CORED CONSTRUCTION** Use of a core material sandwiched between an outer layer and inner layer; e.g. Deck made of fiberglass inner and outer layers and balsa Core.
- CORINTHIAN** Amateur sailor.
- CORIOLIS ACCELERATION** Acceleration of body in motion in a relative or moving Coordinate system. See Coriolis Force.
- CORIOLIS CORRECTION** 1) Correction applied to Assumed Position, Celestial line Of Position, Celestial Fix, or to Computed or Observed Altitude to allow for Coriolis Acceleration. 2) In inertial navigation equipment, acceleration correction which must be applied to measurements of acceleration with respect to coordinate system in translation to compensate for effect of any angular motion of coordinate system with respect to inertial space.
- CORIOLIS FORCE** Inertial force acting on body in motion, due to rotation of earth, causing deflection to right in Northern Hemisphere and to left in Southern Hemisphere. It affects air / wind, water / current, etc. and introduces an error in Bubble Sextant observations made from moving craft due to liquid in bubble being deflected, the effect increasing with higher Latitude and greater speed of craft.
- CORNER REFLECTOR** Radar reflector consisting of three mutually perpendicular flat reflecting surfaces designed to return incident electromagnetic radiation toward its source. AKA Trihedral Reflector. See Radar Reflector.
- COROMELL** Night offshore land breeze prevailing from November to May at La Paz, Mexico.
- CORONA** 1) Luminous envelope surrounding sun but visible only during total solar eclipse. 2) Luminous discharge due to ionization of air surrounding electric conductor. 3) Set of one or more rainbow colored rings of small radii surrounding sun, moon or other source of light covered by thin cloud veil. It is caused by diffraction of light by tiny droplets in atmosphere, and hence colors are in reverse order to those of Halo caused by refraction. 4) Circle of light occasionally formed by apparent convergency of beams of Aurora.
- CORONA DISCHARGE** Luminous and often audible discharge of electricity intermediate between spark and point discharge. See St. Elmo's Fire.
- CORONAZO** Strong south winds blowing along west coast of Mexico. Winds are usually eastern peripheries of tropical storms which are located well

offshore to West.

CORPOSANT Ball or streak of light sometimes seen Aloft at sea, caused by static electricity under some atmospheric conditions. From Latin, 'corpo sanctus', holy body. See Corona Discharge and Saint Elmo's Fire.

CORRASION Wearing away of earth's surface by abrasive action of material transported by Glacier, water or air; process of erosion.

CORRECTED COMPASS COURSE Compass course with Deviation applied. AKA Magnetic Course.

CORRECTED COMPASS HEADING Compass Heading with Deviation applied. AKA Magnetic Heading.

CORRECTED CURRENT Relatively short series of Current observations from subordinate station to which factor is applied to adjust Current to more representative value, based on relatively long series from nearby Control Station. See Current and Total Current.

CORRECTED ESTABLISHMENT 1) Mean of all High Water Intervals. It is usually 10 to 15 minutes less than Common Establishment. See Establishment Of The Port. 2) Sailor's bar after a police raid.

CORRECTED SEXTANT ALTITUDE Sextant Altitude corrected for Index Error, Height of eye, parallax, refraction. AKA Observed Altitude or True Altitude.

CORRECTING Process of applying corrections, particularly process for converting compass to Magnetic direction, or compass, Magnetic, or Gyro to true direction. Opposite of Uncorrecting.

CORRECTION 1) RT Proword meaning error. 2) That which is added to or subtracted from reading of an instrument to eliminate effect of an error or to reduce observation to an arbitrary standard.

CORRECTION OF SOUNDINGS Adjustment of Soundings for any departure from true depth because of method of Sounding or any fault in measuring apparatus. See Reduction of Soundings.

CORROSION RESISTANT MATERIAL Materials in a grade suitable for its intended use in a marine environment such as silver, brass, bronze, aluminum alloys with a copper content of no more than 0.4 percent,

plastics, stainless steel, etc.

CORRECTOR Magnet, piece of soft iron or device used in adjustment of magnetic Compass. See Flinders Bar, Heeling Magnet, and Quadrantal Correctors.

CORROSION Wearing or wasting away by chemical action, usually by oxidation. See Corrasion and Erosion.

CORROSIVE Destructive chemical reaction.

CORSAIR 1) An especially independent Privateer. 2) Any pirate from the Barbary Coast. From French, 'corsaire', raid. From 'corsair' Spanish word for someone between Pirate and Privateer See Buccaneer and Freebooter.

CORUS Latin God of the Northwest Wind.

CORVETTE 1) Small Sailing ship 'one decker', smaller and supposedly faster than Frigate. 2) Also cumbersome, ponderous freighters. From Latin 'corbis', basket. 3) Swift patrol and escort ship, usually smaller and more lightly armed than Destroyer or Frigate.

COS See Cosine.

COS⁻¹ 1) ArcCosine = Inverse of Cos. 2) ArcCosine = $1 / \text{Cos}$

COSECANT (CSC) Cosecant = $1 / \text{Sine}$. Ratio of hypotenuse of plane right triangle to the opposite one of acute angles of triangle.

COSINE (COS) Trigonometric function expressing length of adjacent side of an angle divided by length of hypotenuse of a right triangle. $\text{Cos} = X (\text{base}) / Z (\text{hypotenuse}) = \text{Adjacent} / \text{Hypotenuse}$ $\text{Secant} = 1 / \text{Cos}$.

COSPASS / SARSAT Cooperative search and rescue satellite system operated by U.S. and Russia which provides worldwide coverage by sensing signals of Emergency Position Indicating Radiobeacons (EPIRB's).

COTANGENT (COT) $\text{Cot} = 1 / \text{Tan}$. Ratio of shorter side adjacent to an acute angle of plane right triangle to side opposite same angle.

COTIDAL Having Tides occurring at same time. Please note that the 'i' is after the 't', otherwise it means something completely more fun.

COTIDAL CHART Chart showing Cotidal Lines. Not to be confused with a coital chart.

COTIDAL HOUR 1) Average interval between moon's transit over Meridian of Greenwich and time of following high water at any place, expressed in either mean solar or lunar time units. When expressed in solar time, it is same as Greenwich high water interval. When expressed in lunar time, it is equal to Greenwich high water interval multiplied by 0.966. 2) Not to be confused with coital hour which is something entirely different and probably more fun.

COTIDAL LINE Line on major Chart passing through places having same Cotidal Hour. See Amphidromic Point.

COTTER PIN Small pin, wire or fastener used to Secure nuts on bolts, Clevis Pin or keep Turnbuckles from unwinding.

COUNTER Rounded underside surface of an overhanging Stern found on some Vessels Aaft the Rudder, between the sternpost and the Rail. Portion of the Hull, at the Stern, above the Waterline and extending Aft or underside of the after overhang, including the Transom, if any. From French, 'contre arcasse', the curves of the Stern.

COUNTERCLOCKWISE In direction of rotation opposite to that of hands of clock.

COUNTERCURRENT Current usually setting in direction opposite to that of main Current.

COUNTERGLOW See Gegenschein.

COUNTER-MIZZEN Fourth small mast at Stern of a Ship. AKA Bonaventure.

COUNTERTRADES See Antitrades.

COUPLE OF SHAKES Sailor's way of measuring a short period of time. The speed with which a sail would begin to shake when the helmsman's attention wandered and he allowed the ship to head too closely to the wind.

COUPLINGS Standard length cables used to lash barges together.

COURSE (C) 1) Compass direction in which Vessel is Steered or intended to be steered, expressed as angular distance from north, usually from

000° at north, clockwise through 360°. It is often designated as true , magnetic, compass or grid as reference direction. Term applies to direction through water, not direction intended to be made good over ground. See Course Angle, Course of Advance, Course Over Ground, Heading, Track and Track Made Good. From Latin, 'cursus', direction. 2) Lowest and largest, often square, Sails on all Masts of Square Rigger. From French, 'cours', cause to run. 3) Sequence of pre set Buoys, often triangular to be followed and rounded in a race.

COURSE ANGLE Course measured from 00 at reference direction clockwise or Counterclockwise through 90° or 180°. It is labeled with reference direction as prefix and direction of measurement from reference direction as suffix.

COURSE BEACON Directional radiobeacon which gives an "on course" signal in receiver of Vessel which is on, or in close proximity to, prescribed Course Line and "off course" signals in sectors adjacent to this line.

COURSE BOARD Board located on navigation bridge used to display course to steer, Track, drift angle, leeway angle, Compass Error, etc.

COURSE DEVIATION INDICATOR Feature of many GPS and Loran receivers that graphically displays whether or not the Vessel is on its designated track between two waypoints and, if not, the direction necessary to return to that track.

COURSE LINE Graphic representation of ship's course, usually with respect to true north. 2) Line Of Position approximately parallel to course Line, thus providing check as to deviating left or right of Track. See Speed Line.

COURSE MADE GOOD (CMG) Actual course a Vessel travels taking into account all factors including Set, Drift, Leeway, errors, etc. Resultant direction from point of departure to point of arrival at any given time. See Course, Course Over Ground, Track Made Good.

COURSE OF ADVANCE (COA) Expression sometimes used to indicate direction intended to make good over ground. Preferred term is Track. See Course, Course Over Ground.

COURSE OVER GROUND (COG) Direction of path over ground actually followed by Vessel. Preferred term is Track. It is normally somewhat irregular

line. See Course, Course Made Good.

COURSE RECORDER Device which makes automatic graphic record of headings of Vessel vs. Time. See Dead Reckoning Tracer.

COURSE, TRUE (Cn) See True Course.

COURSE UP See Base Course Up.

COVE Small sheltered recess or indentation in Shore or Coast, generally inside larger embayment.

COVERAGE DIAGRAM Chart which depicts area serviced by radionavigation system.

COVERING BOARD Deck plank over the frame heads of any wooden craft, therefore the outermost Deck plank.

COVE STRIPE Painted or gilded ornamental band on the Hull, usually close to the Sheer line, sometimes a groove. Named after the tool, a coving plane, used for cutting a groove.

COWL (S) Bell shaped top of a ship's or boat's ventilator which direct the flow of air and vapors in or out of ducts. From Latin, 'cucillus', hood. AKA Scoops.

COXSWAIN 1) Title of leading seaman or petty officer in charge of smaller of Ship's boats, 'cockboat', 'small cock' or 'skiff' in absence of officer. From English, 'coq', 'cock' or 'cockboat', ship's small boat and 'swain', keeper, attendant, servant or boy servant. See Boatswain. 2) Helmsman or steersman of any boat, racing shell, shore based lifeboat or any boat, regardless of size. AKA cockswain.

CPA See Closest Point Of Approach. There is no other definition accepted in polite, nautical society.

CQD Older distress telegraph call, no longer used. 'CQ' for silence on the frequency or general call alerting other ships that message follows, 'D' for distress or danger. AKA incorrectly come quickly, distress. See S.O.S. and Mayday.

CQR ANCHOR Type of plow Anchor used by yachts and small craft. From 'secure'. AKA Plow Anchor.

CRAB Drift sideways while in forward

motion.

CRABBY Cross, ill tempered person. From German, 'krabbe', because animal is malicious and does not easily let go of what it has.

CRACK LINE Any fracture in ice which has not parted.

CRACK THE SHEETS Ease them.

CRACKING ON Set more sail and attain a better speed. Relates to the loud retorts heard as the straining Sails and Sheets are eased.

CRADLE Structure, frame or framework by which Vessels are supported or held upright and steady when hauled out of water onto shore as in Drydock or "up on the ways". It also supports Hull of ship during launching as she is traveling down slipway. From Anglo Saxon, 'cradl' or 'cradel', meaning basket.

CRANK OR CRANKY 1) Ship with a defective design that she has a tendency to heel even when sufficiently ballasted and not overdriven. A crank Vessel is a mean and hard beast to handle. 2) An unpleasant disposition.

CRANSE IRON 1) Fitting on a sailing Vessel's Bowsprit for the Jibboom. 2) One type of hinge fitting for a Yard on its Mast. From Dutch, 'krans', meaning garland.

CRAFT General word for virtually all ships and boats, both large or small, From English, 'craeft', referring to boats and ships as well as the skills required to build them.

CRAMP ONE'S STYLE An oarsman on a supposedly smart or sharp boat crew missing his stroke and tumble backwards or in rowing terms 'catch a crab', thus ruining their style. AKA 'crab or crimp one's style'.

CRANE Lifting device or apparatus for Cargo and heavy gear, including Anchors.

CRANK Handle used to operate hand Winches on Yachts and large Sailboats. AKA Winch Handle.

CRANKY 1) Description for any Craft of low or poor stability. From English, 'cringan', meaning weak or delicate. Crank sided ship Heels over too easily AKA

Crank. 2) Irritable.

CRASH Collective or plural name for group of Hippopotamus (or is it Hippopotami?)

CRASH STOP (S) Going directly from full ahead to full astern. Reserved for supervised sea trials and genuine emergencies.

CRAZY AS A COOT Crazy. From stupid facial expressions and clownish behavior of coots.

CRAZY AS A LOON Crazy. From crazy laughter of loon water birds. From Dutch 'loen'.

CREEK Stream of less volume than River but larger than Brook. 2) Small Tidal channel through Coastal Marsh. 3) Wide arm of River or Bay.

CREPUSCULAR RAYS Alternating lighter (rays) and darker bands (shadows) which appear to diverge in fan-like array from sun's position at about twilight. Literally 'twilight rays'. AKA Shadow Bands. When they continue across sky to antisolar point, these extensions are called Anticrepuscular Rays.

CRESCENT Bounded by Convex and Concave curve. Originally, term applied only to increasing moon, from which word was derived. By extension, it is now generally applied to moon between last quarter and new as well as between new and first quarter. It is also applied to any other Celestial Body presenting similar appearance or any similarly shaped object. See Phases Of The Moon.

CREST 1) Highest part or top of a wave or swell. 2) On land; hill or ridge.

CREST CLOUD Type of Cloud over mountain ridge, similar to Cap Cloud over isolated peak. Cloud is apparently stationary, but actually is continually being formed to Windward and dissipated to Leeward.

CREVASSE Deep fissure or rift in glacier.

CREW All ship's people who helps sail a boat other than the Captain and officers. From Latin, 'crescere', to increase or grow, signifying that early ships had only skeleton crews as regulars and "filled out" for voyages by various forms of often illegal recruitment. See Shanghai.

CREW ACCOMMODATION SPACE Accommodation space designated for the use of crew

members and that passengers are normally not allowed to occupy.

CREW CUT Crew cut refers to the monthly (at least) haircuts that would be offered.

CREW HEAD Yoke like device on the Rudder head of various types of small craft for steering with handlines. See Yoke. AKA Crosshead.

CRIADOR West wind in Northern Spain which is usually associated with traveling disturbances and which brings rain.

CRIB, CRIBBING Using Dunnage to build up free space so that you can properly Stow and Secure cargo. This structure is usually built to support a heavy weight and consists of blocks and/or skids in alternate tiers crossing each other.

CRINGLE (S) Metal ring, grommet or thimble, rope or reinforced circular eye or loop worked or fitted into Sail, often made on metal or plastic Thimble and used for Fastening on corner of Sail, awning or other Canvas item. See Reef Bands.

CRITICAL TEMPERATURE Temperature above which substance cannot exist in liquid state, regardless of pressure.

CRIVETZ Wind which blows from northeast over lower Danube lands from Russian interior.

CROCODILE TEARS From nautical myth that crocodile moaned and cried to attract sympathetic and helpful sailors, then snatched and ate them while weeping. Crocodiles actually have no tear glands. From Greek 'kroek', gravel and 'drilos' worm since newly hatched animal appears to be oversized worm emerging from gravel on river banks.

CROSS BEARINGS In piloting, taking bearings of two or more objects which cross each other at observer's position. Used as intersecting Lines Of Position for fixing position of craft and to plot Vessel's position on Chart when near a Coast.

CROSS HAIR Hair, thread, or wire constituting part of Reticule.

CROSS JACK YARD See Yard.

CROSSING SITUATION When two Vessels meet,

not Head on or nearly Head on, but with each having the other forward of a direction 22.5 degrees Aft the Beam. Power driven Vessel having the other on its Starboard side is the Give Way Vessel and must keep clear.

CROSSING THE LINE Sailing across International date line or Equator where elaborate initiation ceremony is held for those crossing first time. Bluejackets treasure certificate which testifies that "in Latitude 00-00 and Longitude xx-xx," and usually addressed to all Mermaids, Sea Serpents, Whales, Sharks, Porpoises, Dolphins, Skates, Eels, Suckers, Lobsters, Crabs, Pollywogs and other living things of the sea," (name) has been found worthy to be numbered as one of our trusty Shellback, has been gathered to our fold and duly initiated into the solemn mysteries of the ancient order of the deep." Those who have crossed equator, are called Shellbacks. These Sons of Neptune compose cast for ceremonies. Members of Neptune Rex's party usually include Davy Jones, Neptune's first assistant, Her Highness Amphitrite, Royal Scribe, Royal Doctor, Royal Dentist, Royal Baby, Royal Navigator, Royal Chaplain, Judges, Attorneys, Barbers and other names that suit.. Uninitiated are Pollywogs or worse, landlubbers. These Sons of Neptune compose cast for ceremonies Boisterous ceremonies are ancient and derivation is lost. Vikings were reported to carry out ceremonies on crossing certain parallels to determine who was tough enough to withstand hardships of life upon Sea. Tradition was passed on to Anglo-Saxons, and Normans. Ceremonies of propitiation are carried on to appease Neptune, mythological god of Seas. Ceremonies also took place when ship crossed thirtieth parallel and when going through Straits of Gibraltar. Early ceremonies were rough and to great extent supposed to try crew to determine whether or not novices on their first cruise could endure hardships of life at sea. Custom is primarily crew's party.

CROSS HIS BOWS Traditionally no junior captain should do this to Admiral, i.e. place his ship to Windward where it would blanket wind to senior Vessel. Junior ship must still request permission to cross bows of senior ship.

CROSS JACK Relatively small Course Sail on the Aftermost Mast of a Square Rigged Ship. AKA crojick or Cross Sail.

CROSS SEA Series of Waves imposed across prevailing Waves. It is called Cross Swell when imposed waves are the longer swell Waves.

CROSS SECTION PAPER Paper ruled with tow sets of parallel lines, useful as aid in plotting Cartesian

coordinates. Usually, two sets of lines are mutually perpendicular. See Coordinate Paper.

CROSS STAFF Navigational instrument for finding Latitude and forerunner of modern Sextant, It was used for measuring Altitudes of Celestial Bodies, consisting of wooden rod with one or more perpendicular cross pieces free to slide along main rod. AKA Forestaff, Jacob's Staff. Replaced by Backstaff which didn't require looking at sun to use.

CROSS SWELL See Cross Sea.

CROSS TIDE Tidal Current setting in diirection approximately 90° from Course of Vessel. See Beam Tide, Fair Tide, Head Tide.

CROSS TRACK ERROR Feature of many GPS and Loran receivers that displays the distance between the Vessel's actual position and the direct course between two Waypoints.

CROSTREES 'Thwartship timbers over Trestle Trees on Mast of Sailing Ship. Wooden or metal arms extending sideways from Mast. From 'across' and 'tree' a word for many devices made of wood.

CROSS WIND See Beam Wind.

CROW FLIES, AS STRAIGHT AS Coastal vessels customarily carried a cage of crows. Crows detest large expanses of water and head, "as straight as a crow flies", towards the nearest land. If released at sea, it was very useful if you were unsure of nearest land when sailing in foggy waters before days of radar. See Crow's Nest.

CROWFOOT 1) System of Lines, gathered at one end and spread at the other to support a Sail or Yard. 2) A technique for Tabling a Sail to strengthen stress points. See Tabling.

CROWN KNOT Formed on the end of a Line by interweaving the Strands as is done in the beginning of a backsplice where the Strands are tucked back into the rope.

CROW'S FOOT Larger rope terminating in Block, eyelet, Shackle or plate from which radiate number of smaller Ropes to different points. Larger Rope takes total strain imposed upon smaller Ropes. It can be a means of suspension to support awnings, ship's boats, etc.

CROW'S NEST Lookout station or perch at highest practicable point Aloft or high on Mast. From Norse or British vessels which carried land birds, ravens or crows in cages or coops. They were an essential part of Vikings' navigation equipment. Norsemen carried birds in cage secured to top of Mast. These land-lubbing birds were carried on aboard to help Ship's navigator determine where closest land lay when weather prevented sighting Shore. When out of sight of land, in cases of poor visibility or in doubt as to whereabouts of land, Skipper ordered cages Hoisted Aloft, birds or crows were released, Navigator plotted course corresponding to bird's flight path because crow invariably headed towards land, then followed their directions inland to shore. Later on, as ships grew and lookout stood watch in tub located high on main Mast, this name was given to tub. See Crow Flies.

CRUCIFORM BITTS Short post of wood or steel (see Bitt) used to Secure a Line that has a single pin or pipe passing through it and takes the general shape of a cross.

CRUISE 1) To wander, whatever reason
2) Going to sea for warlike purposes. 3) Two or more days spent continuously on a boat that is underway, with stops for the night.

CRUISER Warship, larger than a Destroyer but smaller than a Battleship. From Dutch, 'kruizer', to cross.

CRUISER RACER See Racer Cruiser.

CRUISING BOAT Boat used only for cruising.

CRUISING RADIUS Distance craft can travel at Cruising speed without refueling. AKA Cruising Range.

CRUTCH Support or trestle for Spar, especially support for Boom when Sails are Furled, sometimes adjustalbe. From Norse, 'krykkia', for a forked or crooked timber.

CRYSTAL Crystalline substance which allows electric current to pass in only one direction.

CRYSTAL CLOCK See Quartz Crystal Clock.

CUB Young shark.

CUBBRIDGE Partition or Bulkhead across half-deck of Ship.

CUBE 1) Solid bounded by six equal

square sides. 2) Third power of a quantity.

CUBIC FOOT Is a cube one (1) foot on each side. One cubic foot equals 7.48 gallons of water.

CUBIT Length derived from the distance between the elbow and the tip of middle finger, 18 inches. From Latin, 'cubitum', for elbow.

CUDDY Small compartment, shelter or cabin in a boat. From Dutch, 'kahute', small cabin.

CUL-DE-SAC Inlet with single small opening.

CULMINATION See Meridian Transit.

CULVERIN Medium-sized cannon, about 16 pounds.

CUMSHAW 1) Obtain through horse trading or possibly through slightly less than legal means when impeded by the paperwork bureaucracy. 2) Grateful thanks. Tip or gratuity.

CUMULIFORM Like Cumulus; generally descriptive of all Clouds, principal characteristic of which is vertical development in form of rising mounds, domes or towers. See Cirriform and Stratiform.

CUMULONIMBUS Exceptionally dense Cloud of great vertical development, occurring either as isolated cloud or one of line or wall of Clouds with separated upper portions. They appear as mountains or huge togers, at least part of upper portions of which are usually smooth, fibrous, striated and almost flattened. The latter part often spreads out in form of anvil or plume. See Cloud Classification Thundercloud, Thunderhead, Thunderstorm.

CUMULUS (CLOUDS) Thick cauliflower-like clouds of definite form and with vertical development. Cloud form of individual, detached elements which are generally dense and possess sharp non-fibrous outlines. These elements develop vertically, appearing as rising mounds, domes, or towers. Sunlit parts are mostly brilliant white; bases are relatively dark and nearly horizontal. Near horizon, vertical development often causes individual clouds to appear merged. If precipitation occurs, it is usually showery nature. See Cloud Classification.

CUNNINGHAM 1) Adjustment device, Line, cringle and lace Line, or a Block and Tackle system

above Tack of Fore and Aft Sail used to exert, adjust or control tension on Luff of Sail and to fine tune its shape. From Briggs Cunningham, racing Sailor who invented device in 1958 after 5,000 years of sailing. 2) A very sly or clever pig.

CUP OF JOE Josephus Daniels was appointed Secretary of the Navy by President Wilson in 1913. Among his reforms of the Navy were inaugurating practice of making 100 Sailors from Fleet eligible for entrance into Naval Academy, introduction of women into service, and abolishment of officers' wine mess. From that time on, strongest drink aboard Navy ships could only be coffee and over the years, cup of coffee became known as this.

CUPOLA Label on Nautical Chart which indicates small, dome-shaped tower or turret rising from building.

CURRENT 1) Horizontal or lateral movement of water. Classified as Tidal and nontidal. Tidal are caused by gravitational interactions between sun, moon and earth, part of same general movement of sea manifested in vertical rise and fall tidal changes, called Tide. They are periodic with net velocity of zero over Tidal cycle. 2) Nontidal Currents include permanent Currents in general circulatory systems of sea as well as temporary Currents arising from more pronounced meteorological variability such as normal river flow, gravity or wind. See Drift, Set and Tidal Stream.

CURRENT CHART Chart on which current data are graphically depicted. See Tidal Current Charts.

CURRENT CONSTANTS Tidal Current relations that remain practically constant for any particular locality. Classified as harmonic and nonharmonic.

CURRENT CURVE Graphic representation of flow of current.

CURRENT CYCLE Complete set of Tidal Current conditions, such as those occurring during tidal day, lunar month or Metonic cycle.

CURRENT DIAGRAM Graphic table showing speeds of Flood and Ebb Currents and times of Slack and Strength over considerable stretch of Channel of Tidal waterway, times being referred to Tide or Tidal Current phases at some reference station.

CURRENT DIFFERENCE Difference between time of Slack Water or strength of current in any

locality and time of corresponding phase of Tidal Current at reference station for which predictions are given in Tidal Current Tables.

CURRENT DIRECTION Direction toward which Current is flowing, called Set of Current.

CURRENT ELLIPSE Graphic representation of rotary current in which velocity of Current at different hours of tidal cycle is represented by radius vectors and vectorial angles. Line joining extremities of radius vectors will form curve roughly approximating ellipse. Cycle is completed in one half tidal day or in whole tidal day according to whether Tidal Current is of Semi-diurnal or Diurnal type. Current of Mixed type will give curve of two unequal loops each Tidal Day.

CURRENT HOUR Mean interval between transit of moon over Meridian of Greenwich and time of strength of Flood, modified by times of Slack Water and Strength of Ebb.

CURRENT LINE Graduated line attached to Current Pole, used in measuring Velocity of Current. Line is marked so Speed of Current, expressed in Knots and tenths, is indicated directly by length of line carried out by current Pole in specified interval of time. AKA Log Line.

CURRENT METER Instrument for measuring Speed and direction or just Speed of Current.

CURRENT POLE Pole used in observing Velocity of Current. Pole is weighted at one end to float upright and is attached to Current Line but separated from graduated portion by ungraduated section of approximately 100 feet, known as stray line. As it is carried out from observing Vessel by Current, amount of line passing from Vessel during specific time interval indicates Speed of Current. Set is obtained from Bearing from Vessel to Pole.

CURRENT RIPS See Rips.

CURRENT SAILING Process of allowing for Current when predicting Track to be made good or of determining effect of Current on direction of Vessel.

CURRENT STATION 1) Geographic location at which Current observations are conducted. 2) Facilities used to make Current observations. They may include Buoy, ground tackle, Current Meters, recording mechanism and radio transmitter. See Control Current.

CURRENT TABLES See Tidal Current Tables.

CURVE OF CONSTANT BEARING See Curve Of Equal Bearing.

CURVE OF EQUAL BEARING Curve connecting all points at which Great Circle Bearing of given point is same. AKA Curve of Constant Bearing.

CURVILINEAR Consisting of or bounded by curve.

CURVILINEAR TRIANGLE Closed figure having three curves as sides.

CUSP One of horns or pointed ends of crescent moon or other luminary.

CUSTOM BOAT Boat built specifically for one client, as against a stock boat.

CUT 1) Shape or design of a Sail. 2) Notch or depression produced by excavation or erosion. 3) Intersection of Lines Of Position, constituting Fix, with particular reference to angle of intersection.

CUT (TING) A DIDO See Dido, Cutting A.

CUT AND RUN 1) Cut loose the anchor cables and head out (run) to sea if a hasty get-away was necessary. 2) Standard practice amongst Square Rig ships anchored in an open roadstead was to have Sails furled with expendable lashings or gaskets or light ropeyarn. If weather threatened or enemy arrived, Sails could be set quickly by cutting lashings so canvas falls quickly such that ship might make sail, get under way in hurry, then Run off before the wind. 3) Hurridly leave or hasty departure from unpleasant situation.

CUT IN Observe and plot Lines Of Position locating object or craft, particularly by Bearings.

CUTLASS Short sword that was a basic sidearm of the seagoing warrior. From Latin, 'cultellus', short sword.

CUT LOOSE See Cut and Run.

CUT NEITHER NAILS NOR HAIR AT SEA Old superstition that cutting of these items were votive offerings to Persephone, Queen of Hades. Therefore, Neptune would be jealous and show his displeasure by wrecking their ship or drowning sailors believing that his

subjects were making offerings to another god.

CUT OF HIS JIB 1) Experienced sailor could often detect or distinguish character or nationality of a ship by cut and trim of her Jib, headsil or sails (Spain: none or small jib; English: one; French: jibs). 2) Make personal evaluation or judgement of person by their appearance, outward demeanor or actions. First impression or outward impression. 'I'm suspicious of them; I don't like the expression on their face.' From 'jib' meaning 'face' in sailor's slang. 3) Person's nose; like Jib of ship arriving in Harbor, is first part of person to arrive at a designated place.

CUT-OFF 1) New and relatively short Channel formed when Stream cuts through neck of Oxbow or horseshoe bend. 2) Artificial straightening or short cut in Channel.

CUTTER 1) Single Masted sailing Vessel with one only Mast Rigged Fore and Aft, along with two or more headsails or Jibs, usually one Headsail or Jib and a one inner Forestaysail set on an inner Forestay. Main Mast is usually located farther Aft than a Sloop of similar size. 2) Fast, small ocean going Vessel, usually a government type. 3) Ship's pulling obat, of eight oars or more, alos rigged for sail, usually Lug Rigged. From English, 'kittere', a sharp boat.

CUT (TING) THE PAINTER, TO 1) Sever all connection with anything. See Painter. 2) Sneaker or clandestine departure for which boat's Painter is cut so boat can drift silently away. 3) Sever one's lifeline or die.

CUT THE TIES See Cut and Run.

CUTTY SARK 1) Scottish for 'short petticoat'. 2) Famous Clipper Ship.

CUTWATER Portion or part of the Vessel's Stem at the water's edge and just below which cleaves or cuts the water as the Vessel moves.

CYCLE One complete train of events or phenomena that recur sequentially. See Current Cycle, Lunar Cycle, Metonic Cycle, Tidal Cycle.

CYCLIC Of or pertaining to Cycle or Cycles.

CYCLOGENESIS Development or strengthening of cyclonic circulation in atmosphere but not necessarily decrease or deepening in atmospheric

pressure. Opposite of Cyclolysis.

CYCLOLYSIS Weakening of cyclonic circulation in atmosphere but not necessarily an increase or filling of atmospheric pressure. Opposite of Cyclogenesis.

CYCLONE 1) Meteorological phenomena characterized by relatively low atmospheric pressure and winds. In Northern Hemisphere, winds rotate in counter-clockwise direction and inward toward center. Winds blow clockwise around center in Southern Hemisphere. 2) Generic name for Tropical Storm having winds of 34 knots or greater in south Indian Ocean or tropical revolving storm of high intensity and lower atmospheric pressure in Indian Ocean or Inland. 3) Force 12 on Beaufort Scale in Indian Ocean. See Hurricane Tropical Cyclone and Typhoon..

CYCLONIC STORM See Tropical Cyclone.

CYCLONIC WINDS Winds associated with low pressure area and constituting part of Cyclone.

CYGNET Young Swan.

CYLINDER 1) Solid figure having two parallel plane bases bounded by closed congruent curves and surface formed by parallel lines connecting similar points on two curves. 2) Surface formed by straight line moving parallel to itself and constantly intersecting a curve. AKA Cylindrical Surface.

CYLINDRICAL Of or pertaining to a Cylinder.

CYLINDRICAL BUOY See Can Buoy

CYLINDRICAL CHART Chart on a Cylindrical map projection.

CYLINDRICAL MAP PROJECTION Map projection in which surface of sphere or spheroid, such as earth, is conceived as developed on tangent cylinder, which is then spread out to form a plane. See Mercator Map Projection, Rectangular Map Projection, Equatorial Map Projection, Oblique Map Projection, Oblique Mercator Map Projection, Transverse Map Projection.

CYLINDRICAL SURFACE Surface formed by straight line moving parallel to itself and constantly intersecting curve. AKA Cylinder.