

PETER'S NAUTICAL TERMS DICTIONARY & GLOSSARY for BLUEWATER SAILING

D 'Delta' in phonetic alphabet, designated in International code by square flag with broad blue horizontal stripe flanked by narrower yellow stripes. Hoisted in isolation, it means "keep clear of me, I am maneuvering with difficulty".

d Declination, Interpolation Value

D ° Degree angular distance (In Degrees) [1° = 60 nm]

DACRON Synthetic or man-made polyester fiber or fabric used for most modern Sails and for some types of Rope or Cordage.

DAGGERBOARD Centerboard type fin that is raised, retracted or lowered vertically through a slot in the hull rather than hinged.

DALLIA BLACKFISH Tasty fish honoring William Healy Dall, an authority on marine life.

DAILY ABERRATION 1) See Aberration. 2) What you do on your own time is none of my business.

DAILY MEMORANDUM Electronic file of Defense Mapping Agency Hydrographic / Topographic Center's Navigation Information Network (NAVINFONET) containing Hydrolants, Hydropacs and Navarea Warnings.

DAILY RATE See Chronometer Rate, Watch Rate.

DALE Vale or small valley.

DAM Barrier to check or confine anything in motion; particularly bank of earth, masonry, etc, across watercourse to keep back moving water.

DAME PARTINGTON, MRS. PARTINGTON Name for anyone futilely trying to hold back progress or natural forces. From legendary women who had tried to mop up the Atlantic Ocean, which was flooding her cottage.

DAMPED WAVE 1) Wave such that, at every point, amplitude of each sinusoidal component is a decreasing function of time. 2) Wave in which amplitudes of successive peaks or Crests progressively diminish.

DAMPEN Cause to moderate.

DAMP HAZE See Haze.

DAMPING Reduction of energy in mechanical or electrical system by absorption or radiation. 2) Act of reducing amplitude of oscillations of oscillatory system; hindering or preventing oscillation or vibration; diminishing sharpness of resonance of natural frequency of system.

DAMPING ERROR See Ballistic Damping Error.

DAN BUOY Temporary Buoy consisting of ballasted float carrying staff which supports flag or light. Used for any of several purposes, usually associated with fishing, minesweeping or sometimes anchoring. Possibly from biblical Daniel.

DANFORTH Type of stockless Anchor with movable triangular Flukes.

DANGER ANGLE Measured Piloting angle between directions to two points, such as Buoys, landmarks or rocks. Maximum or minimum angle between two points as observed from craft. It indicates to Mariner on both Chart and water, an unsafe limit or limit of safe approach for Vessel to an offlying danger.

DANGER ANGLE, HORIZONTAL Measured between points shown on Chart. See Danger Angle.

DANGER ANGLE, VERTICAL Measured between top and bottom of object of known height. See Danger Angle.

DANGER AREA Specified area above, below or within which there may exist potential danger. See Prohibited Area, Restricted Area.

DANGER BEARING Maximum or minimum Bearing of point for safe passage of off-lying danger. As Vessel proceeds along Coast, bearing of fixed point on Shore, such as Lighthouse, is measured frequently. As long as Bearing does not exceed limit of predetermined Danger Bearing, Vessel is on safe course.

DANGER BUOY Buoy marking isolated danger to navigation, such as rock, Shoal or sunken wreck.

DANGER LINE Line drawn on Chart to indicate limits of safe navigation for vessel of specific Draft. 2) Line of small dots used to draw navigators' attention to danger which would not stand out clearly enough if it were represented on Chart solely by specific

symbols. Line of small dots is also used to delimit areas containing numerous dangers, through which it is unsafe to navigate.

DANGEROUS SEMICIRCLE Half of Cyclonic storm in which rotary and forward motions of storm reinforce each other and winds tend to blow Vessel into Storm Track. In Northern Hemisphere it is to right of storm center when facing direction storm is moving. In Southern Hemisphere, it is to left. Opposite of Less Dangerous or Navigable Semicircle.

DANGER SECTOR Fixed red part of a Lighthouse's light shining over Shoals.

DANGER SOUNDING Minimum Depth or Sounding read on Depth Sounder, Fathometer or hand Lead Line and still remain in safe waters or indicate limit of safe navigation for Vessel of specific Draft.

DARK NILAS 1) Nilas which is under 5 centimeters in thickness and is very dark in color. 2) Chocolate covered vanilla wafers.

DASHER BLOCK 1) Small Block at the aftermost Gaff peak of a sailing vessel, used for the Ensign, also for signal hoists. 2) A Block for a studding Sail Boom Outhaul. AKA jewel Block, possibly because of its small size.

DATE 1) Designated mark or point on time scale. 2) What you might be looking for after many days at sea.

DATE LINE Line coinciding approximately with 80th meridian, at which each calendar day first begins. Boundary between -12 and +12 time zones. Date on each side of line differs by 1 day but time is same in two Time Zones. When crossing line on westerly course, date must be advanced 1 day. When crossing on easterly course, date must be put back 1 day. 'When its Sunday in San Francisco, its Monday in Manilla'. AKA International Date Line.

DATOO Westerly sea breeze which blows over Gibraltar from adjacent waters of Atlantic Ocean

DATUM Any numerical or geometrical quantity or set of quantities which may serve as reference or base for other quantities. In navigation, two types are used: horizontal and vertical. See Chart Sounding Datum, Horizontal Geodetic Datum, Vertical Geodetic Datum, Vertical Datum.

DAVIDSON CURRENT Seasonal North Pacific Ocean countercurrent flowing northwestward along west Coast of North American from 32°N to 48°N. It flows inshore of southeasterly flowing California Current from November to April. AKA Davidson Inshore Current or Winter Coastal Countercurrent.

DAVIT (S) 1) Light crane, pair of cranes, curved lifting arm or swing out device at Stern or side of Vessel used to hoist and lower ship's Boats such as Dinghy, lifeboat, rescue boats, Dinghy, other small boat or heavy / bulky lifesaving equipment. 2) It may also be used for hoisting ladders on ships and a single one at the Bow is often used to handle a heavy Anchor.

DAVY JONES 1) One of King Neptune's royal court which presides when ships cross the equator. 2) An apparition or legendary spirit of the sea much feared by sailors. Davy from 'devil' or 'duppa', 'duppy', or 'duffy', a malevolent West Indian word for devil or Ghost or St. David, patron saint of Wales and Jones from 'Jonah'. Or Davy from St. David, patron saint of Welsh sailors and Jones from a feared pub owner.

DAVY JONES' LOCKER 1) Bottom of the sea and final resting place on the bottom of sea for ships that sink and where everything goes that is lost or thrown overboard, including the bodies of dead sailors. 2) Euphemism for death (especially by drowning), the devil and hell. Locker from an ordinary seaman's chest. See Fiddler's Green. 3) Bottom of the Sea.

DAWN First appearance of light in eastern sky before sunrise. AKA day brake. See Dusk, Twilight.

DAY 1) Duration of one rotation of Celestial Body on its Axis. Measured by successive transits of reference point on Celestial Sphere over meridian and each type takes its name from reference used. See Lunar Day, Sidereal Day, Solar Day. 2) Period of 24 hours beginning at specified such as Civil Day or Astronomical day. 3) Specified time or period, usually of approximately 24 hours duration such as Calendar Day or Tidal Day. 4) Period of daylight as opposed to night.

DAY, APPARENT SOLAR Reference is Apparent Sun.

DAY, ASTRONOMICAL Begins at noon. See Civil Day.

DAY BEACON Unlighted fixed

navigation aid structure or beacon equipped with standard Daymark for daytime identification. Identified by its color as well as color, shape and number of its Daymark. See Dayboard, Daymark.

DAYBOARD Large geometric shape atop a pile to mark one side of Channel or an obstruction such as a submerged Jetty. Combination of the Dayboard and Pile or Dolphin, if unlighted, is a Daybeacon, if lighted it is termed a Light.

DAYBRAK See Dawn.

DAY, CALENDAR Extends from midnight to midnight and is 24 hours unless time change occurs during day.

DAY, CIVIL Begins at midnight. See Astronomical Day.

DAY, JULIAN Begins at Greenwich mean noon and days are consecutively numbered from January 1, 4713 B.C.

DAYLIGHT SAVINGS MERIDIAN Meridian used for reckoning daylight Saving Time. It is generally 15° east of Zone or Standard Meridian.

DAYLIGHT SAVING NOON Twelve o'clock Daylight Saving Time, or instant mean sun is over upper branch of daylight saving meridian. AKA Summer Noon. See Mean Noon.

DAYLIGHT SAVINGS TIME (DST) Variation of standard time on order to make better use of daylight by adjusting hour of daylight to fit work schedules and conserve power. In spring (last Sunday in April), we 'spring' clocks ahead of standard time by one hour. In fall (last Sunday in October), we 'fall back' one hour to standard time. DST = Standard Time + 1 Hour. AKA Summer Time.

DAYLIGHT SIGNAL LIGHT Signal light exhibited by day and also, usually with reduced intensity by night. Reduction of intensity is made in order to avoid galre. Daylight signals may be used to indicated whether or not entrance to lock is free.

DAY, LUNAR 1) Reference for earth rotation is moon. 2) Duration of one rotation of moon with respect to sun.

DAY MARK 1) Daytime identifying

characteristics or identifier of Aid To Navigation.. Signboard attached to Daybeacon to convey navigational information presenting one of several standard identifying characteristics or shapes (square, triangle, rectangle) and colors (red, green, orange, yellow, or black). They usually have reflective material indicating shape, but may also be lighted. Warning markers displayed on poles used in lieu of Buoys, typically in shallower water. See Daybeacon. 2) Unlighted navigation mark. 3) Shaped signals used to identify Vessels engaged in special operations during daytime, more properly known as day shapes.

DAY, MEAN SOLAR Reference is mean sun.

DAY OF INFAMY Pearl Harbor Day or December 7, 1941.

DAYSAILER Boat without Cabin that is used for short sails or racing.

DAYSHAPE Special geometrical marker, such as a black ball, cone or cylinder hung Aloft to indicate a Vessel's type, occupation or state under the Rules of the Road.

DAY, SIDEREAL Reference is Vernal Equinox.

DAY, SOLAR Reference is Sun.

DAY'S RUN Distance traveled by Vessel in 1 day, usually reckoned from noon to noon.

DAY'S WORK Term used to describe the navigator's working day; from noon sights and position to those of the following day.

DAY, TIDAL Is either same as Lunar day on earth or period of daily cycle of tides, differing slightly from Lunar Day because of Priming and Lagging.

DEAD 1) Immobile or inactive. 2) Exactly.

DEAD AHEAD Directions exactly Ahead of Vessel. Bearing 000° Relative. If bearing is approximate, term Ahead should be used. Opposite of Dead Astern.

DEAD AS A DODO, DODO 1) Large, heavy, flightless and (unfortunately for them) delicious bird, Didus Ineptus, from islands of Reunion and Mauritius which became extinct within one century of discovery. 2)

Synonym for stupidity, extinction or hopelessly dumb person.

DEAD ASTERN Direction exactly aft or behind a Vessel. Bearing 180° Relative. AKA Right Astern. If Bearing is approximate, term Astern should be used. Opposite of Dead Ahead.

DEADBEAT 1) Aperiodic or without a period.
2) Someone who hasn't paid their bills.

DEADBEAT COMPASS See Aperiodic Compass.

DEAD COVER See Deadlight.

DEAD END (OF A LINE) 1) Fixed or Secured end of a Fall. 2) Secure an end of a Line to an Object.

DEADEYE (S) Rounded piece of hardwood grooved round edges and pierced with two or three holes in triangular pattern, spliced into lower ends of Shrouds and by which Shrouds were fastened to Chain Plates with Lanyards. Thick, wooden disks through which ropes are passed. By the number of holes in them, they were known as three- or five-eyes. Lanyards passed through holes joining two Deadeyes to form kind of Block to hold Shrouds firm. From similarity to face and that it had no moving parts. AKA Dead Eye and Dead Man's Eye. See Deadlight.

DEADHEAD 1) Block of wood used as Anchor Buoy. 2) Large lumps of concrete, often reinforce with pig iron, cast iron, steel cassions, heavily weighted. They would be sunk and fitted with Chains and sometimes Anchors and indicated by Bouy. They were sunk in Anchorages, Bays or shallows to provide Moorings for Vessels. 3) Bollard, particularly one of wood set in ground.

DEAD HORSE 1) Advance payment of wages. During liberty ashore, many Sailors ran out of money and were carried on credit, then advanced wages to pay off debt before next voyage. Thus Sailor's first month or more at sea was time for which they had already been paid and probably spent the money and when were only working off advanced wages to pay back Ship's Master. With money gone, sailors felt they were working for nothing or nothing but Salt Horse. When debt had been repaid, Salt Horse was said to be dead and it was time for great celebration among crew. Custom was to celebrate by making or constructing effigy of horse from scrap material, hoist it Aloft and Outboard, light or set it afire,

then cut it Adrift and Afloat to cheers and hilarity of ex-debtors. See Bully Beef, Chew The Fat, Flogging A Dead Horse. 2) When Sailor pays off debt to the command such as advance pay, overpayments, etc... they say they've paid off a Dead Horse. See Drawing A Dead Horse.

DEAD LIGHT 1) Fixed piece of glass, or skylight, comparatively small, in door, Deck, Cabin top etc. for admitting added light to space below. Non opening port or Portlight which does not open for ventilation purposes. AKA bullseye. See Airport and Portlight. 2) Heavy metal shutter, shield, Wooden or steel cover that clamps over and covers the inside of an Airport, glass Portlight or Porthole to protect it from storm or battle damage and avoid glass breakage. Used to keep water out in heavy weather and also used to 'darken ship'. AKA Dead Cover, storm port, battleport or porthole cover. See Airport and Portlight. 3) The eyes.

DEADMAN (EN) 1) Sloppy, loose, often frayed, end of a rope or line. 2) An improperly caulked seam. 3) An empty bottle. 4) Timber or other long sturdy object buried in ice or ground to which ship's Mooring lines are attached.

DEAD MARINE (OR SOLDIER) 1) Empty wine or liquor bottle. From statement by King William IV of England, sailor king, who order ship's steward to remove these remarking that, like marines, wine had done its duty nobly and would be ready to do it again. 2) Cynical old salt implied expressing meant that empty bottle was a useless as dead marine, live ones being useless enough.

DEAD RECKONING (DR) 1) Process by which position of ship is found, without any observation of sun or stars. Determining and plotting Vessel's estimated position, courses and speeds by considering Course steered and distance steamed but without considering or taking into account errors caused by Current, Drift, Wind, Leeway or other Factors. Navigational procedure, means or process of navigation to determine or estimate Vessel's position without obtaining Fix. Calculated using Course Steered, Speed and distances made good after departing from known position and sometimes using Drift data or estimates. Usually calculating, then plotting boat's position based on advancing from last known or well determined position using course and distance run or speed and time. Uses ship's course indicated by Compass, distance indicated by log and sometimes taking account drift and leeway. Indicated on a Chart by marking half circle with dot on Track line, with time placed at angle horizontal to Track line. From corruption of Deduced Reckoning. 2) Course leading directly to a Reef.

DEAD RECKONING ALTITUDE AND AZIMUTH TABLE

See H.O. Pub. No. 211.

DEAD RECKONING EQUIPMENT Device that continuously indicates DR position of Vessel. It may also provide, on Dead Reckoning Tracer, graphical record of DR. See Course Recorder.

DEAD RECKONING PLOT Graphic plot of DR, suitably labeled with time, direction and speed. See Navigational Plot.

DEAD RECKONING POSITION Position obtained by adding to last Fix, ship's course and Speed for given time. Comparison of DR position with Fix for same time indicates sum of Currents, winds and other forces acting on Vessel during intervening period.

DEAD RECKONING TRACER (DRT) Device that automatically provides graphic record of DR. It may be part of Dead Reckoning Equipment. See Course Recorder.

DEAD RISE 1) Vertical distance or height from point of intersection of top of Keel or bottom of Vessel to Turn of Bilge, Vessel's widest Beam or to another specified point. 2) Angle between one side of bottom and horizontal, usually measured near transom. 3) Getting up to check the anchor at 0300.

DEAD SEA Salt lake in Palestine which is 51 miles long, 11 miles wide, 1300 feet deep and 26% salt as opposed to 3-4% in oceans. From Roman, 'mare mortum', dead sea because its water supports practically no life.

DEAD WATER Water that closes in Astern of ship as it moves forward. Part of a Vessel's Stern wake directly and immediately Aft of the Vessel; in effect, negative turbulence. Water carried along with Ship as it moves through water. It is maximum at waterline and decreases with depth. I increases in direction towards Stern.

DEADWEIGHT Total weight a Vessel carries when immersed to her authorized loaded draft. This weight includes all cargo, fuel, water, ship's stores, baggage, passengers, crew and personal effects. It does not include weight of the Vessel itself which is called her Light Displacement.

DEADWOOD After part of the Hull underwater

where it is shaped into the Rudder post.

DEATH ROLL Capsize to Windward, generally occurring while sailing downwind. A bad thing.

DEC Declination = Angular Distance North or South of The Celestial Equator.

DECEMBER SOLSTICE Winter solstice in Northern Hemisphere.

DECIBEL Dimensionless unit used for expressing ratio between different powers. It is 10 times logarithm to base 10 of power ratio.

DECK 1) Permanent covering or roof over Compartment, Hull or any part of ship, not modern sense of platform. 2) Top of Hull or floor you walk on or what shelters you aboard Ship. From Dutch, 'dec', meaning roof. See Beam, Carlines. 3) Floor or level on a ship.

DECK BEAM Acts as Beam to support vertical Deck loads, acts a tie to keep the sides of the ship in place and acts as a web to prevent plate wrinkling due to twisting action in the Vessel.

DECK BEAM BRACKET (S) Adds strength of a Deck.

DECK LOG See Log.

DECK, ORLOP Lowest Deck.

DECK PRISM See Deadlight.

DECK'S AWASH 1) Water on Deck. 2) Drunk.

DECK, UPPER Topmost Deck completely planked from Stem to Stern and from one side of Ship to other and exposed in whole or in part to elements. See Bulwark, Gangway, Scupper.

DECLINATION (DEC) 1) Angular distance north or south of the Celestial Equator; arc of hour circle between Celestial Equator and point on Celestial sphere, measured northward or southward from Celestial Equator through 90°, and labeled N or S (+ or -) to indicated direction of measurement. 2) Abbreviation for Magnetic Declination.

DECLINATION DIFFERENCE Difference between two Declinations, particularly

between Declination of Celestial Body and value used as argument for entering table.

DECLINATIONAL INEQUALITY See
Dirunal Inequality.

DECLINATIONAL REDUCTION
Procession of observed high and low waters or Flood and Ebb Tidal currents to obtain quantities depending upon changes in Declination of moon; such as Tropic Ranges or Speeds, height or Speed inequalities, and Tropic intervals.

DECLINOMETER Instrument for measuring magnetic Declination. See Magnetometer.

DECREMENT Decrease in value of variable. 2) Decrease variable in steps. See Increment.

DEDUCED RECKONING AKA Ded Reckoning.
See Dead Reckoning.

DEEP 1) Unmarked Fathom point on Lead Line.
2) Relatively small area of exceptional depth found in depression of ocean floor. Term is generally restricted to depths greater than 3,000 Fathoms. If it is very limited in area, it is referred to as Hole. 3) Relatively deep channel in Strait or Estuary.

DEEPENING Decrease in atmospheric pressure, particularly within low. Increase in pressure is called Filling. See Cyclogenesis.

DEEP SEA LEAD Heavy sounding Lead, usually having line 100 Fathoms or more in length. AKA Dipsey Lead. Light Deep Sea Lead is also called Coasting Lead.

DEEP SIX Throw something overboard, to drown or to kill a person or thing. To get rid of or kill something or send it to Bottom. 'By the deep six' is the leadsman's report of six fathoms depth.

DEEP WATER ROUTE Route for deep Draft Vessels within defined limits which has been accurately surveyed for clearance of sea bottom and submerged obstacles as indicated on chart. See Routing System.

DEFENSE MAPPING AGENCY (DMA) Agency provides accurate hydrographic, navigational, topographic and geodetic data and charts, primarily for foreign waters.

DEFENSE MAPPING AGENCY HYDROGRAPHIC / TOPOGRAPHIC AGENCY (DMAHTC) See

Defense Mapping Agency.

DEFINITION Clarity and fidelity of detail or radar images on radar scope. Combination of good resolution and focus is required for good definition.

DEFLECTOR Instrument for measuring directive force acting on Magnetic Compass. It is used for adjusting Compass when ordinary methods of determining Deviation are not available, and operates on theory that when directive force is same on all cardinal Headings, compass is approximately adjusted.

DEFORMED ICE General term for ice which has been squeezed together and in places forced forwards and downwards. See Hummocked Ice, Rafted Ice, Ridged Ice.

DEGAUSSING Neutralization of strength of Magnetic field of Vessel, using electric coils permanently installed in Vessel. See Deperming.

DEGAUSSING CABLE Cable carrying electric current for Degaussing Vessel.

DEGAUSSING RANGE Area for determining magnetic signatures of ships and other marine craft. Such signatures are used to determine required Degaussing coil current settings and other required corrective actions. Sensing instruments and cables are installed on sea bed in Range and there are cables leading from Range to control position ashore.

DEGREE 1) Angular measurement with 360 of them in circle and 11.25° in Point. 2) Unit of measurement of temperature.

DEGREE OF FREEDOM Number of orthogonal Axes of Gyroscope about which spin Axis is free to rotate, with spin Axis freedom not being counted. This is not universal convention. For example, free Gyro is frequently referred to as three Degree Of Freedom Gyro, spin Axis being counted.

DELIVER A BROADSIDE 1) Simultaneous firing or discharge of every cannon which could be brought to bear on enemy. See Broadside. 2) Crushing remark or verbal assault which ends all further discussion.

DELAT Low alluvial land, deposited in more or less triangular form, as Greek letter 'delta', at mouth of river which is often cut by several distributaries of main stream. 2) change in variable quantity, such as change in value of Declination of Celestial Body.

- DEMAGNETIZE** Remove magnetism.
Opposite of Magnetize.
- DEMI-CANNON** Heaviest cannon Galleon could carry, about 32 pounds.
- DEMI-CULVERIN** Small-sized cannon, about 8 pounds.
- DEMURRAGE** 1) Name given to the delay of a Vessel beyond the agreed terms for delivering cargo for loading or accepting unloaded cargo. 2) Term for the charges assessed. From French, 'demur', delay.
- DENSITY** Weight of material that occupies a given volume. Fresh water has a density of 62.4 pounds per cubic foot. Salt water has a density of 64.0 pounds per cubic foot.
- DEPARTURE (p)** 1) Linear distance in Longitude at any given parallel of Latitude between Longitudinal Meridians, as measured or expressed in linear unites, usually Nautical Miles. It varies with Cosine of Latitude. Distance to east or west made good by craft in proceeding from one point to another. $p = \text{Difference in Longitude (Dlo)} * \text{Cos (Latitude)}$. 2) Point at which reckoning of Voyage begins. It is usually established by Bearings of prominent landmarks as Vessel clears Harbor and proceeds to Sea. When Navigator establishes this point, they are said to take Departure. AKA Point of Departure. 3) Act of departing or leaving. 4) Amount by which value of meteorological element differs from normal value.
- DEPERMING** Process of changing magnetic condition of Vessel by wrapping large conductor around it in vertical plane, athwartships and energizing coil thus formed. If single coil is placed horizontally around Vessel and energized, process is called Flassing, coil remains stationary and Wiping if it is moved up and down. See Degaussing.
- DEPOWER** Lessen Heeling forces by making Sails less full, Easing them or allowing them to Luff.
- DEPRESSED POLE** 1) Celestial Pole below Horizon and of opposite name to current Latitude. Opposite of Elevated Pole. 2) A very unhappy person from Warsaw.
- DEPRESSION** 1) See Negative Altitude. 2) Developing cyclonic area or low pressure area. 3) What you won't have if you go sailing.
- DEPRESSION ANGLE** See Angle Of Depression.
- DEPTH** 1) Amount of water available or vertical distance from surface of water or given water level to Sea Bottom. See Depth, Controlling; Depth, Charted, Chart Sounding Datum and Sounding. 2) Fullness of sail, expressed as percentage of Depth at the sail's deepest point to the length of the Chord
- DEPTH, CHARTED** Vertical distance from Tidal Datum to Bottom.
- DEPTH CONTOUR** Line connecting points of equal depth below Sounding Datum. It may be called Fathom Curve or Fathom Line if Depth is expressed in Fathoms. AKA Depth Curve, Isobath.
- DEPTH, CONTROLLING** Least Depth in approach or Channel to area such as Port or Anchorage, governing maximum Draft of Vessels that can enter.
- DEPTH CURVE** See Depth Contour.
- DEPTH FINDER** See Echo Sounder.
- DEPTH MEASUREMENT** See Marks and Deepes.
- DEPTH SOUNDER** Depth finding or measuring instrument, usually electronic, measuring the time a sound wave takes to go from the Vessel to the bottom and return, then displaying depth of water result in feet, fathoms or meters.
- DERELICT** 1) Ship or any property abandoned or forsaken by her crew on high seas, often large enough to constitute menace to navigation. From Latin, 'derelictus' or 'derelinquer', forsaken. See Jettison, Wreck. 2) Someone who floats on a sea of misery or person who is down on his luck. 3) Something run down and abandoned. Negligent.
- DERRICK** Apparatus or cargo hoisting boom and lever system for handling stores, boats, etc. on ships. It comprises a boom secured at foot of Mast and runs Block and Tackle controlling elevation and traverse of boom. From invention by Mr. Derrick, hangman at England's Tynham prison.
- DESCENDING NODE** Point at which Planet, planetoid, or comet crosses ecliptic from north to south, or satellited crosses plane of Equator of its primary from north to south. AKA Southbound Node. Opposite of Ascending Node.

DESTINATION Port of intended arrival.
AKA Point Of Destination. See Point of Arrival.

DESTROYER Relatively light and always fast combat ship, often the workhorse of navies. Previously known as torpedo boat destroyer.

DETACHABLE LINK Link connecting two Shots of Anchor Chain.

DETRITUS Accumulation of fragments resulting from disintegration of rocks.

DEVELOPABLE Capable of being flattened without distortion. Opposite of Undevelopable.

DEVELOPABLE SURFACE Curved surface that can be spread out in plane without distortion; e.g.; cone and cylinder.

DEVELOPING GALE Refers to an Extratropical Low or area in which Gale force winds of 34 knots (39 mph) to 47 knots (54 mph) are "expected" by a certain time period. On surface analysis charts it indicates Gale force winds within next 36 hours. When term is used on 48 hour surface forecast and 96 hour surface forecast charts, Gale force winds are expected to develop by 72 hours and 120 hours, respectively.

DEVELOPING STORM Refers to an Extratropical Low or area in which Storm force winds of 48 knots (55 mph) or greater are "expected" by a certain time period. On surface analysis charts it indicates Storm force winds forecast within next 36 hours. When term is used on 48 hour surface and 96 hour surface charts, Storm force winds are expected to develop by 72 hours and 120 hours, respectively.

DEVIASCOPE Device for demonstration of various forms of Deviation and compass adjustment, or compass compensation.

DEVIATION 1) Magnetic Compass Error, angle or amount by which ship's magnetic Compass needle points to one side or the other of magnetic North. Angle or Angular difference between Compass Card reading and actual or real magnetic Meridian direction, expressed in degrees east or west to indicate direction in which northern end of Compass Card is offset from magnetic north. It is plus(+) if Compass points east of magnetic north and minus (-) if it points west. Caused by disturbing magnetic influences in vicinity of compass: magnetic objects such as iron, steel, magnets and forces

such as DCI currents in wires on Board (either ship or cargo) in vicinity of the Compass. It causes Compass to vary by different amounts on different Headings or courses. 2) Algebraic difference between single observation and mean or average value of series of observations. See Random Error. 3) any departure from the Captain's orders. 4) What some of your more intriguing guests may be interested in.

DEVIATION TABLE Listing or table of ship's Deviation error of magnetic Compass on various magnetic headings. AKA Magnetic compass Table. See Napier Diagram.

DEVIL 1) Wide seam between two planks in wooden ships hull located next to water. Longest and most difficult seam to Pay (fill with oakum and tar) or juncture where covering board that capped ship's sides met Deck Planking, near Garboard Strake. Seam between Deck Planking and timbers. Seam was particularly difficult to caulk because of its length, because there was so little space in which to perform awkward task, and because there was so little standing room between it and sea. 2) Any Seam below Channels which sometimes had to be caulked or otherwise worked on or Chined while ship was underway. 3) Garboard Seam. 4) Outboard Seam on Deck. 5) Portion of long support Beam for main Deck which extends past Hull, over water. See Between The Devil And The Deep Blue Sea.

DEVIL AND DEEP BLUE SEA See Between The Devil and The Deep Blue Sea.

DEVIL DOGS German nickname for World War I U.S. Marines, 'teufelhunden' because they were such fierce fighters.

DEVIL'S CLAW Two prong hook fitting or chain stopper near Anchor windless that holds and prevents anchor chain from Paying out.

DEVIL (OR HELL) TO PAY, THE 1) Unpleasant task of using of hot pitch or tar to waterproof, caulk, 'Pay' or seal the most difficult seam (see Devil) on a wooden ship with the possibility of running out of hot pitch. 2) Severe punishment, penalty or bawling out. See Between the Devil and the Deep Blue Sea. 'Pay' from Latin 'picare' indicating the process. Originally 'The Devil To Pay and No Hot Pitch' or 'There'll Be the Devil to Pay and only a Half Bucket of Pitch. 3) Unpleasant result from some action that has been taken or done something they shouldn't have. Facing serious

consequences. Trouble. 4) Something hell-fire difficult to be done or must be done and nothing to do it with. 5) Devil confused with Satan and thus corrupted to Hell.

DEW Condensed water vapor that is deposited on cooled surfaces. Dew is not Precipitation.

DEW POINT Temperature to which air must be cooled at constant pressure and constant water vapor content to become saturated or reach saturation with water vapor. Any further cooling usually results in formation of Dew or Frost.

DF Direction Finder or Finding.

DIAGONAL (S) Longitudinal slices through hull set at angle to centerline, used mainly for fairing up lines and supplement buttocks and waterlines.

DIAGONAL BUILD Method of wooden shipbuilding in which Hull Planks are laid diagonally across timbers. Sometimes, for extra strength a second casing is laid in opposite direction.

DIAGRAM ON THE PLANE OF THE CELESTIAL EQUATOR See Time Diagram.

DIAGRAM ON THE PLANE OF THE CELESTIAL MERIDIAN

Theoretical orthographic view of Celestial Sphere from point outside Sphere and over Celestial Equator. Great circle appearing as outer limit is local Celestial Meridian; other Celestial Meridians appear as ellipses. Celestial Equator appears as diameter 90° from Poles. Parallels of Declination appear as straight lines parallel to Equator. Celestial Horizon appears as diameter 90° from Zenith.

DIAGRAM ON THE PLANE OF THE EQUINOCTIAL See Time Diagram.

DIAMETER Any Chord passing through center of figure, such as circle, ellipse, sphere, etc. or the length of such Chord. See Radius.

DIAMETER, FINAL See Final Diameter.

DIAMETER, TACTICAL See Tactical Diameter.

DIAPHONE Sound signal emitter operation on principle of periodic release of compressed air controlled by reciprocating motion of piston operated by compressed air. It usually emits powerful sound of low pitch which often concludes with brief sound of lowered pitch called

Grunt. See Two Tone Diaphone.

DIAPER PLATE Plate, bolted, not riveted or welded, in a place near the Rudder post, for access for inspection and repair.

DIAPHRAGM HORN Soud signal emitter comprising resonant horn excited at its throat by impulsive emissions of compressed air regulated by elastic diaphragm. AKA Compressed Air Horn.

DIATOM (S) Microscopic animal or alga with external skeletons of silica, found in both fresh and salt water. Part of ocean bed is composed of sedimentary Ooze consisting principally of large collections of skeletal remains of Diatoms.

DICHROIC MIRROR Glass surface coated with special metallic film that permits some colors of light to pass through glass while reflecting certain other colors of light. AKA Semireflecting Mirror.

DIDO, CUTTING A 1) Frivolously acting up. From British HMS Dido, fast and nimble ship capable of sailing close to wind. Captain and crew enjoyed showing off prowess by sailing circles or cruising smartly around fleet at close quarters, 'sailing rings around them'. From Dido, Queen of Carthage. Note: there is no 'l' in this term. 2) Dashing.

DIE FOR THE WANT OF LOBSTER SAUCE 1) Chef said to have killed himself because the lobsters or fish he needed for a sauce being prepared for Louis XIV didn't arrive on time. 2) Someone who suffers greatly because of some small disappointment.

DIESEL Engine named after its German inventor.

DIFFERENCE IN LATITUDE (DLat) Shorter arc of any Meridian between parallels of two places, expressed in angular measure.

DIFFERENCE IN LONGITUDE (Dlo) Angular distance (°) between meridians measured in degrees and does not vary with Latitude (Δ Longitude: begin - end). Smaller angle at pole or shorter arc of Parallel between Meridians of two places, expressed in angular measure. See Departure.

DIFFERENCE OF MERIDIONAL PARTS See Meridional Difference.

DIFFERENTIAL Relating to technology of increasing accuracy of an electronic navigation system by monitoring system error from known, fixed location and transmitting corrections to Vessels using System such as Differential GPS.

DIFFRACTION 1) Bending of rays of radiant energy around edges of obstacle or when passing near edges of opening, or through small hole or slit, resulting in formation of spectrum. See Reflection Refraction. 2) Bending of wave as it passes an obstruction.

DIFFUSE ICE EDGE Poorly defined ice edge limiting area of dispersed ice. It is usually on Leeward side of area of Pack Ice.

DIGITAL Referring to use of discreet expressions to represent variables. See Analog.

DIGITAL NAUTICAL CHART (DNC)
Electronic chart data base used in U.S. Navy's NAVSSI.

DIGITAL SELECTIVE CALLING (DSC)
Synchronous system used to establish contact with station or group of stations automatically by means of radio. Communications technique using coded digitized signals which allows transmitters and receivers to manage message traffic, accepting or rejecting messages according to certain variables. See Selective Calling.

DIGITAL TIDE GAGE See Automatic Tide Gage.

DIHEDRAL ANGLE Angle between two intersecting planes.

DIHEDRAL REFLECTOR Radar Reflector consisting of two flat surfaces intersecting mutually at right angles. Incident radar waves entering aperture so formed with direction of incidence perpendicular to edge, are returned parallel to their direction of incidence. AKA Right Angle Reflector.

DIKE Bank of earth or stone used to form barrier, which restrains water outside of an area that is normally flooded. See Levee.

DINGHY 1) Any of several types of small, open, light boats, often small, racing sailboat usually with a centerboard, Daggerboard or leeboard. It can be small rowboat, round bottomed, usually light and nimble and sometimes used as tender or carried by a larger boat. It is

often used to travel back and forth from shore to larger Boat. From Hindi', 'dinh' or 'dengi', a diminutive for the name of a type of Vessel. AKA dink. 2) What you may be after too many days at Sea. 3) Sound of ship's bell.

DIOPTIC LIGHT Beam of light from a Buoy or Lighthouse which is concentrated by prisms or lenses into parallel beam. From Greek, 'dioptrikos', refraction. See Catoptric Light and Fresnel Lens.

DIP 1) Vertical angle, at eye of observer, between horizontal and line of sight to visible Horizon. Altitudes of Celestial Bodies measured from visible sea Horizon as reference are too great by amount of Dip. Since Dip arises from and varies with elevation of observer eye above surface of earth. Correction for Dip is sometimes called Height of Eye Correction. Dip is smaller than Geometrical Dip by amount of terrestrial refraction. AKA Dip Of The Horizon. 2) Angle between horizontal and lines of force of earth's magnetic field at any point. AKA Magnetic Dip, Magnetic Latitude, Magnetic Inclination. 3) First detectable decrease in altitude of Celestial Body after reaching its maximum Altitude on or near Meridian Transit. 4) Great dance move on cruise ship.

DIP CIRCLE Instrument for measuring Magnetic Dip. Consists of Dip Needle or magnetic needle, suspended in such manner as to be free to rotate about horizontal axis.

DIP CORRECTION Correction to Sextant Altitude due to Dip of Horizon. AKA Height of Eye Correction.

DIP NEEDLE Magnetic needle suspended so as to be free to rotate about horizontal Axis. Instrument using such a needle to measure magnetic dip is called Dip Circle. Dip Needle with sliding weight that can be moved along one of its arms to balance the magnetic force is called Heeling Adjuster.

DIP OF THE HORIZON See Dip.

DIP POLE See Magnetic Dip Pole.

DIPPING A LIGHT See Bobbing A Light.

DIPSEY LEAD Heavy deepwater hand lead and its gear, used for Sounding. A corruption of 'deep sea'. AKA Dipsy Lead. See Deep Sea Lead.

DIRECT INDICATING COMPASS Compass

in which dial, scale or index is carried on sensing element.

DIRECTION Position of one point in space relative to another without reference to distance between them. It may be either three dimensional or two dimensional, horizontal being usual plane of latter. It is not an angle but is often indicated in terms of its angular distance from Reference Direction. Horizontal direction may be specified as Compass, magnetic, true, grid or relative. See Current Direction, Swell Direction, Wave Direction, Wind Direction.

DIRECTIONAL ANTENNA Antenna designed so that radiation pattern is largely concentrated in single lobe.

DIRECTIONAL GYRO Gyroscopic device used to indicate selected horizontal direction for limited time.

DIRECTIONAL GYRO MODE Mode of operation of Gyrocompass in which compass operates as free Gyro with sin Axis oriented to grid north.

DIRECTIONAL LIGHT Light that illuminates a sector or narrow angle and is intended to indicate a specific direction to follow.

DIRECTIONAL RADIOBEACON See Course Beacon and Radiobeacon.

DIRECTION FINDER See Radio Direction Finder.

DIRECTION FINDER DEVIATION Angular difference between Bearing observed by Radio Direction Finder and correct Bearing, caused by disturbances due to characteristics of receiving craft or station.

DIRECTION FINDER STATION See Radio Direction Finder Station.

DIRECTION LIGHT Light illuminating sector of very narrow angle and intended to mark Direction to be followed. See Single Station Range Light.

DIRECTION, MERCATOR OR RHUMB Horizontal direction of Rhumb line, expressed as angular distance from reference Direction.

DIRECTION, GREAT CIRCLE Horizontal direction of Great Circle.

DIRECTION OF CURRENT Direction toward

which Current is flowing. AKA Set of Current.

DIRECTION OF FORCE OF GRAVITY Direction indicated by plumb line, perpendicular to surface of geoid. AKA Direction Of Gravity.

DIRECTION OF GRAVITY See Direction Of Force Of Gravity.

DIRECTION OF RELATIVE MOVEMENT Direction of motion relative to reference point, itself usually in motion.

DIRECTION OF WAVES OR SWELL Direction from which waves or swell are moving.

DIRECTION OF WIND Direction from which wind is blowing.

DIRECTIVE FORCE Force tending to cause directive element of compass to line up with reference direction. It is also the value of the force. Of Magnetic Compass, it is intensity of horizontal component of earth's magnetic field.

DIRECT MOTION Apparent motion of planet eastward among stars. The usual motion of planets is Direct. See Retrograde Motion.

DIRT BOATS See Bumboat.

DIRTY DOG Original nautical expression 'a dirty dog and no sailor'. Mean spiritless and utterly useless rascal.

DISCONTINUED Remove previously authorized Aid To Navigational from operation or service on either a temporary or permanent basis.

DISCONTINUITY 1) Zone of atmosphere within which there is comparatively rapid transition of any meteorological element. 2) Breach in sequence continuity of anything.

DISCREPANCY 1) Failure of Aid to Navigation to maintain its position or function exactly as described in the Light List. 2) Difference between two or more observations or measurements of given quantity.

DISCREPANCY BUOY Easily transportable Buoy used to temporarily replace an Aid or Buoy, that is Adrift, temporarily discontinued, off station, missing, damaged, destroyed or one that is not 'watching' or flashing

properly.

DISMAL Swamp bordering on, or near sea. AKA Pocosin.

DISMANTLE Unrig vessel and discharge all stores.

DISMAST Occurs to Vessel when its Mast and Rigging are unexpectedly brought down by stress of weather or any other cause, usually fairly upsetting. See Struck.

DISPERSION Separation of light into its component colors by its passage through diffraction grating or by refraction such as that provided by prism.

DISPLACEMENT 1) Measure of ship's size. Weight or volume of water displaced by Vessel afloat, underwater portion of Hull or floating Hull. Weight of the water is exactly equal to the total weight of Vessel and its cargo. Expressed in metric tons of 1,000 kilograms or English long tons of 2,240 pounds. Volume of water will vary depending on whether it is fresh water or seawater. 2) When you dock your boat and can't find it later.

DISPLACEMENT BOAT Relatively heavy boat that cannot plane.

DISPLACEMENT HULL Boat supported by its own buoyancy while in motion. Type of Hull that plows through water, displacing weight of water equal to its own weight, even when more power is added. It maintains consistent Draft while moving. Speed is limited mostly by length, with longer boats traveling faster. See Planing Hull.

DISPLACEMENT, LIGHT Boat that is relatively light for her length.

DISPLACEMENT TONNAGE Weight of the Vessel, which is the same as the weight of the water displaced. See Displacement, Gross Tonnage and Net Tonnage.

DISPLAY 1) Visual presentation of radar echoes or electronic charts. 2) Equipment for the visual display.

DISPOSAL AREA Area designated by Corps of Engineers for depositing dredged material where existing Depths indicate that intent is not to cause sufficient Shoaling to create danger to surface Navigation.

They are shown on Nautical Charts. See Dumping Ground, Dump Site and Spoil Area.

DISPOSITION OF LIGHTS Arrangement, order, etc., of navigational lights in area.

DISREGARD THIS TRANSMISSION RT Prowords indicating that this transmission is in error - disregard it.

DISTANCE CIRCLES Circles concentric to center of formation of ships, designated by their radii in thousands of yards.

DISTANCE FINDING STATION Attended light station or lightship emitting simultaneous radio and sound signals as means of determining distance from source of sound, by measuring difference in time of reception of signals. Sound may be transmitted through either air or water or both and either from same location as radio signal or location remote from it. Very few remain in use.

DISTANCE OF RELATIVE MOVEMENT Distance traveled relative to reference point, itself usually in motion.

DISTANCE RESOLUTION See Range Resolution.

DISTANCES BETWEEN PORTS Defense Mapping Agency publication which contains worldwide listing of distances between ports and foreign waters. See Pub. 151.

DISTANCES BETWEEN UNITED STATES PORTS Two separate publications produced by the National Ocean Service providing calculated distances in Nautical Miles over water areas between U.S. Ports.

DISTANCE TO GO Feature of many GPS and Loran receivers that displays the distance from the Vessel's present position to the next Waypoint.

DISTRESS See Distress Signal.

DISTRESS SIGNAL (S) Internationally recognized, standardized or improvised signals, which may be visual, audible, radiotelephone transmissions or electronic, that are used On Board a boat to indicate distress, Vessel in grave and imminent danger and seek or request immediate assistance. Specific various signals are listed in the Navigation Rules. See Mayday.

DISTRESS TRAFFIC All messages relative to the immediate assistance required by a ship, aircraft or other vehicle in distress.

DISTRIBUTION PANEL Electrical panel that receives energy from the switchboard and distributes the energy to energy consuming devices or other panels.

DITTY BAG Small bag carried by sailor in which sailor keeps small tools, equipment, also small personal articles such as letters, small souvenirs and sewing supplies. From Hindi, 'dittis', a kind of tobacco or from Anglo Saxon, 'dite', tidy or from 'dittis', Manchester duck or canvas material of which it was made. 2) Utility bag for small tools or personal effects. See Ditty Box.

DITTY BOX Miniature sea chest, a different shape but similar purpose of Ditty Bag.

DIURNAL 1) Having period or cycle of approximately one day. 2) Said of Tide when only one high water and one low water occur during Tidal Day. 3) Sail of Tidal Current when there is single Flood and single Ebb period in Tidal day. 4) Said of Rotary Current if it changes its direction through 360° once each Tidal day. See Stationary Wave Theory, Type Of Tide.

DIURNAL ABERRATION See Aberration.

DIURNAL AGE See Age Of Diurnal Inequality.

DIURNAL CIRCLE Apparent daily path of Celestial body, approximating Parallel Of Declination.

DIURNAL CURRENT Tidal Current in which Tidal Day Current cycle consists of one Flood Current and one Ebb Current, separated by Slack Water; or change in direction of 360° of Rotary Current.

DIURNAL INEQUALITY 1) Difference in heights between two High Tides / High Waters or two Low Tides / Low Waters that occur at same place during a Tidal Day. 2) Difference in velocity or speed between two Flood Tidal Currents or two Ebb Tidal Currents that occur at same place during Tidal Day. Difference changes with Declination of Moon and Sun (to lesser extent) with increased inequality with increasing Declination. AKA Declinational Inequality.

DIURNAL MOTION Apparent daily motion of Celestial Body.

DIURNAL PARALLAX See Geocentric Parallax.

DIURNAL RANGE Difference in height between Mean High Water and Mean Low Water AKA Range. See Great Diurnal Range.

DIURNAL TIDE Tide with one High Water and one Low Water each tidal day. See Type Of Tide; Diurnal.

DIVE Submergence with one end foremost.

DIVERGENCE Outward flow of air in more than one direction so that more air goes out than comes in.

DIVIDERS Adjustable metal tool or instrument with two pointed legs or sharp points joined by pivot, used principally in navigation to measure distance or coordinates on a Chart. See Beam Compass and Compass.

DIVIDERS, PROPORTIONAL Instrument with legs are pointed at both ends and provided with adjustable pivot in middle of legs.

DIVINE SERVICES AT SEA On Sunday mornings, immediately after quarters, should weather permit, all hands are called to muster. Summons is instantly obeyed, by every one proceeding to the quarter-deck (sick alone are exempted) where minister stands in readiness arrayed in his clerical robes, and capstan covered with national flag, to answer purpose of pulpit. Commodore takes his station on weather side of chaplain; lieutenants, and all other commissioned and warrant officers on weather side of Deck; forward officers at five-rail, and petty officers at fore-part of main-mast. Bluejackets take up their position abaft mizzen mast, clad in white frocks with blue collars, white trousers, and straw hats, looking picture of cleanliness; whilst marines are stationed and drawn up in rank, on Lee side of Deck, headed by their commanding officer, all in blue uniform."

Dλ °Degree difference in Longitude measured in degrees and minutes.

Dlat °Degree difference in Latitude measured in degrees and minutes.

D-LAYER Lowest of ionized layers in upper atmosphere, or ionosphere. It is present only during

daylight hours, and its density is proportional to altitude of sun. It is of minor significance except for tendency to absorb energy from radio waves in medium frequency.

Dlo °Degree difference in Longitude (Delta Longitude: begin - end) = Angular Distance Between Meridians (Does Not Vary with Latitude).

Dlov °Degree angular distance in Longitude from Departure to Vertex. AKA Dlov1 and Dv1.

Dlovx °Degree angular difference in Longitude between Vertex and point either side of Vertex on Great Circle.

Dlov1 °Degree angular distance in Longitude From Departure to Vertex. AKA Dlov and Dv1.

Dlo1x °Degree angular distance from Departure to Known Longitude.

Dlo2x °Degree angular distance from Arrival to Known Longitude.

Dlo12 °Degree angular distance from Departure to Arrival.

DOCK 1) Enclosed, protected or nearly enclosed waterspace area, slip or waterway between or next to float or Piers, in which Boat sits while tied up to Float or Pier or cut into land for Berthing of Ships. It is usually an artificial basin. Place where Vessels can make Fast at Pier, Wharf, floating Dock or protected area where Vessels are Moored. From Dutch, 'docke'. AKA Slip. See Jetty, Landing. 2) Basin, enclosure or other device for reception of Vessels or by which Vessel can be taken out of water or provided with means for controlling water level.. 3) Float or Pier itself. Term is often used to denote Pier or Wharf. 4) To bring a boat alongside a Float or Pier or place in Dock.

DOCK COMMITTEE Vagrants, bums, or derelicts, often drunk, who hang around the Dock.

DOCK, DRY Dock providing support for ship and lock gate to shut out sea or means of removing water so that bottom of Ship can be exposed. See Dock, Drydock and Wet Dock.

DOCK, FLOATING Dry Dock consisting of floating structure.

DOCK, GRAVING Dry dock consisting of artificial

Basin.

DOCKING LINE Line Securing a boat to a Float or Pier.

DOCKING SIGNALS See Traffic Control signals.

DOCKS Term used to describe area of Docks, Wharves, Basins, Quays, etc.

DOCK SILL Foundation at bottom of entrance to Dry Dock or Lock against which caisson or gates close. Depth of water controlling use of Dock or Lock is measured from Sill to Surface.

DOCK, WET One in which water can be maintained at various levels by closing gate when water is at desired level. See Dock, Dry Dock.

DOCKYARD British terminology for Shipyard.

DOCTOR 1) Name for cook since cook was usually the doctor. AKA 'croker' since he carried his tools in a 'crocus bag'. When the patients died, they 'croaked'. 2) Cooling sea breeze in tropics. 3) Strong Southeast wind which blows on South African coast. AKA Cape Doctor. See Harmattan. 4) Cooling sea breeze which occurs in tropics.

DOCUMENTATION Special federal license or registration for a Vessel.

DODGER Any of several devices, usually of cloth or canvas, to protect sailor from wind and spray, acting as Weather Boards. It is often a folded up spray shield at the Forward end of Cockpit, Bridge or attached to a railing. From Scottish, 'dodd', dodge. See Weathercloth and Pavisade.

DODO See Dead As A Dodo.

DOG (S) 1) Various, simple mechanical devices or lever used to close, tighten, clamp, grip, hold, screw down or otherwise secure an object such as a Hatch or Door. 2) One or more handles or fittings used to secure a hatch scuttle, or watertight door to its frame to prevent water from entering. 3) Person's best friend. 4) Bad looking date.

DOG AND BITCH THIMBLE Specially shaped Thimble to allow a Block to be brought closer in to a Fitting. Origin uncertain, but implies a close connection (you figure it out)

- DOG DAYS** Period of greatest heat in Summer.
- DOGHOUSE** Low deckhouse or upper portion of the Main Salon above the Main Deck. Originally a temporary, small, low structure to accommodate personnel when a Vessel was overcrowded. AKA Dog House.
- DOG'S BREAKFAST** 1) Complete mess or disorganized. 2) After effects of someone being seasick.
- DOG'S BODY** An unpopular dish aboard ship which consisted of passenger's leftovers mixed with ships biscuits and reheated, often peas boiled in a sack like pudding, sometimes mixed with flour.. AKA Dogsboddy.
- DOG VANE** Weather vane, Telltale, small flag or strip of light canvas which does not fray, mounted in view of Helmsman and officer of watch. It shows direction of Apparent Wind. 'Dog' connection unclear and vane from Anglo Saxon, 'fana', flag.
- DOG WATCH** Four hour 1600-2000 watch was split into two hour watch at sea, either 1600-1800 (First Dogwatch) or 1800-2000 (Second Dogwatch). From traditional practice used to ensure crew aren't always on duty at same time each day or night; i.e., changing times of their turn of duty or watch every day. It permits shift in order of watch every 24 hours to prevent people from always being on duty at same time each day. From 'curtailed watches' (really a cur), thence to 'docked watches' and then to 'dog watch'. Or from sailor ability to dodge same daily routine, hence they are 'dodging watch' or standing 'dodge watch'. In its corrupted form, dodge became dog and procedure is referred as 'dodging the watch' or standing "dog watch." Or from fitful sleep of sailors called dog sleep, because it is a stressful watch.. See Afternoon Watch, Forenoon Watch, Mid Watch, Morning Watch, Night Watch, Watch.
- DOG WATCH, FIRST** Two hour watch at sea, 1600-1800.
- DOG WATCH, SECOND** Two hour watch at sea, 1800-2000.
- DOLDRUMS** 1) Sailor's name for a belt of calm, light and variable winds which lie near equator between trade winds of northern and southern hemispheres. 2) Any area where ship is likely to be becalmed. 3) State of depression, boredom or stagnation. From slang word combining 'dull' or 'dumps' and 'tantrums'. Signified the state of apathy as crews passed through these latitudes with no breeze to fill the sails or cool the living spaces.
- DOLPHIN** 1) One of your playful sea creatures, a mammal often leaping near Bow of Vessel. 2) Pile / post or small group of piles / posts often tied together or bound with wire cables into a single structure, usually made up of several heavy stakes or beams driven into bottom of harbor, generally used for Mooring or Warping Vessel or as Channel marker. It may be in water, on Wharf or on Beach. Originally decorated with pictures of dolphins. See Pile Dolphin.
- DOLPHIN STRIKER** Nickname for Martingale Boom on sailing Vessel. It is small spar rigged beneath and at right angles to Bowsprit. It is used for extra staying of Bowsprit and Jib Booms.
- DOME** Label of Nautical Chart which indicates large, rounded, hemispherical structure rising from building or roof.
- DOME-SHAPED ICEBERG** Solid type of iceberg with large, round, smooth top.
- DONKEY BOILER** Small boilers used for auxiliary steam and for all kinds of heavy hauling, thereby reducing the need for manpower. AKA Donkey Engine.
- DONKEY'S BREAKFAST** Straw mattress.
- DONKEY ENGINE** Small steam auxiliary engine with its own boiler. AKA donkey boiler.
- DONKEY WORK** Heavy lifting work done by the Donkey Engine.
- DON'T GIVE UP THE SHIP** 1) Shouted by mortally wounded Captain Lawrence during 1813 battle of USS Chesapeake against HMS Shannon. 2) Don't lose heart, keep going.
- DON'T LET CAT OUT OF THE BAG** 1) Cat 'o' Nine Tails was normally kept in blood red canvas or cloth bag. Bag was sometimes brandished in front of potential miscreant to warn or was only pulled out immediately prior to Flogging. It was sign of impending punishment of Master-At-Arms taking or letting Cat O Nine Tails out of before seaman was Flogged. 2) Scrubs would sell suckling pig to someone, presenting them with squirming sack, or "poke". Unfortunate buyer would then have bought pig in a poke. When poke was opened, they would find not a nice edible pig, but a cat; thus, letting cat

out of the bag reveals the deception.

DON'T LET THEM GET YOUR TOW LINE

Be careful of parting with your money (aka tow line) or being swindled while ashore.

DOPPLER EFFECT Observed as frequency shift which results from relative motion between transmitter and receiver or reflector of acoustic or electromagnetic energy. AKA Doppler Shift.

DOPPLER NAVIGATION Use of Doppler Effect in Navigation. See Doppler sonar Navigation, Doppler Satellite Navigation

DOPPLER RADAR Any form of Radar which detects radial motion of distant object relative to Radar apparatus by means of change of radio frequency of echo signal due to motion.

DOPPLER SATELLITE NAVIGATION Use of Navigation system which determines positions based on Doppler effect of signals received from artificial satellite.

DOPPLER SHIFT See Doppler Effect.

DOPPLER SONAR NAVIGATION Use of Doppler Effect via ultrasonic energy in Doppler Sonar Speed Logs to measure relative motion between Vessel and reflected sea bottom or suspended particulate matter in seawater itself to determine Vessel's velocity.

DORADE VENT (ILATOR) Type of or designed Deck box ventilator designed to admit air but not water to below Deck areas. Keeps water out with a baffle while letting air in below Decks. Named for famous racing yacht, 'Dorade'.

DORIS Wife of Nereus and who lives with him at bottom of Mediterranean. See Neptune, Nereids, Poseidon, Oceanids, Oceanus and Portunus.

DORY General type of multipurpose pulling and sailing boat. A very seaworthy craft, of simple and sturdy, straight sided construction with much Sheer and raked ends. From French 'oree', or 'd'oree', meaning the edge of a forest or woods as a source of materials and a place to build a boat.

DOUBLE 1) To make a passage around a Point, Cape or Peninsula. 2) Travel around with near reversal of Course. See Round.

DOUBLE ALTITUDES See Equal Altitudes.

DOUBLE BOTTOM Watertight compartment between the Bottom and the Sole or Floor.

DOUBLE BRAID Rope made with a braided core and a braided cover, usually of synthetic fibers.

DOUBLE CARRICK BEND Variation of the Carrick Bend and provides a greater degree of security.

DOUBLE EBB Ebb Tidal Current having two maxima or Speed separated by lesser Ebb Speed.

DOUBLE ENDED BOILER Boiler having fireboxes or furnaces at both ends.

DOUBLE ENDER Design of a boat with a sharp Stern, resembling the Bow in configuration.

DOUBLE FLOOD Flood tidal current having two maxima of speed separated by lesser flood speed.

DOUBLE INTERPOLATION Interpolation when there are two arguments or variables.

DOUBLER PLATING Extra thickness of shell plating on parts of the Hull that adds strength and thickness and protects against corrosion.

DOUBLE SEXTANT Sextant designed to enable observer to simultaneously measure left and right horizontal Sextant angles of Three Point Problem.

DOUBLE SHEET BEND Knot more secure than Sheet Bend.

DOUBLE STABILIZATION See Stabilization of Radarscope Display.

DOUBLE STAR Two appearing close together.

DOUBLE STAR, PHYSICAL Two stars in nearly same line of sight and at approximately same distance from observer. See Binary Star.

DOUBLE STAR, OPTICAL Two stars in nearly same line of sight but differ greatly in distance from observer.

DOUBLE SUMMER TIME See Summer Time.

DOUBLE TIDE High water consisting of two maxima of nearly same height separated by relatively small depression, or Low Water consisting of two minima separated by relatively small elevation. AKA Agger. See Gulder.

DOUBLING Section Aloft, in which a lower and upper Mast overlap.

DOUBLING THE ANGLE ON THE BOW Method of obtaining Running Fix by measuring distance Vessel travels on steady Course while Relative Bearing (right or left) of fixed object doubles. Distance from object at time of second Bearing is equal to run between Bearings, neglecting Drift.

DOUBLOONS Famous Spanish coin.. Also half doubloons, quarter doubloons or pistols, one-eight doubloons.

DOUBTFUL Of questionable accuracy. See Approximate or Second Class.

DOUBTFUL SOUNDING Of uncertain Depth, used principally on Charts to indicate Position where Depth may be less than indicated.

DOUSE 1) Take down, drop or lower quickly, such as a sail. 2) Put out or extinguish, as a lamp, light or fire. From Dutch, 'dossen'. AKA Dowse.

DOWN 1) See Dune. 2) Area of high, treeless ground, usually undulating and covered with grass.

DOWN BY THE HEAD Having greater Draft at Bow than at Stern. Depression of Vessel towards Bows due to various causes such as shifting of Ballast or cargo or she has sprung lead Forward. AKA By The Head. Opposite of Down By The Stern or By The Stern.

DOWN BY THE STERN Having greater Draft at Stern than at Bow. AKA By The Stern. Opposite of Down By The Head or By The Head. See Drag.

DOWNDRAFT Downward flow of air.

DOWN EAST Any large, wooden sailing ship built in Maine. AKA Downeaster.

DOWNHAUL 1) Any Rigging Line that holds or Hauls down an object such as Spar, Boom, Sail or other object on board Ship. 2) Line attached to Tack of Sail, used to Trim Draft Forward.

DOWNSLOPE Downward tilted portion of the earth's surface, such as the downhill side of a mountain.

DOWNSTREAM In direction of flow of Current or Stream. Opposite of Upstream.

DOWN THE HATCH Popular drinking expression or toast after which portion of whiskey is drunk in one gulp. From sea freighters, where cargoes are lowered into hatch or ship's hold.

DOWN TO HER MARKS Ship is in this condition when sufficient cargo is loaded to depress her to one of her Loadlines.

DOWNWIND 1) Away from direction from which wind blows or direction to Leeward, with the Wind. Direction that wind is blowing toward. Term applies particularly to situation of moving in this direction whether desired or not. See Before The Wind and Leeward. Opposite of Upwind. 2) Run, but can mean any point of sail when the wind is Aft of the Beam.

- DR** See Dead Reckoning.
- DRABLER** Second Bonnet on a Sail. From English, 'drabblen', to get wet or splash.
- DRAFT** 1) Depth Vessel sinks into water or submerged as measured from Vessel's waterline to lowest or deepest part of Hull or Keel. Depth of water a boat draws. Depth of Keel or Centerboard in water, or measured underwater vertical dimension of craft as distance between water's surface and lowest part of Keel or Hull or attachments such as propellers and rudders. Vertical distance from molded baseline of Vessel Amidships to Waterline. 2) Minimum depth of water required to float Vessel or in which Vessel will float or depth of water boat Draws. AKA draught. 3) Amount, position, Depth, fullness or curvature built into or of a Sail measured as ratio of Chord Depth to Chord Length. High ratio indicates a full Sail and low ratio, flat Sail. 4) What you might want to avoid for cold viruses or the military.
- DRAFT GAUGE** Method to determine Draft.
- DRAFTING MACHINE** See parallel Motion Protractor.
- DRAFT MARKS** Numbers or numerals (6" high and 6" apart) placed on sides of Vessel at Bow and Stern to indicate Depth to which Vessel is submerged or amount of water a Vessel draws.
- DRAFT POSITION** Position of the Sail's deepest point, expressed as a percentage of the distance the point is back from the luff to the length of the Chord.
- DRAG** 1) Resistance or retardation of Ship, especially when in shallow water. 2) Pull along Bottom such as when Anchor breaks out and skips along Bottom. Anchor ceases to Bite and Comes Home. 3) See Sea Anchor. 4) Short for Wire Drag. 5) Designed difference between Draft forward and Aft when Vessel is down by Stern. See Trim. 6) Short for Atmospheric Drag. 7) Tow line or object below surface, to determine least Depth in area or insure that given area is free from navigational dangers to certain Depth. Refers particularly to location of bostructions or determination that obstructions do not exist. See Sweep. 8) What clothes you might wear to relieve any boredom and stimulate your crew after many days at sea.
- DRAG ANCHOR** See Drag.
- DRAG FOR AN ANCHOR** Search for lost Anchor by sweeping seabed with length of rope or Chain carried between two boats.
- DRAGGING** Process of towing wire or horizontally set bar below surface, to determine least Depth in area or insure that given area is free from navigational dangers to certain Depth. 2) Process of pulling along bottom, as in Dragging Anchor.
- DRAGNET** 1) Used by fishermen for bottom fishing. 2) Police term for a round-up of suspects.
- DRAINAGE** Sinking or downward flow of water or air caused by the action of gravity.
- DRAW** 1) To be immersed to specified Draft. Vessel is said to 'draw' certain amount of water or however many feet of water that are her Draft. 2) Sail that is full and doing its job is said to 'draw'. From Norse, 'dragen', pull. 3) Change Relative Bearing forward or aft, or to Port or Starboard.
- DRAWING A DEAD HORSE** Dead Horse is advance payment of wages. In British Merchant Service, approximately months pay was advanced when sailor shipped. Ceremony was held when crew 'stopped working for nothing', usually after about five weeks at sea. Men made horse out of canvas stuffed with waste material or out of Cask. Permission was requested to light it and hoist it out to end of Boom or Yard. Cheers went up as it marked time crew started to accumulate wages 'on the books.'
- DRAWS AWAY** What Vessel does with another Vessel or from point on Shore when she leaves them behind.
- DREADNOUGHT** Revolutionary, first, modern heavy gun battleship. Built by British in 1906. Name became synonymous with any big ship of comparable size.
- DREDGE** 1) Dig out or deepen Channel. Remove solid matter from bottom of water area. 2) Vessel that does actual work to Dredge an area. 3) Dragging an Anchor on purpose. See Clubbing. From Anglo Saxon, 'frecq', draw or pull.
- DREDGING AREA** Area where Dredging Vessels may be encountered Dredging material for construction. Channels Dredged to provide an adequate depth of water for navigation are not considered Dredging Areas.

DREDGING BUOY Buoy marking limit of area where Dredging is being performed. See Spoil Ground Buoy.

DRESSING DOWN 1) To dress or apply an oil preservative to the rigging. An unpleasant and sometimes dangerous job that might have been given in punishment. 2) A severe scolding or reprimand.

DRESS SHIP, (TO) Decorate Vessel for special celebration. Customarily done by stringing signal flags from Bow, over Mastheads and down to Stern, usually on national holidays. National Ensign is flown from flagstaff and usually from each masthead. Ships not under way are dressed from 0800 to sunset; ships under way do not dress until they come to anchor during that period.

DRIED ICE Sea ice from surface of which meltwater has disappeared after formation of cracks and thaw holes. During period of drying, surface whitens.

DRIFT 1) Lateral distance or movement sideways of Boat or craft due to Current or action of Wind without control. See Leeway. 2) Current's Speed or Velocity expressed in Knots. 3) Downwind or downcurrent motion of airborne or waterborne objects due to wind or Current. 4) Material moved from one place and deposited in another, as sand by river, rocks by glacier, material washed ashore and left stranded, snow or sand piled up by wind. See Erratic. 5) Horizontal component of real precession or apparent precession, or algebraic sum of the two.

DRIFT ANGLE Angle between tangent to Turning Circle and Centerline of Vessel during turn. 2) Angular difference between Vessel's ground track and water track. See Leeway Angle.

DRIFT AXIS On Gyroscope, Axis about which Drift occurs. In directional Gyro with spin Axis mounted horizontally, It is the vertical Axis. See Spin Axis, Topple Axis.

DRIFT BOTTLE Identifiable float allowed to Drift with Ocean currents to determine their Sets and Drifts.

DRIFT CURRENT Wide, slow moving Ocean Current principally caused by prevailing Winds.

DRIFTING In a Calm, to be carried by the Current.

DRIFTING SNOW Snow raised from ground and carried by wind to such height that horizontal visibility is considerably reduced but vertical visibility is not materially diminished. Term used only when horizontal visibility is reduced. See Blowing Snow.

DRIFT LEAD Heavy lead used or placed on Bottom when Vessel is riding at Anchor to heavy sea, wind, or strong Current to indicate movement of Vessel or whether her Anchor is holding or dragging. At Anchor, Lead Line is usually secured to Rail with a little slack. If ship drags Anchor, line tends forward. Also used to indicate when Vessel coming to Anchor is dead in water or when it is moving Astern. It can also be used to indicate Current if Ship is Dead in water.

DRILLING RIG Term used solely to indicate mobile drilling structure. It is not charted except in rare cases where it is converted to permanent production platform.

DRINK LIKE A FISH Common synonym for drinking excessively. From misleading and incorrect appearance of fish continuously drinking while swimming along. AKA drunk as a fish. See Loaded To The Gills.

DRIP PROOF Enclosed equipment so constructed or protected that falling drops of liquid or solid particles striking the enclosure at any angle from 0° to 15° downward from the vertical do not interfere with the operation of the equipment.

DRIVER Sometimes used for the Spanker, sometimes for studdingsail-like addition to Spanker, but in either case, aftermost sail in ship.

DRIZZLE Steady fall of many or numerous very small droplets of water with diameters less than 0.02 inch. They are uniformly dispersed so water drops may appear to float while following air Currents. Unlike fog droplets, it falls to ground. Usually falls from low Stratus clouds and is frequently accompanied by low visibility and Fog. See Mist.

DROGUE 1) Any device streamed or pulled from a Vessel's Bow or Stern to reduce the Vessel's speed or keep its Bow or Stern headed into the waves. Sea Anchor or equivalent open ended cone, usually Canvas, serving to slow a boat in heavy Weather. Word is related to 'drag'. See Sea Anchor. 2) Current measuring assembly consisting of weighted parachute and attached surface Buoy.

DROGUE CHUTE 1) Conical shaped bag designed to slow ship's drift to Leeward and keep her headed into oncoming waves. From German 'dragge', drag anchor or grapnel. 2) General device to slow down a vehicle.

DROP Name for the vertical measure, usually at the center, of a square sail. From English, 'dropian', meaning distance downward.

DROP KEEL See Centerboard. AKA Dropkeel.

DROP STRAKES Strakes which are dropped as they approach the Bow and Stern to reduce amount of plating at the ends. Necessary due to the greater Girth of a ship amidships than at the ends. See Strakes, Stealer Plate and Through Strakes.

DROUGHT Protracted period of dry Weather.

DROXTAL Very small ice particle (about 10 to 20 microns in diameter) formed by direct freezing of supercooled water droplets at temperatures below -30°C. They cause most of the restriction to visibility in Ice Fog.

DRS Sail known as a drifter / reacher / spinnaker.

DRY BULB TEMPERATURE
Temperature of air, as indicated by Dry Bulb Thermometer of psychrometer.

DRY BULB THERMOMETER
Thermometer with uncovered bulb, used with Wet Bulb Thermometer to determine atmosphere Humidity. The two thermometers constitute essential parts of Psychrometer.

DRY COMPASS Compass without liquid filled bowl, particularly magnetic Compass having very light Compass Card. See Liquid Compass.

DRYDOCK 1) Any device or enclosed Dock, providing support for Vessel, from which water can be pumped out such that it takes Ship out of her element, and her bottom can be exposed. Used so a Ship can be repaired or cleaned. AKA Dry Dock. See Camel; Dock; Dock, Dry; Dock, Floating; Dock, Graving; Marine Railway and Wet Dock. 2) To place in a Dry Dock.

DRYDOCK ICEBERG Iceberg eroded in such manner that large U-shaped slot is formed with twin columns. Slot extends into or near waterline.

DRY FOG Fog that does not moisten exposed surfaces.

DRY HARBOR Small Harbor which either dries at Low Water or has insufficient Depths to keep Vessels Afloat during all states of Tide. Vessels using it must be prepared to take the Ground on falling Tide.

DRY HAZZE See Haze.

DRYING HEIGHTS Heights above chart sounding Datum of those features which are periodically covered and exposed by Rise and Fall of Tide.

DRY ROT Decay of wood timbers, as in a boat, actually occurring in moist conditions.

DRYSAIL Drying out the boat after each Sail outing.

DRY SAILING Keeping a boat out of water when not in use.

DRY STORAGE Storing on land, out of the water.

D SAIL Piece of equipment you might consider 'Hoisting' on a Calm Wind day when the Jib, Genoa, Mainsail and Mizzen are providing insufficient power.

DST See Daylight Savings Time.

DUAL PURPOSE AID Aid to Navigation used to mark an important river or Channel and, in addition, is also used to mark some portion of the Intracoastal Waterway.

DUBBING Shaping and smoothing a Vessel's timbers with an adze. From Anglo Saxon, 'dubbon', meaning light stroke.

DUCK 1) High quality, strong cotton, flax or linen smooth-woven fabric or cloth, lighter than canvas, used in heavier grades for sails and lighter grades for sailor's clothing in warm weather. Often incorrectly called Canvas. 2) Something whose noisy quacks keep you up at night until the orange sauce can be found.

DUCT (S) Devices used to channel movement of air for the actual displacement of fumes from the space being ventilated.

DUCT TAPE Universal quick but temporary fixer of everything. Duct it if you can't affect a repair

DUFFLE 1) Sailor's personal effects or referring to his principal clothing. 2) Seabag in which a sailor carried and stowed their personal effects. From Flemish town of Duffel near Antwerp and denotes rough woolen cloth made there. AKA Duffel.

DUMB COMPASS See Pelorus. Never use a Compass which is smarter than you are.

DUMB SHIPS Ships unable to navigate themselves, such as Lightships.

DUMMY RUN Practice runs made with torpedoes fitted with dummy warheads.

DUMPING GROUND Area used for disposal of Dredge Spoil. Shown on Nautical charts but dumping has been discontinued in U.S. Areas will continue to be shown until they are no longer considered to be danger to navigation. See Disposal Area, Dump site, Spoil Area.

DUMP SITE Area shown on Nautical Chart and established by Federal Regulation in which dumping of dredged and fill material and other nonbuoyant objects is allowed with issuance of permit. See Disposal Area, Dumping Ground, Spoil Area.

DUNE Mound ridge or hill of Sand piled up by wind on Shore or in desert. AKA Sand Dune.

DUNGAREES. Coarse kind of fabric worn as Sailor's work clothes and also used for tents and sails. Sailors often made both working clothes and Hammocks out of discarded sail cloth. It wasn't as well woven nor was it dyed blue as today. Dungarees were cut directly from old sails and remained tan in color just as they been when filled with wind. After battles, it was practice in both American and British Navies for Captains to report more sail lost in battle than actually was the case so the crew would have cloth to mend their Hammocks and make new clothes. Since cloth was called dungaree, clothes made from fabric borrowed the name. From Hindi, 'dungri', a type of Indian cotton cloth.

DUNNAGE Pallets, frames or barks of timber on which Cargo rests when it is impractical, for any reason, for Cargo to lie directly on Deck. Wood, usually scrap, timber or other material used to Chock, brace Cargo or Raise cargo and stores in Ship's Hold to keep it dry. Often used when loading Deck Cargo such as pipe to raise

it far enough so it is accessible for rigging slings and to facilitate lashing down. From Dutch, 'dunne', a collection of light material. AKA Dinnage.

DUPLEX Device which permits single antenna system to be used for both transmitting and receiving.

DURALUMIN Industrial light alloy composed of copper, magnesium, silicon and manganese on aluminum base which is used for shipbuilding.

DURATION OF EBB Interval of time in which Tidal Current is Ebbing with intervals being reckoned from middle of intervening Slack Waters or Minimum Currents. See Duration of Rise, Duration of Fall.

DURATION OF EBB, FLOOD Together they cover, on average, Period of 12.42 hours for Semidiurnal Tidal Current (each 6.21 hours) or Period of 24.84 hours for Diurnal Current. See Duration of Rise, Duration of Fall.

DURATION OF FALL Interval from Low Water to High Water.

DURATION OF FALL, RISE Together they cover, on average, Period of 12.42 hours for Semidiurnal Tidal Current (each 6.21 hours) or Period of 24.84 hours for Diurnal Current. See Duration of Ebb, Duration of Flood.

DURATION OF FLOOD Interval of time in which Tidal Current is Flooding with intervals being reckoned from middle of intervening Slack Waters or Minimum Currents. See Duration of Rise, Duration of Fall.

DURATION OF RISE Interval from High Water to Low Water.

DUSK Darker part of Twilight; that part between completed darkness and darker limit of Civil Twilight, both morning and evening.

DUST DEVIL Well developed Dust Whirl, small but vigorous whirlwind, usually of short duration, rendered visible by dust, sand, and debris picked up from ground.

DUST STORM Unusual, frequently severe weather condition characterized by strong winds and dust filled air over extensive area. See Sandstorm.

DUST WHIRL Rapidly rotating column

or air or whirlwind over dry and dusty or dandy area, carrying dust, leaves and other light material picked up from ground. See Dust Devil.

DUTCH COURAGE Lie spread by the English during their war with Dutch stating that Dutch crew were so cowardly that they had to be primed with alcohol or schnapps before they would come out and fight or bravery induced by stiff drink or drink itself.

DUTCHMAN Small patch, usually of wood, to repair damage or replace rotted material.

DUTCHMAN'S BREECHES Small patch of blue in an otherwise cloudy sky. From both sayings "enough (or not enough) blue to patch a Dutchman's breeches".

DUTCHMAN'S LOG Buoyant object or elaborate instrument engraved with pictures and numbers for timing and measuring speed in Knots. It is thrown overboard to determine Speed of Vessel. Time required for known length of Vessel to pass object is measured. See Chip Log, Log Line.

DYE MARKER 1) International orange or other colored dye used as an approved daytime distress signal. 2) Gravestone.

DYNAMICAL MEAN SUN Fictitious sun conceived to move eastward along ecliptic at average rate of apparent sun. It and apparent sun occupy same position when earth is at Perihelion in January. See Mean Sun.
