Australian Government

Defence

AUSTRALIAN NAVAL CLASSIFICATION AUTHORITY MANUAL (VOLUME 2)

DIVISION 1: AUSTRALIAN NAVAL CLASSIFICATION RULES

PART 1: ANC RULES

ANNEX A: DEFINITIONS AND ABBREVIATIONS

This document is issued for use by Defence and Defence Industry personnel and is effective forthwith.

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May 2024 Edition

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ANCA Manual (Volume 2)

Division 1: Australian Naval Classification Rules, Part 1: ANC Rules, Annex A: Definitions and Abbreviations, May 2024 Edition

Developer:

Australian Naval Classification Authority

1 https://www.legislation.gov.au/Series/C1968A00063

2 https://www.legislation.gov.au/Series/C2004A04868

3 https://www.legislation.gov.au/Series/C2004A03712

4 http://drnet/AssociateSecretary/security/policy/Pages/dspf.aspx

AUSTRALIAN NAVAL CLASSIFICATION RULES

First issued	May 2024
Reissue date	N/A
Issued by	CN Dagg, CSC, AS ANCA
Document management	This volume will be reviewed periodically from the date of issue, but sooner if necessitated by business requirements, and to ensure it continues to meet the intent of Defence policy.
Availability	The latest version of this volume is only available from the Defence Australia website. Its currency cannot be guaranteed if sourced from other locations. It is available for public release.
Policy domain	Defence Seaworthiness
Accountable Officer	Australian Naval Classification Authority
Publication Owner	Defence Seaworthiness Authority (DSwA)
Policy contact	anca.communications@defence.gov.au
Structure	see Contents[5]
Cancellation	N/A
Definitions	Definitions that apply to this volume are located in the Division 1, Part 1 Annex A.

[5] https://www.defence.gov.au/business-industry/industry-governance/australian-naval-classification-authority/australian-naval-classification-rules

AMENDMENTS

Proposals for amendments to the ANCA Manual (Volume 2) may be sent to:

Australian Naval Classification Authority
Mail to: anca.correspondence@defence.gov.au

EDITIONS

Edition	Edition	Amendment type	Effective
May 2024	Original issue		May 2024

Division 1: Australian Naval Classification Rules

Annex A: Definitions and Abbreviations

Contents

Australian Naval Classification Rules

Scope and Application

Annex A details the definitions and abbreviations used in the ANC Rules.

Definitions

Definitions - A

Term	Definition
"A" class divisions	Divisions formed by bulkheads and decks which comply with the following criteria: a. they are constructed of steel or other equivalent material; b. they are suitably stiffened; c. they are insulated with approved non-combustible materials such that the average temperature of the unexposed side will not rise more than 140°C above the original temperature, nor will the temperature, at any one point, including any joint, rise more than 180°C above the original temperature, within the time listed below: i. class "A-60" 60 minutes ii. class "A-30" 30 minutes iii. class "A-15" 15 minutes iv. class “A-0” 0 minutes **Note:** Insulated "A" class bulkheads and decks used on board Naval Vessels, including the means of affixing the insulation to the "A" class structural members, should be consistent with the materials, details and arrangements used during, and documented in the test reports issued for, the approval test for that insulating material. d. designed to carry more than 60 non-crew. e. they are constructed as to be capable of preventing the passage of smoke and flame to the end of the one-hour standard fire test; f. they have been prototype tested to the satisfaction of the ANC Authority in accordance with the FTP Code or other standard agreed by the ANC Authority to ensure that it meets the above requirements for integrity and temperature rise. **Note:** “Light-weight constructions" (honeycomb type, etc.) of steel or equivalent material may be used as non load-bearing internal "A" class division in accommodation and service spaces provided they have successfully passed the relevant standard fire test to the satisfaction of the ANC Authority in accordance with the FTP Code or other standard agreed by the ANC Authority. These "light-weight constructions" should not be used as an integral part of main fire zone bulkheads and stairway enclosures on Naval Vessels.
"B" class divisions	Divisions formed by bulkheads, decks, deck-heads or linings which comply with the following criteria: b. they are constructed of approved non-combustible materials and all materials used in the construction and erection of "B" class divisions are non-combustible, with the exception of combustible veneers which may be permitted provided they meet other appropriate requirements of Chapter 06 (e.g. Rules 4 and 5); c. they have an insulation value such that the average temperature of the unexposed side will not rise more than 140°C above the original temperature, nor will

Term	Definition
	the temperature at any one point, including any joint, rise more than 225°C above the original temperature, within the time listed below: i. class "B-15" 15 minutes ii. class "B-0" 0 minutes d. they are constructed as to be capable of preventing the passage of flame to the end of the first half hour of the standard fire test; e. they have been prototype tested to the satisfaction of the ANC Authority in accordance with the FTP Code or other standard agreed by the ANC Authority to ensure that it meets the above requirements for integrity and temperature rise.
"C" class divisions	Divisions constructed of approved non-combustible materials. They need meet neither requirement relative to the passage of smoke and flame nor limitations relative to the temperature rise. Combustible veneers are permitted provided they meet the requirements of Chapter 06.
Abandonment	A surface escape method where the crew remains onboard the platform whenever possible, and only abandon once the risk to a disabled platform's stability or personnel safety is too great. Survivors will require surface recovery and medical treatment.
Accommodation	See: Habitability
Accommodation Spaces	Spaces for Embarked Persons such as corridors, heads & bathrooms, cabins, offices, mess decks, hospitals, pantries containing no cooking appliances and similar spaces. These spaces may contain: a. Toasters, microwave ovens, induction heaters and similar appliances each of them with a power not more than 5kW; b. Electrically heated cooking plates and hot plates for keeping food warm each of them with a maximum power less than 2kW and a surface temperature not above 150°C. c. Coffee machines, dish washers and water boilers regardless of their power.
Accommodation Stores	All stores required to maintain the platform's hotel services. They include linen, drapery, and mess equipment.
Accumulator	Apparatus in which potential energy is stored in a practically incompressible fluid. Fluids applications: An accumulator stores energy through the compression of non-compressible hydraulic fluid (Commonly used as Nitrogen) in a Container which is held under pressure that is applied by an external source. Electrical applications see: Battery
Action State	A disposition of readiness of personnel and equipment due to operational objectives.
Activation	The intended use of a dangerous good (Class 1).
Active (in the electrical context)	Any conductor that is maintained at a difference of potential from the neutral or earthed conductor. In a system that does not include a neutral or earthed conductor, all conductors are considered to be active conductors.
Active sonar	Active sonar transducers emit an acoustic signal or pulse of sound into the water. If an object is in the path of the sound pulse, the sound bounces off the object and returns an "echo" to the sonar transducer. Many sonar systems may have both an 'active mode' and a 'passive mode'.
Additional Bridge functions	Functions related to Naval Vessels operations which should be carried out on the Bridge in addition to primary navigation functions, but not necessarily by the Officer of

Term	Definition
	the Watch. Examples of such functions are extended communication functions, monitoring and control of ballasting and cargo operations, monitoring and control of machinery, and monitoring and control of domestic systems.
Additional Military Layers	A range of digital geospatial products designed to enhance situational awareness in the maritime environment, and includes both vector and raster formats.
Adjacent Area	The area around a Ready Use Magazine or launcher measured from the EO Stowage boundary or exposed EO to a specified distance all around line of sight within which requirements are to be applied. In surface platforms, the adjacent area for small magazines is defined as being 2m all-round line of sight from the small magazine boundaries.
Adjacent Compartments	A compartment which has at least one deck, deckhead or bulkhead in common with an EO Stowage. An 'Indirectly' adjacent compartment diagonally abuts the corners of the decks, deckheads or bulkheads in common with the EO Stowage.
Advance Reach	The distance measure along the original course from the point of interest in a turn to the point of execute of the turn.
Advice	Indicates a statement that does not represent a requirement but provides advice, information and clarification. There is no requirement to verify compliance with an "Advice" annotated requirement.
Afloat	For the waterline not to exceed the submergence limit.
Agreed	Documented confirmation between the Naval Vessel Operator, the designer and the ANC Authority.
Agreed standard	The standard selected by the Naval Vessel Operator and agreed by the ANC Authority, compliance with which will be deemed to meet the requirements of the ANC Rules.
Air Capable Ship	Air capable ships are ships on which an aircraft can land and from which an aircraft can be launched, i.e. ships fitted with a flight deck. Ships must be certified to operate with particular types of aircraft. From NSC: The ability of a ship / platform to engage in the use of manned or Remotely Piloted Air Systems (RPAS), either its own (Organic) or a 3rd party (Non-Organic) to conduct operations to fulfil tasks.
Air Filtration Unit	The system which removes contaminants to provide sufficient air of the required standard to the internal ventilated compartments of the ship usually fitted to the HVAC system.
Airlock	A compartment with two doors between the toxic-free area and the source of CBRN hazards without any purge facility.
ALARA: As Low As Reasonably Achievable	The principle under which Defence conducts any activity that involves ionising radiation. ALARA applies to the ionising radiation context only. It relates to the linear no threshold (LNT) hypothesis for ionising radiation risks, whereby risk is proportional to the dose received, i.e. linear with there being no lower limit (no threshold). The main conclusion of this hypothesis is that there is no safe level of ionising radiation. Consequently, when applied to the ionising radiation safety model, exposures must be reduced until they are as low as reasonably achievable (ALARA). There is no lower limit at which an exposure is legislated to be safe.
All Up Round (AUR)	Includes ammunition and guided weapons s generally comprised of a housing (cartridge), primer, projectile, and propellant shipped fully assembled by the

Term	Definition
	manufacturer. An AUR may or may not be assembled with components such as igniter, wings and fins, tracking flares, etc.
Alert system	A means of providing information to the operator that a parameter has deviated from a norm by a defined amount.
Allied	Represents Australia's traditional allies in Canada, New Zealand, UK and USA (AUSCANNZUKUS).
Allied Forces	Defence Forces of countries other than Australia that may operate with ADF Assets.
Alternate Conning Position	A secondary position not on the Bridge, from where the primary navigation functions can be exercised.
Alternate Cooking Point	An area in the Naval Vessel (usually the Wardroom pantry) that is suitable for the preparation of meals in the event that the main galley becomes unserviceable.
Ammunition Routes	Established routes on a Naval Vessel used for the movement of EO. This includes point of EO embarkation to the magazine and from the magazine to the operational point (i.e. weapon or weapon launcher).
ANC Authority	See ANC Framework Manuals for definition.
Anchoring and mooring equipment	Fixed and non-fixed devices to hold a platform in position such as anchors, chains, warp, windlasses, bollards, fairleads, and mooring ropes
Anode	Positively charged surface that acts as a source of current to the electrolyte, and on the surface of which electrons are released during oxidation reactions. The anode in a CP system provides cathodic protection to the structure.
Anticipated List or Trim for Damaged Conditions	Worst case trim and list as determined from Chapter 03 and as a minimum shall be 10° of trim and 20° of list either way.
Anti-fouling system	Has the same meaning as AFS convention Article 2.2: "Anti-fouling system" means a coating, paint, surface treatment, surface, or device that is used on a Naval Vessel to control or prevent attachment of unwanted organisms.
Anti-exposure suit	Protective suit for use by rescue craft crews and Marine Evacuation System (MES) parties.
Appendage	Any part of the Naval Vessel protruding beyond the hull below the design waterline.
Appropriate degree of certainty	A quantified or experienced-based degree of certainty adjudged by the ANC Authority's interpretation of society's demands.
Approval or Approved	Means approval or approved by the ANC Authority.
Approved type	A device that is approved by the ANC Authority.
Area of operation	NBoatC definition not used. See NSCV Part B General requirements.
Armament System	An Armament System embodies everything required to perform the functions of EO Stowage, handling, and use. Armaments include the EO (munition), the storage and handling system (magazine, missile container, etc.) and the launching system (gun, launcher, etc.).

Term	Definition
Armour	A shielding material provided for the ballistic defeat of projectiles or fragments when inherent shielding is inadequate
Armour Piercing	A projectile with a hardened or high density core which is designed to penetrate armour.
Arrival Condition	The arrival condition corresponds to Minimum Operating Condition.
Assault Route	An assault route is defined as a route taken by embarked forces personnel to enable issue and/or return of weapons and EO prior to disembarkation or post embarkation via various means.
As Delivered	When associated with a Naval Vessel displacement, is the condition of the Naval Vessel at the time of handover by the contractor.
Assembly	Any part of equipment which can be replaced as a unit but does not perform a complete function on its own.
Asset	An item owned or being used by the ADF or others for operational or non-operational purposes.
Authorised List Of Explosive Stores (ALES)	Authorised List of Explosive Stores (ALES) lists EO authorised for embarkation on a particular Class of platform.
Autopilot	An automatic control system that enables control of the vessel's steering gear. The autopilot usually takes the form of a Heading Control or Track Control System. Autopilots are synchronised with the Naval Vessel's sensor and position data as inputs, which then adjusts the rudder to maintain the heading and/or position entered by the operator.
Auxiliaries	Systems required to provide services for the operation of the Naval Vessel and for crew habitability. (E.g. refrigeration, HVAC, water distillation, bilge pumps, sewage, etc.)
Auxiliary Engines	Diesel engines providing power to drive equipment other than propeller shafts, such as electrical generating sets, compressors etc.
Auxiliary Mechanical Power	Source of mechanical power to facilitate boat launching during ‘dead’ ship condition. The system is dedicated to an individual boat lifting appliance and independent of the Naval Vessel’s own electrical supply (e.g. Hydraulic accumulator system).
Auxiliary Ship	A ship designed to support fleet operations. Such ships may have roles that include but are not limited to replenishment at sea, oceanographic, hydrographic, submarine tender, tug and other workboats.
Auxiliary Steering Gear	The equipment other than any part of the main steering gear necessary to steer the Naval Vessel in the event of failure of the main steering gear but not including the tiller, quadrant or components serving the same purpose.
Average 24-hour electrical load	The average calculated electrical load over a 24-hour period with the Naval Vessel operating at the specified cruising speed and ambient air and seawater conditions in a defined operating state or states.
Aviation Systems	Fixed or Rotary Wing Aircraft, piloted or remotely piloted, and the ground-based systems vital to their safe operation.

Definitions - B

Term	Definition
Back-up (Cascade) Protection	A method by which an over-current protective device of a higher fault rating is used to protect devices of lower fault rating against short-circuit currents.
Ball Projectile	A projectile with a soft core usually consisting of lead and/or mild steel.
Ballast Water	Has the same meaning as BWM Convention Article 1.2: Ballast Water means water with its suspended matter taken on board a ship to control trim, list, draught, stability or stresses of the ship.
Ballistic	To do with the motion of projectiles, such as a rocket, which is propelled and guided only in the initial phase of its flight, but reaches its target by a ballistic descent, and acted on only by gravitational and drag force.
Ballistic Protection System	A combination of materials that make up a system that is designed to defeat ballistic threats up to an expected or tested level.
Ballistic Threat	A projectile or fragment of a specified size impacting at a specified velocity. See also: Projectile Threat
Baseline (in the context of contract)	Refers to the parameter agreed at the time of contract signature.
Baseline (in the context of ship)	A line parallel to the design waterline, passing through a nominated position such as the underside of keel at amidships. Note: It is a reference line for vertical measurements
Battery (in the context of Army unit)	Tactical and administrative artillery unit or sub-unit corresponding to a company or similar unit in other branches of the Army. All guns, torpedo tubes, searchlight or missile launchers of the same size and calibre or used for the same purpose, either on one ship or otherwise operating as an entity.
Battery (in the context of electric power)	A battery is a device for storing electrical power in chemical form and used as a source of power.
Battery Room	A dedicated compartment where batteries are installed and interconnected to provide dc power, or where batteries are serviced and charged.
Beam Reach	The perpendicular distance from the point of interest in a manoeuvre to the projection of the original course from the point of execute.
Best Heading	In the context of seakeeping, the heading on which the least severe motion occurs. This will depend on the motion or set of motions under consideration.
Biofouling	Biofouling has the same meaning as MEPC.207(62): Biofouling means the accumulation of aquatic organisms such as micro-organisms, plants, and animals on surfaces and structures immersed in or exposed to the aquatic environment. Biofouling can include microfouling and macrofouling.
Black	1. Black Data: Data that contains only cipher text, or up to OFFICAL information. 2. Black Equipment: The designation applied to information systems, equipment or facilities that handle only cipher texts or data up to OFFICIAL.
Black water	1. Untreated drainage and other wastes from any form of toilets and urinals;

Term	Definition
	2. Drainage from medical premises (sickbays, dispensaries, and medical areas) via washbasins, tubs and scuppers located in such premises; 3. Drainage from spaces containing living animals; or 4. Other waste waters when mixed with the drainages defined above.
Blast	A destructive wave produced in the surrounding atmosphere by an explosion. The blast includes a shock front, high pressure behind the shock front and rarefaction following the high pressure.
Blind Pilotage	The navigation of a Naval Vessel through restricted waters in low visibility with little or no recourse to the visual observation of objects outside the ship. The primary non-visual aid to navigation that enables this to be done is the high definition surface warning radar, but all non-visual aids are employed.
Boarding equipment	Marine Evacuation System (MES), ladders, nets, etc.
Boat	reversionary
Boat Lifting Appliance	Any davit, derrick, crane or other device fitted onboard the ship to lift and/or lower any Small Craft, carried onboard that ship, out of or into the water. The appliance shall include, but not be limited to, blocks, shackles, standing and running rigging, straps, bridles, chain, hooks, slings, rings, eyebolts, eyeplates, pad eyes, disengaging gear, operating and braking machinery and associated fittings.
Boot Topping	That part of the anti-foul paint extending from the unladen waterline to slightly above the design waterline. The Boot topping is usually black.
Breadth	The extreme width from outside of frame to outside of frame at or below the Full Load Draught. For High Speed Craft, it is the breadth of the broadest part of the moulded watertight envelope of the rigid hull, excluding appendages, at or below the design waterline in the displacement mode with no lift or propulsion machinery active.
Bridge	comprises a wheelhouse and where fitted Bridge wings, from which primary navigation and additional Bridge functions are performed.
Bridge Resource Management	The process of co-ordinating and directing all the available assets of the Bridge and its staff for the safe and efficient conduct of navigation
Bridge Wings	Open parts of the Bridge on both sides of the Naval Vessel's wheelhouse which extend to the Naval Vessel's side.
Bridge Workstation	A position on the Bridge at which one or several primary navigation functions or tasks constituting a particular activity are carried out.
Bridge-to-bridge communications	Safety communications between Naval Vessels from the position from which the ships are normally navigated.
Broaching	The phenomenon that occurs in following and quartering seas, where control of the Naval Vessel is difficult, and may be lost, allowing the Naval Vessel to swing violently onto a beam sea heading with the potential for a large roll motion. In the case of hydrofoil vessels, the same term is more typically associated with emergence of a foil above the water surface or near to it such that ventilation occurs with the risk of a loss of lift and hence instability in the ride of the craft.
Buffer	Buffer is the material immediately surrounding the glass fibre in an optic fibre which is there to prevent the individual fibre from mechanical damage or distortion.
Build Margin	This margin is owned by the builder and is incorporated to account for uncertainties resulting from:

Term	Definition
	1) differences in specified and delivered equipment; 2) unknowns at the time a prediction is made; and 3) Anticipated minor changes in the design as items are exchanged during construction due to unavailability. If the same contractor is responsible for design and build this can essentially be combined with the Design Margin.
Bulbous Bow	A protruding bulb at the bow designed to modify water flow around the hull, reducing drag and increasing speed and range.
Bulk (Fuels etc.)	A category of goods that is transferred within a dedicated package such as cargo fuels.
Bulk Fuel Carriage	See Special Functions
Bulkhead Deck	The uppermost deck to which the main bulkheads and the ship's shell are carried watertight. (SOLAS II-1 Reg.2.19)
Bullring	Fully enclosed fairlead fitted along the centre line of the deck at the stem and stern to enable towing operations. The towing ropes of the ship towing or being towed pass through the bullring.
Buoyancy Compartment	A permanently sealed compartment to aid floatation when a vessel is swamped and/or damaged. Buoyancy compartments are normally filled with air or an impermeable buoyant material, such as closed cell foam.

Definitions - C

Term	Definition
Calculated Diameter	A diameter of a cable or cable component not inclusive of any manufacturing tolerances that may be applicable or required.
Canteen Goods	All stores sold at the Naval Vessel’s canteen, excluding beverages.
Capability	Note: In a military context, capability is achieved by developing a force structure appropriately prepared for a range of military operations.
Capability lifecycle	A capability system's whole of life, from initial identification of a need to its disposal. An end-to-end process for capability development and delivery of capital projects, and associated through-life support, related to major capital equipment, infrastructure, enterprise enablers and information and communication technology.
Capability Upgrade Margin	The Capability Upgrade Margin is provided to allow changes to be made to the operational capability of the platform from that in the original contract specification requirements but generally should be regarded as additional to same. Sometimes referred to as the Board Margin. This margin is allocated to allow changes to be made to the operational capability of the platform from that in the original contract specification. The Capability Upgrade Margin is set and owned by the Naval Vessel Operator and defined in the OSI.
Capacity	The capacity of the structure to meet the demand.
Capsize	Roll, heel or list to the point of angle of vanishing stability.

Term	Definition
Cargo	Goods (not personnel) being transported by the Naval Vessel from one port or vessel to another, not intended for use by the Naval Vessel itself.
Cargo EO	Any quantity of embarked explosives or explosive ordinance (EO) in excess of that permitted for use by the vessel in the Warrant of Armament Stores and Practice Allowances, other than personal EO carried by Embarked Military Forces. 'Cargo EO' includes 'Cargo Ammunition core Loads'.
Cargo Oil Tanks	Tanks for the carriage of oils fuel in bulk not for the Naval Vessels own use or use in ship borne equipment.
Cargo spaces	Spaces used for cargos and trunks to such spaces.
Carriage and Use / Carriage or Use	All activity associated with the stowage, handling, movement, transport, transfer, preparation, and activation of dangerous goods under normal and fault conditions. Note: Use is assumed to include any activity involving the dangerous goods for any purpose other than to transfer it.
CASEVAC	CASualty EVACuation.
Casualty	Has the same meaning as ADDP 1.2.: A person who is wounded, injured or diseased.
Casualty evacuation locations	Any location onboard where an incapacitated casualty can be safely removed from the platform, including the platform's evacuation stations, flight deck or well dock.
Casualty Potential	The number of people that can be injured as the result of a fire or release of the fire extinguishing media.
Casualty Power	A system of relocatable cabling that allows electrical power supply to bypass damaged electrical distribution equipment in order to supply Damage Control equipment and other equipment required for the safety of the ship.
Casualty Threshold (In the context of a Fire)	The casualty threshold, in the context of a fire, includes: • Loss of space of origin up to the nearest "A" class boundaries, which may be a part of the space of origin, if the space of origin is protected by a fixed fire extinguishing system; or • Loss of the space of origin and adjacent spaces up to the nearest "A" class boundaries, which are not part of the space of origin.
Catastrophic event	An extreme event where the Naval Vessel is rapidly lost
Cathode	Negatively charged surface that acts as sink of current from the electrolyte, and on the surface of which electrons are consumed during reduction reactions. The cathode in a CP system is the structure being cathodically protected.
Cathodic Disbonding	Failure of adhesion between a coating and a metallic surface as a direct result of application of cathodic protection.
Cathodic Protection System	Complete installation including active and passive elements that provides cathodic protection.
Cavitation	The change of state of water to vapour (gas) due to low pressure. Typically for Naval Vessels, cavitation will occur on propeller blades due to the low pressure caused by the flow of water over the blade.
Central control station	The primary station in which the following control and indicator functions are centralised:

Term	Definition
	a. fixed fire detection and fire alarm systems; b. fire pumps and emergency fire pumps; c. fire main isolation and monitoring; d. fixed fire fighting, sprinkler and local application systems; e. fire door indicator panels; f. fire door closure; g. flood detection systems; h. internal and external watertight door indicator panels; i. internal and external watertight door closures; j. all powered ventilation systems; k. general emergency alarm system; l. internal communication systems; m. shore telephones when alongside; n. microphones to main broadcast systems; o. emergency evacuation systems; p. CCTV where required by the ANC Rules.
Certified Equipment	Certified Equipment has been through a process to assure the conformity of a product with declared design, test and construction standards. Through a combination of: manufacturer's declaration, type approval, independent 3rd party design appraisal, audit of production or direct inspection.
Characteristic value	A quantified measure of a demand or a capacity that has a known probability of occurrence.
Charts	Specifically designed to meet the requirements of marine navigation, showing depths of water, nature of bottom, elevations configuration and characteristics of coast, dangers and aids to navigation.
Chute	A sloping channel or slide for safely conveying EO from one level to a lower level.
Citadel	The compartments within the vessel which form a group of interconnecting compartments enclosed by a vapour-tight boundary, within which filtered air can be circulated at a positive pressure to provide collective nuclear, biological and chemical protection.
Class 1 Dangerous Goods	As defined in the UN Recommendations on the Transport of Dangerous Goods – Model Regulations.
Class 2-9 Dangerous Goods	As defined in the UN Recommendations on the Transport of Dangerous Goods – Model Regulations.
Classification of Dangerous Goods (see also Dangerous Goods)	As defined in the UN Recommendations on the Transport of Dangerous Goods – Model Regulations.
Classification Society	An organisation that establishes and applies technical standards in relation to design, construction and through-life survey of ships for the purpose of enhancing safety. For the purpose of these Rules, refers only to Classification Societies having IACS membership status and approved as a Competent Organisation by the ANC Authority.
Classify	The function of determining the function of the detected emitter.

Term	Definition
Cleansing Station	A group of compartments suitably equipped and organised where chemical, biological or radiological decontamination of personnel and material takes place.
Clear Width of an Escape Route	The net width of an escape route when the width of equipment, handrails and any other items are subtracted.
Clearance Distance	The shortest distance between metallic parts of electrical equipment, measured through the air.
Climbing net	Net used for disembarkation of persons to the survival craft and for the rescue of persons from the water.
Clinical Care	The medical treatment of casualties including testing, diagnosis, treatment, hospitalisation and medicines.
Close In Weapon System	CIWS is a point-defence weapon system for detecting anti-ship missiles and aircraft, small high-speed surface craft, helicopters and surface mines that have penetrated the outer defences.
Closed down conditions	Operational conditions where the Naval Vessel is secured for enhanced levels of integrity as defined by the ANC Authority. This may include watertight integrity or protection in a Chemical, Biological, Radiological or Nuclear environment.
Closed ro-ro spaces	All Spaces which are neither open ro-ro spaces nor open deck spaces.
Closed vehicle and boat spaces	All Spaces used for vehicles or boats which are neither open nor open deck spaces.
Closure	A device for ensuring an opening in a watertight structure can be closed watertight or weathertight.
CO's Stores	Alcohol and mess gear for the commanding officer.
Coherence	Property of a wave by which its amplitude and phase can be predicted at some future time.
Coherent Electronic Attack	Electronic Attack techniques utilising digital radio frequency memory.
Cold Room/Store (Frozen Provisions)	Cold rooms/stores should be maintained at between -18 to -20 degrees Centigrade (°C) for storage of frozen fish, poultry, meat and vegetables.
Cold Start	System Start up from a powered off state to operational state.
Collective Protection	Protection provided to a group of individuals in a CBRN environment, which permits relaxation of individual protective equipment. Collective protection also provides protection against riot control agents and toxic industrial materials.
Collimated Beam	A near parallel beam of light or other electromagnetic radiation with very low divergence or convergence angle. The low divergence property is used in directional systems, such as Laser and certain Radar systems.
Collision Bulkhead	A watertight transverse bulkhead in the fore part of a Naval Vessel, that extends from the keel to the submergence limit, to prevent water flowing aft in the event of a collision.
COLREGS	International Regulations for Preventing Collisions at Sea

Term	Definition
Combat Management System (CMS)	Synonym for Command and Control System.
Combat System	Is the composite of those systems of the Naval Vessel and its personnel, which control, co-ordinate and carry out the warfare mission capabilities of the Naval Vessel.
Combat System Element	Means a component (i.e. equipment, computer program, or human) of the Combat System, including sensor systems, weapon systems etc.
Combatants	Combatants comprise all organised armed forces, groups or units (except medical service and religious personnel) who are under the command of a party to a conflict and are subject to an internal disciplinary system.
Combined	In the case of interoperability, to mean communications with allies, specifically the AUSCANNZUKUS nations.
Combined Collection System	Is a sewage collection system, which combines black and grey water together in the same pipe work prior to entering the surge or treatment tank (i.e. there is no way of discharging grey water separately from black water)
Combined operation	Is an operation conducted by forces of two of more allied nation's action together for the accomplishment of a single mission
Combustible Fluids	For the purposes of this document, hydrocarbon fluids having a flashpoint above 60˚ C and below 93˚ C
Combustible material	Any material other than a non-combustible material.
Command and Control (C2) System	Composite of the Command System and Control Systems which includes a. Sensor Data Management, b. Track Management, c. Command and Decision, and d. Tactical Controls
Command and Decision	The command capability performs tactical control of activities in all Warfare Areas: - Anti Surface - Undersea - Anti Air According to doctrine and operational orders.
Command System	The composite of systems and personnel, which provide command, control and co-ordination of the Naval Vessel system resources.
Commanding Officer	Person in command of the Naval Vessel. All embarked persons are under the Commanding Officer's authority and are the Commanding Officer's responsibility. Other terms used elsewhere for the Commanding Officer are Captain and Master.
Common Tactical Picture (CTP)	Common Tactical Picture (CTP) contains information spanning the spectrum from the sensor to the shooter to support tactical forces, and is a visual representation of the information contained within the databases of the battlespace sub-networks. The CTP consists of intelligence, surveillance, reconnaissance, identification, environmental, and positioning inputs to each component commanders' tactical picture which, when fused, create the CTP. A CTP is a generic term that may be the Recognised Air Picture (RAP) and Recognised Maritime Picture (RMP) disseminated by the MTN, Recognised Land Picture (RLP) disseminated by the GN, etc.
Common Operating Environment (COE)	The runtime environment that allows segments developed by separate software developers to function together and act as an integrated system.

Term	Definition
Communication	The means of transmitting information by telephone, radio, television, etc. Any means of sending military messages, orders, etc.
Community of Interest	Subset of a Security Enclave
Compartment	A sub-divided volume of a main sub-division compartment so as to facilitate the normal working of the Naval Vessel. Large compartments may be main sub-division compartments in their own right (e.g. a main machinery space). Compartments may be required to be fitted with fire detection and extinguishing appliances and, depending upon their use and the use of adjoining compartments, provide a degree of structural fire protection between adjacent compartments
Compatibility	Goods of class 1 are considered to be "compatible" if they can be safely stowed or transported together without significantly increasing either the probability of an accident or, for a given quantity, the magnitude of the effects of such an accident. By this criterion, goods listed in this class have been divided into a number of compatibility groups, each denoted by a letter from A to L (excluding I), N and S.
Compatibility Group	Used to specify the controls for the transportation, and storage related there to, of explosives and to prevent an increase in hazard that might result if certain types of explosives were stored or transported together.
Competent Authority	1. An individual or organisation with enough specialised knowledge or expertise in a particular area that they are deemed competent by the sponsor to provide support in the assessment of compliance to the requirements of these Rules. 2. A person being either a Senior Executive Officer within the meaning of the Public Service Act 1922; or a Commissioned Officer of the ADF being an officer of at least the rank of Commodore, Brigadier or Air Commodore. Appointed in writing to be a Competent Authority by the Minister for Defence for matters pertaining to the administration of the Explosives Act 1961 and the Regulations made under this Act.
Complex Scan	A complex scan is a combination of simple emitter scans.
Compressed Air System	An arrangement of compressors, dryers, distribution pipework and equipment employed to compress atmospheric air to a pressure above 0.5 bar gauge. To purify it such that it meets specified quality standards and to distribute it to consumers at the required pressure.
Compromising Emanations	Unintentional Signals that, if intercepted and analysed, would disclose the information transmitted, received, handled, or otherwise processed by information systems equipment.
Computer Based Components	Software and systems containing components that are developed with methods similar to software development methods, including firmware, application-specific integrated circuits, programmable logic controllers, programmable logic arrays and other custom hardware.
Concurrent Threats	Multiple number of threat emissions which are capable of being resolved in time, and thus are able to be distinguished based on a time of arrival reference point. Each threat emission may be countered consecutively.
Configuration	The functional and physical characteristics of existing or planned hardware, firmware, software or a combination thereof, as set forth in technical documentation, including specifications, standards and drawings, and ultimately achieved in a product.
Confined Space	An enclosed or partially enclosed space that: • is not designed or intended primarily to be occupied by a person; and

Term	Definition
	• is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space; and • is, or is likely to be, a risk to health and safety from: an atmosphere that does not have a safe oxygen level; or • contaminants, including airborne gases, vapours and dusts, that may cause injury from fire or explosion; or • harmful concentrations of any airborne contaminants, or engulfment.
Confusion Mode	• Ejecting chaff to confuse enemy sensors, thus making the target selection difficult. This mode is operated manually from the system main control facility.
Connected Replenishment	See: Replenishment at Sea.
Conning Position	A position on the Bridge from where the primary navigation functions are exercised.
Consecutively	Occurring in succession.
Consequence (of risk)	The outcome or net effects of harm, injury, or other adverse effects associated with a hazard. Consequences may be minor, major, critical, or catastrophic and may affect any or all of Fitness for Service, Safety, or Environmental Compliance.
Constabulary role	Naval Vessel whose OSI is in a maritime security / policing role, but not a combat role.
Constant Tension System	A winch capable of automatic high-speed tensioning of the fall wire, thus preventing any slack, when operating in high sea state conditions. Also known as 'wave compensation system'.
Contained (Fuels etc.)	A category of goods that is transferred within a dedicated package such as cargo fuels.
Continuous "B" class ceilings or linings	Those "B" class ceilings or linings which terminate at an "A" or "B" class division.
Continuous watch	The radio watch concerned shall not be interrupted other than for brief intervals when the Naval Vessel's receiving capability is impaired or blocked by its own communications or when the facilities are under periodical maintenance or checks.
Continuous Wave (CW)	An electromagnetic (EM) waveform that does not vary in amplitude (or power). CW modulation methods include Frequency Modulation (FMCW), and Phase Modulation (PMCW). Some pulsed radar receivers declare an intercepted signal as CW if it exceeds the PW measurement capability of the receiver.
Continuously manned control station	Control station which is continuously manned by a responsible member of the crew.
Continuously Manned Spaces	Spaces such as messes and control areas which are expected to be continuously manned during any state or condition for more than 20 minutes at any one time.
Constraint	Is a restriction, limit or regulation imposed on a product, project, or process. A constraint is a type of requirement or design feature that cannot be traded off.
Contact	1. A contact is a general term for any entity which could be detected by the sonar system and displayed to the sonar operator. This can include submarines, ships, torpedoes, mines, autonomous vehicles, aircraft, divers, biologicals including marine mammals, and geological features. Though depending on the mission

Term	Definition
	and application, some of these may be considered 'false contacts' if they are detected when they shouldn't be, or 'missed contacts' if they are not detected when they should be. 2. A vehicle (subsurface, surface or above surface) or other object which is detected by the VSR system.
Contact follower	Contact follower contains acoustic tracking algorithms (trackers), to follow entities both actively and passively detected by the HMS sensors and provide updates to the Sonar Operator.
Control measure	An action or activity put in place to minimise the likelihood of an event occurring, or the severity.
Control station	A location the machinery or equipment can be operated or from which operations can be directed by human operators. Control Stations include the following spaces: • Central Control Station. • Damage Control Stations. • Wheelhouse and chartroom. • Spaces containing the Naval Vessel's radio equipment. • Fire-extinguishing spaces and spaces with equipment for fire extinguishing. • Control room for propulsion machinery when located outside the propulsion machinery space. • Spaces containing centralised fire alarm equipment. • Spaces containing centralised emergency public address system operating positions and equipment. • Spaces containing naval systems for detection, command, defence, offence, communication, combat or weapon/control operation. • Spaces containing centralised Naval Vessel's operation equipment. Note: Main navigational equipment includes, in particular, the steering stand and the compass, radar and position-finding equipment. Steering gear rooms containing an emergency steering position are not considered to be control stations. Where in the Rules of Chapter 06 and where relevant to fixed fire-extinguishing systems, there are no specific requirements for the centralisation within a control station of major components of a system, such major components may be placed in spaces which are not considered to be a control station. Spaces containing, for instance, the following battery sources should be regarded as control stations regardless of the battery capacity: • emergency batteries in separate battery room for power supply from black-out until the start of the emergency generator; • emergency batteries in separate battery room as reserve source of energy to radio installation; • batteries for start of the emergency generator; • in general, all emergency batteries required for the emergency source of electrical power.
Controllable pitch propeller	A propeller in which the pitch of the blades can be changed while the propeller is in motion.
Controlled drug	Has the same meaning as AMSA MO11: A substance mentioned in Schedule 8 to the current Poisons Standard as defined in section 52A of the Therapeutic Goods Act 1989.
Converter	A power converter equipment, that transforms electrical energy from one form to another by modifying voltage, current or frequency for various applications.

Term	Definition
Cook Off	The unintended initiation of an explosive substance due to the application of excessive external heat.
Cooperating Unit(s)	Members of a data link/network who are sharing relevant data, in in both near Real-Time and Real-Time, for purposes such as Situational Awareness and Co-ordination.
Cope points	Points for connection of shore services to Naval Vessel alongside a wharf generally located at the edge of the wharf.
Craft	Having the same meaning as a Small Craft
Creepage Distance	The shortest distance between metallic parts of electrical equipment measured over the surface of the insulation.
Crew members	See: Embarked Persons.
Critical medical equipment	Medical equipment which supports or supplies life-saving care to a casualty, including refrigeration of blood and medicines.
Critical structure	Structure where the loss of a single element of structure such as a pillar, deck or bulkhead could lead to collapse of the hull girder or a main deck.
Cruet	Any item of equipment designed to contain rounds of ammunition or ammunition boxes/ ammunition canisters (ACAs) during handling.
Cyber Systems	Comprises ICT and OT Systems that operate as part of the Cyberspace environment.
Cybersecurity Incident	A cybersecurity event that has been determined to have an impact on the Naval Vessel prompting the need for a response and possibly recovery.
Cyberspace	The interdependent network of information technology infrastructures, including the internet, telecommunications networks, computer systems (ICT and OT), and embedded computing, controllers and data.
Cyclic demand	A repetitive demand that requires assessment using formulations or methods which take into account the repetitive nature of the demand or response.

Definitions - D

Term	Definition
Daily Vibration Exposure A(8)	The weighted, total energy equivalent vibration, for a worker over an 8 hour period, for a particular direction of vibration, expressed as a root mean squared acceleration in metres per second squared (m/s2) for whole of body vibration in the frequency range of 1-80 Hertz.
Damage	Damage is an abnormal state that has resulted in physical harm to a Naval Vessel or its systems. For the purposes of the ANC Rules: • Foreseeable damage is damage that can be foreseen for the type of Naval Vessel. Note: Foreseeable damage includes damage that could be caused by one's own cargo or weapons, navigational hazards (collision, grounding), naval exercises (certain types of navigational exercise, replenishment at sea, landings, boat operations, etc.), system failures or mal-operation.

	• Extreme damage is damage that could be experienced as a result of environmental conditions in excess of the defined foreseeable conditions and for which the Naval Vessel is required to survive. Some capabilities will be compromised as a result. Note: Extreme damage includes damage that could be caused by freak waves or typhoons. • Extreme threat damage is damage that may result under extreme threat conditions. Note: Extreme threat damage includes damage that could be caused by weapon attacks and extreme acts of aggression.
Damage Control Central (DCC)	The primary compartment that provides central command and control for DC information, systems and coordination with Command, DC repair bases. (Alternative terms; HQ1 or Ship Command Centre (SCC) may be used in differing ship classes).
Damage Control Deck	A watertight deck for the purposes of safe continuous access along the length of the Naval Vessel, communication and recovery activities. Note: This may be referred to as the bulkhead or communications deck.
Damage control resuscitation	Has the same meaning as ADDP 1.2.: A set of procedures designed to: 1. identify moderate to severe trauma patients in compensated and uncompensated haemorrhagic shock; 2. establish and maintain a definitive airway, when required; 3. provide ventilatory support, when required; 4. perform chest decompression via needle then tube thoracostomy, when indicated; 5. control accessible haemorrhage via haemostatic agents and/or tourniquets; 6. prevent and/or treat hypothermia; 7. prevent and/or treat the cause of acidosis; 8. reverse coagulopathy and anaemia with appropriate blood products; and 9. administer sufficient intravenous fluids and blood products to preserve cerebral and cardiac perfusion, without aiming for a 'normal' blood pressure, until haemorrhage is controlled.
Damage control station (Secondary)	A control station which is to include as a minimum the following control and indicator functions: • Fire and flood control and monitoring; • Communications and main broadcast system. • And may also contain the following control and indicator functions; • Essential machinery; • CBRN protection. See also: ADCC
Damage control surgery	Has the same meaning as ADDP 1.2.: A deliberately limited set of surgical procedures performed when the magnitude of tissue and organ damage is such that prolonged surgery is likely to exceed the patient's physiological limit of recovery. Only the minimum is done to deal with life-threatening issues or those that threaten limb viability or eyesight.
Damage control zone(s)	Areas of the Naval Vessel, bounded by watertight bulkheads and decks where located below the damage control deck, that have been identified by a qualitative risk analysis and which are considered necessary for controlling the spread of damage following an external event by providing each zone with own damage control measures.
Damage Scenario	A scenario/situation that describes the location, type and extent of damage (including any combination of damage mechanisms) arising from a realised threat or incident.
Damage tolerant design	Damages that are tolerated if they do not lead to a catastrophic failure before the next scheduled survey period at which all damage may be detected. For example,

	the corrosion of a hull that is rendered damage tolerant by the inclusion of a corrosion margin.
Damping Rate	A rate that is used to calculate the reduction in amplitude for each successive oscillation of a single degree of freedom (SDOF) system.
Dangerous Goods (see also Classification of Dangerous Goods)	Dangerous Goods are substances, mixtures or articles that, because of their physical, chemical (physicochemical) or acute toxicity properties, present an immediate hazard to people, property or the environment. An alternative term within some navies is Dangerous Materiel – Materiel is defined in NATO AECTP-100 Environmental Guidelines for Defence Materiel as 'A generic term covering military systems, sub-systems, equipment, supplies and associated packaging'.
Dangerous Goods Incident	A Dangerous Good Incident includes: a. Any accident - an occurrence involving dangerous goods that results in, or contributes to: personal injury or death, material losses or damage to the environment. b. Any unintended event or action that affects the inherent safety of the dangerous good. c. A near miss - any unintended event or action that could have affected the inherent safety of the dangerous good. d. The theft or loss of a dangerous good. e. The failure of a dangerous good or its system to function in its intended manner.
Dangerous Goods Preparation Area	A part of the Naval Vessel where dangerous goods are worked on and during such activity the safety risk is modified compared to the level of risk associated with stowage of the item.
Dangerous Goods Stowage Area	A designated part of the Naval Vessel specifically designed, assessed operated for the stowage of dangerous goods.
Dark Adaptation Lighting	Lighting to a level provided in selected areas to ensure that the night vision of personnel is not compromised.
Darken Ship	A condition in which the Naval Vessel is running in a darkened state, i.e. no light, direct or indirect, is visible from outboard.
Data Cable	The term encompasses all cable used for delivery of data, including control, instrumentation, communications.
Data Refresh Rate	The minimum rate for updating all data.
Datum Mark	Datum marks facilitate the measurement of the vessels draught when in the damaged condition and locate the horizontal and vertical datum for displacement draught marks.
Dead ship condition	The condition under which the main propulsion plant, boilers and auxiliaries are not in operation due to the absence of power.
Deadweight	For Naval Vessels subject to the Loadline Convention, means the difference in tonnes between the displacement of a Naval Vessel in water of a specific gravity (density) of 1.025 at the load waterline corresponding to the assigned summer freeboard and the Lightship Displacement. For Naval Vessels not subject to the Loadline Convention, deadweight is to be taken as the difference between the Full Load Displacement and the Lightship Displacement.
Deck Wetness	In ship motion calculations, the condition when the deck edge drops below the water surface, and so typically allowing sea water (green seas) to flow over the deck. The ‘deck wetness’ in seakeeping terminology is not intended to address the issue of water falling on an exposed deck as a result of ship motion induced water spray thrown into the air or wind-blown broken water.

Deckhouse	A deckhouse is a decked structure other than a superstructure, located on the strength deck or above.
Decontamination	The process of making any person, equipment or area safe by destroying, neutralising or removing chemical agents, biological agents or radioactive material that is present.
Deemed to Satisfy/Comply	Design solutions accepted as satisfying/compliant to the Performance Requirements of the Rules without the need for additional testing.
Deep Draught Waterline	The Waterline of a vessels' deep draught measured at a displacement such that the ship is in all respects complete, and is fully loaded with full complement, stores, fuel, water and payload plus any specified growth margin.
Defence	The Australian Department of Defence.
Defence Civilian	A person (other than a Defence member) who: 1. With the authority of an authorised officer, as defined in the Defence Force Discipline Act 1982 (DFDA), accompanies a part of the ADF that is outside Australia or on operations against the enemy; and 2. Has consented in writing to subject themselves to ADF discipline while so accompanying that part of the ADF.
Defence member	1. A member of the permanent Navy, the regular Army or the permanent Air Force; or 2. A member of the reserves who is rendering continuous full-time service, or is on duty or in uniform.
Defined Threat	A threat which has been defined in an operational context. Platform vulnerability reduction measures are designed to defeat/protect against defined threats.
Demand	A demand made on the structure which is generally a load, but may also be an imposed deflection, thermal effect, the avoidance of an environmental impact, or a human demand (e.g. To avoid sharp edges).
Departure Condition	The departure condition generally corresponds to Full Load as defined in Chapter 03. Special Departure conditions may be defined in which the fuel load is below the normal capacity of the tanks.
Designated Danger Areas	Designated Danger Areas (DDAs) are compartments and spaces not fitted out specifically for the stowage of EO stores/munitions, but in which there is likely to be an increased hazard to Naval Vessel safety due to their temporary presence.
Design Draught	The Full Load Draught with any additional margins, such as for through life growth.
Design life	The nominal period that the Naval Vessel is assumed to be exposed to operating and/or environmental conditions and/or the corrosive environment which is used for selecting appropriate Naval Vessel design parameters. The Naval Vessel's actual service life may be longer or shorter depending on the actual operating conditions and maintenance of the Naval Vessel throughout its life cycle.
Design Margin	This margin is owned by the designer and is incorporated to account for uncertainties resulting from: 1. Prediction errors associated with estimating techniques; 2. Unknowns at the time a prediction is made; and 3. Anticipated minor changes in the design as the design develops.
Design Waterline	The waterline the vessel would attain at its designed displacement and trim in standard density sea water (1.025 tonnes/m^3).

Designation	The process of requesting fire control functionality, through a Fire Control Channel, for a specific Target. A Fire Control Channel is designated to a Target through the provision of required data from the Command and Control System to the FCS.
Designer	The organisation charged with responsibility for designing the Naval Vessel.
Detonator Magazine	Detonator magazines are usually of small magazine proportions and are used for the stowage of detonators and other compatible natures IAW the Hazard Classification Code (HCC).
Digital selective calling (DSC)	A technique using digital codes which enables a radio station to establish contact with, and transfer information to, another station or group of stations, and complying with the relevant recommendations of the International Telecommunications Union (ITU-R)
Direction Find	A system function which determines the angle of arrival of an emitter/signal.
Discharge	Discharge has the same meaning as MARPOL Article 2 (3): a) "Discharge", in relation to harmful substances or effluents containing such substances, means any release howsoever caused from a Naval Vessel and includes any escape, disposal, spilling, leaking, pumping, emitting or emptying; b) "Discharge" does not include: i. dumping within the meaning of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, done at London on 13 November 1972; or ii. release of harmful substances directly arising from the exploration, exploitation and associated offshore processing of sea-bed mineral resources; or iii. release of harmful substances for purposes of legitimate scientific research into pollution abatement or control.
Discrimination	The selective operation of two (or more) protective devices in series such that the intended device operates and the other(s) do not. For most applications the intended device is nearest the load.
Dispersion	A random error between line of sight and projectile flight dependent upon the type of ammunition being launched/fired. It can also vary from lot to lot in the same ammunition type due to muzzle velocity variations shot to shot in the lot. Generally quoted in milliradians (mRad) by the gun system manufacturer.
Distraction Mode	Surrounding the ship with chaff and/or infrared decoys to provide a ship like target for the missile to acquire.
Distributed Interactive Simulation (DIS)	A time and space coherent synthetic representation of world environments designed for linking the interactive, free play activities of people in operational exercises. The synthetic environment is created through real time exchange of IEEE 1278 compliant protocol data units between distributed, computationally autonomous simulation applications in the form of simulations, stimulators, and instrumented equipment interconnected through standard computer communicative services. The computational simulation entities may be present in one location or may be distributed geographically.
Distributed Processor	An architecture that uses peer-to-peer networking to allow any processor on the network to take over the function of any other similar processor; as opposed to the (single point) central processing concept.
Distributed Simulation	A synthetic environment within which humans may interact through Simulation at multiple sites networked using complaint architecture, Modelling, protocols, standards and database.

Distribution Fibre Optic Cable	An optic fibre cable in which each fibre is tight buffered, but not individually sheathed. There is however an overall sheath.
Distribution Panel	A self-contained assembly of one or more over-current protective devices, arranged for the distribution of electrical power to final sub-circuits.
Disturbance	Any event (internal or external to the Naval Vessel) that has the potential to change the equilibrium state of the Naval Vessel, including but not limited to, environment (wind, waves, ice build-up, navigational obstructions), cargo, towing, lifting, crowding, turning, conditions of no or reduced load (lightship, minimum operating condition), entrained water, loss of watertight integrity and collision not causing loss of watertight integrity (such as grounding or use of tug boats).
Documentation	General term covering drawings, specifications, technical manuals, supply manuals, regulations, modifications, work orders, instruction cards, work standards, inspection plans, instructions and bulletins.
Downflooding point	A large opening above the submergence limit that when submerged will cause unrestricted flooding and may lead to loss of the Naval Vessel.
Draught	Depth of the hull or a projecting fitting below the waterline.
Draught Marks	General - Alphanumeric marks fixed externally to a ship, indicating the depth of a particular aspect of the Naval Vessel. • There are three types of draught marks highlighted in this document, Draught Marks, Limiting Draught Marks and Projection Draught Marks • When referred to as (simply) “Draught Marks”, these marks used to determine the draught to the projected USK line, and are used to calculate the vessels displacement and may not relate to the actual draught at that location • If a particular draught mark is greater than all other draught marks and projected marks then it define the navigational limits
Drill Ammunition	Ammunition which is completely inert and is used for practice in handling.
Dry Provisions	Provisions that do not require cool or cold storage although dry provisions should be stored at 20-26 degrees Centigrade in low humidity storage. Dry provisions include breadmix, flour, tinned and dried substitutes and other provisions.
DSwMS Compliance Obligations	Outcome-focused, goal-based function and performance requirements that must be satisfied to build confidence that hazards and risks to the Seaworthiness Outcome are controlled.
Dud	Explosive munition which has not been armed as intended or which has failed to explode after being armed.
Dudding	The permanent degradation of the firing characteristics of an EED following application of stimulus, such as RF radiation, insufficient to cause ignition.
Duty Holder	A person who is identified in legislation or having an obligation to comply with a requirement. The person (or delegated representative) responsible as design authority for the safety, design and material state of the platform and/or the acquisition of a service.
Dynamic demand	A demand that requires assessment using formulations or methods which take into account the dynamic nature of the demand or response. Includes inertial demands.
Dynamic Positioning	Dynamic positioning (DP) is a computer-controlled system to automatically maintain a vessel's position and heading by using its own propellers and thrusters.

Definitions - E

Term	Definition
Early Warning	Rapid evaluation of the RF environment to determine the presence of RF energy.
Earth (or Ground)	All parts forming the metallic hull of the naval vessel or ground plate(s) provided as a means to establish ground potential for connecting all metallic components or equipment.
Earth Bond	A permanent electrical connection within a naval vessel that links a piece of equipment or structural element to the vessel's earth. This connection creates a low-resistance path for any electrical current to safely flow directly to vessel's earth and ultimately dissipate into the water. 'Grounding' is typically applied for the practice of 'Earthing' in electrical equipment and installations. 'Bonding' is typically referred to for the application of EMI/EMC or RF 'earthing', and lightning earthing methodologies.
Earthing	Has the same meaning as MIL-STD-1310; The process of connecting a metallic item to earth (or ground).
Effective NEQ	When explosive components in a weapon system are initiated by unplanned stimuli and propagate a shock wave that results in Practically Instantaneous Propagation (PIP) with adjacent munitions leading to mass initiation. The combined NEQ that produces the response of blast overpressures with the ability to damage structural integrity is called the Effective NEQ (ENEQ). (See also Net Explosive Quantity)
Effector	A device that accepts direction from other Combat System functions and acts as a source of kinetic energy (physical ordnance) or directed energy (non-kinetic) by the Combat System for offensive, defensive, or measurement purposes.
Effluent	Liquid waste that is discharged.
Elastic Deformation	Deformation of a structure due to loading where the stresses in the material have not exceeded the yield stress and the object will return to its original shape after the loading is removed.
Electrical Distribution Centre (EDC)	This is a distribution section consisting of one or more distribution units. It is usually supplied from two (normal and alternate) switchboards. It serves as a power distribution centre in locations requiring power supplies exceeding the capacity of the distribution panels.
Electrical items	Electrical Items shall be taken to include electrical installations and equipment, where installations refer to permanent or fixed items within the Dangerous Goods area and equipment refer to portable or non-permanent items taken into a Dangerous Goods area
Electrically Initiated Device (EID)	Electrically initiated device is a single unit, device, or subassembly that uses electrical energy to produce an explosive, pyrotechnic, thermal, or mechanical output.
Electrolyte	A liquid such as seawater in which electric current may flow by charge transfer between ions.
Electrolytic (Galvanic) Corrosion	Electrolytic (or galvanic) corrosion occurs when two metals in electrical contact are bridged by an electrolyte such as condensation, rain or seawater. As a result, the less noble metal is corroded and the more noble metal protected.
Electromagnetic	Pertaining to the combined electric and magnetic fields associated with radiation or with movements of charged particles.

Electromagnetic Compatibility	The capability of electrical and electronic systems, equipment and devices to operate in their intended electromagnetic environment within a defined margin of safety, and at design levels of performance without suffering or causing unacceptable degradation as a result of electromagnetic interference.
Electromagnetic Interference	Any electromagnetic disturbance, whether intentional or not, which interrupts, obstructs or otherwise degrades or limits the effective performance of electronic or electrical equipment. It can be induced intentionally, as in some forms of electronic warfare, or unintentionally, as a result of spurious emissions and responses, intermodulation products, and the like.
Electromagnetic Pulse	Caused by airburst nuclear detonation and has the ability to adversely affect or destroy unshielded electronic equipment by burning/fusing the internal circuits.
Electronic & Operational Spaces	Electronic & Operational Spaces are specific areas on a vessel that are designated for housing electronic and operational equipment. These spaces include, but may not be limited to, Computer Rooms, Conversion Equipment Rooms, Designated Communications and Weapon Equipment Compartments, Electrical Distribution Centres, Electronic Warfare Spaces, Special Weapons Compartments, Switchboard Rooms, and Main Cable and Wiring Spaces.
Electronic Attack	Sometimes referred to as Electronic Counter Measures, is action involving the use of electromagnetic energy against threat radars to prevent the effective use of the electromagnetic spectrum by the threat radar.
Electronic Protection	Systems that attempt to reduce or eliminate the effect of Electronic Attack for the purpose of ensuring continued friendly use of the electromagnetic spectrum. Also known as electronic counter-countermeasures
Electronic Support	The division of electronic warfare (EW) involving actions taken under direct control of an operational commander to search for, intercept, identify and locate sources of radiated electromagnetic energy for the purpose of immediate threat recognition.
Electronic Warfare (EW)	Military action involving use of electromagnetic energy to determine, exploit, reduce, or prevent hostile use of the electromagnetic spectrum and action which retains friendly use of the electromagnetic spectrum.
ELINT	A generic term that includes the collection of electronics intelligence for the purpose of conducting analysis of non-communication signals
Embarkation Arrangements	Both the evacuation station and boarding equipment.
Embarkation Equipment	Equipment that enables safe transfer of persons into survival craft and aimed at dry-shod embarkation.
Embarkation ladder	Ladder provided at evacuation stations to permit safe access to survival craft after launching.
Embarkation Station	Location on board from which embarked persons can safely evacuate into survival craft. These locations may not be designated for evacuation purposes only and may in some Naval Vessels be considered to be the whole upper deck.
Embarked forces	See Embarked Persons.
Embarked Persons	Embarked Persons shall fall into one of two categories: a. Crew members. Persons carried on board the Naval Vessel to provide navigation and maintenance of the Naval Vessel, operation; and b. Maintenance of its machinery and systems (including weapon and radio-communication systems), and arrangements essential for propulsion and safe navigation or to provide services for other embarked persons. Crew

	members are expected to be well disciplined and able-bodied, and have an excellent knowledge of the layout of the ship and its safety equipment; c. Non-crew. Includes embarked forces, special personnel, wounded personnel, and passengers for whom permanent accommodation is provided on board. i. Embarked forces. Persons who are not members of the crew who are carried on board in connection with the special purpose of the Naval Vessel. Embarked forces are expected to be very fit, well-disciplined and able-bodied; ii. Special personnel. Persons who are not members of the crew who are carried on board in connection with the special purpose of the Naval Vessel or the special work being carried out aboard the Naval Vessel. Special personnel (which may include pilots and air crew of organic aircraft, scientific staff, trials personnel and equipment engineers, surveyors, or persons under training) are expected to be fit, well-disciplined and have a fair knowledge of the layout of the Naval Vessel and its safety equipment; iii. Persons carried in an emergency. For the purposes of rescuing persons in order to avoid a threat to their safety the ANC Authority may permit the carriage of a larger number of persons than is otherwise permitted. **Note:** Where the Naval Vessel's primary role includes carriage of people in an emergency then those people should be treated as passengers.
Emergence	Event in which a particular location on the Naval Vessel, which is normally submerged in still water, breaks free of the sea surface.
Emergency Conning Position	A position, on the upper deck but not on the Bridge, from where route planning, route monitoring, conning and internal communication functions are exercised using only limited resources.
Emergency Control Functions	Capability to control safety equipment/system, in a short respond time, in response to internal to external incidents, so as to revert to a safe situation.
Emergency Escape Breathing Devices	Device solely provided for local escape purposes.
Emergency generator	A fully independent generator located above the submergence limit for autonomous operation in supplying the Essential Electrical Services. (The independence extends to the fuel storage and supply system, an associated switchboard, transitional power and electrical distribution).
Emergency lighting	The description given to all lighting powered by emergency power or a battery power supply, which becomes operational in the event of failure of the primary lighting.
Emergency operation	A machine or system has suffered a failure and functionality is reduced to the minimum level required to maintain the safety of the system or Naval Vessel.
Emergency Rations	Rations for use during an emergency. Emergency rations do not require cool or cold storage but should be stored at +20-26 degrees Centigrade in low humidity storage. Emergency rations are to be consumed hot or cold and be non-fresh water dependant.
Emergency Power Supply	An electrical supply to power those electrical equipment used primarily for the safety of Naval Vessel's personnel in an emergency.
Emission Control (EMCON)	Implementation of the emission policy formulated by a commander to obtain maximum tactical advantage in a particular situation. This is achieved by management of the emissions of friendly units in accordance with operation orders or plans which may authorise, restrict or prohibit the operation of equipment by type, or unit, or both.
Emission Control Area	Emission Control Area has the same meaning as MARPOL Annex VI Reg 2.1.13 "Emission control area means an area where the adoption of special mandatory

	measures for emissions from Naval Vessels is required to prevent, reduce and control air pollution from NOx or SOx and particulate matter or all three types of emissions and their attendant adverse impacts on human health and the environment. Emission control areas shall include those listed in, or designated under, regulations 13 and 14 of this Annex. "
Emitter	Any device which emits a signal e.g. radar. A target, such as a ship, may have several emitters onboard, operating in multiple modes simultaneously.
Emitter Descriptor Word	A number of bytes that collectively provide a parametric description of a de-interleaved group of pulses belonging to a single emitter type.
EMSEC	The component of communications security that results from all measures taken to deny unauthorised people from accessing information of value that could be derived from intercept and analysis by compromising emanations from cryptographic equipment and information systems.
Enroute care	Has the same meaning as ADDP 1.2: “The care required to maintain the phase treatment initiated prior to evacuation and the sustainment of the patient’s medical condition during evacuation.”
Enclosed Escape Route	An escape route which offers fire and smoke protection in accordance with the requirements of Chapter 06 Fire Safety.
Enclosed Space	Enclosed spaces are all those spaces which are bounded by the Naval Vessel’s hull, by fixed or portable partitions or bulkheads, by decks or coverings other than permanent or movable awnings. No break in a deck, nor any opening in the Naval Vessel’s hull, in a deck or in a covering of a space, or in the partitions or bulkheads of a space, nor the absence of a partition or bulkhead, shall preclude a space from being included in the enclosed space.
End of Life	When associated with a displacement, is the condition of the Naval Vessel at the time of handover by the contractor plus any allowances for service life weight growth, fitted for but not with and space and weight items planned for the ship (Ch.01).
End User(s)	Includes: 1. Operators of Remote and Autonomous Systems located at the Remote Command Unit who navigate and supervise the RAS whilst it is at sea in order to achieve its missions. Operators are expected to be well disciplined and have an excellent knowledge of the capabilities of the RAS, its missions and its RAS Maturity Levels 2. Maintainers who perform maintenance and upkeep of RAS and RCU systems (including combat and radio-communication systems and fitting of payloads) essential for the RAS operation
Energised	Connected to a source of electrical power supply.
Engagement	The FCS assisted process of utilising an effector against a target or decoy to carry out an offensive or defensive action.
Engineering systems	Machinery and its associated control, auxiliaries and support systems including electrical generation, distribution, lighting and other electrical services.
Enlarged Smoke Containment Zone	On Naval Vessels designed for special purposes, with spaces crossing multiple Smoke Containment Zones, such as vehicle spaces, ro-ro vehicle spaces or hangars, where the provision of Smoke Containment Zone boundaries would defeat the purpose for which the Naval Vessel is intended. The space is to be considered as an Enlarged Smoke Containment Zone, the boundary of which must meet the requirements of a Smoke Containment Zone.
Environment, Natural	A range of items that make up the earth and its surroundings including sea, air, land, flora and fauna

Environment, Operational	An imposed situation caused by a set of decisions made for tactical reasons as part of a military strategy
Environment, Physical	A set of conditions that an Asset may encounter during its operational life, including wind, sea state, day/night, cloud cover etc.
Environmental Conditions	The environmental conditions in which the Naval ship is expected to operate. This covers the external environment (from sea state, temperature, humidity, wind, precipitation, ice through to airborne particles, wildlife and indeed land mass) and the internal environment (temperature, humidity, ship motion, noise and so on).
Environmental Data	Data relating to the environment in which the Naval Vessel is or expects to operate including, but not limited to, meteorological, oceanographic, electromagnetic signal propagation
Environmental Protection System	A system and / or associated equipment which collects, treats, transfers, discharges harmful substances or effluents to prevent or minimise pollution of the marine environment.
Environmental Vibration	Is vibratory force, which is imposed on equipment installed aboard Naval Vessels, caused by the hydrodynamic forces on the propeller blades interacting with the hull and by other sources. This type of vibration is classed as TYPE I Vibration.
EO Handling	The movement of EO either by manual handling or by use of approved appliances, from the point of embarkation/disembarkation along the ammunition routes to the EO stowage or from the EO stowage to the weapon system or WPA.
EO Transfer Route	Established routes on a platform used for the movement of EO including EO transfer and operational activities (previously named “Ammunition Route”).
EO Stowage	An explosive ordnance stowage designed especially for the permanent or temporary storage of approved EO stores/munitions. Includes Magazines, WSCs, Missile Magazines, GW Magazines, Small Magazines, Specific Magazines, EO Stowage, Emergency EO Stowage, Ready Use EO racks and torpedo and launch tubes.
Equivalent Quasi-Static Overpressure	Notional quasi-static overpressure which is proportional to explosive charge mass divided by compartment volume.
Escape	The movement of persons to a place of relative safety on board the Naval Vessel following an emergency.
Escape and Evacuation Analysis	Both types of escape and evacuation analysis: simplified (hydraulic representation) and advanced (individuals modelled).
Escape and Evacuation Demonstration	Trial on the Naval Vessel as built.
Escape and Evacuation Time	Time it takes for persons to undergo all steps of the escape and evacuation process from the initiating announcement to evacuate the Naval Vessel until the last person has evacuated in a survival craft and all survival craft are cleared from the Naval Vessel.
Escape Route	A designated route ultimately leading from a compartment to the evacuation station, thereby including both primary and secondary routes, for the purposes of local and global escape.
Escape, Evacuation and Rescue Equipment Stowage	Tiny stowage such as containers, brackets, racks and other similar stowage locations designated for any Escape, Evacuation and Rescue equipment.

Escape, evacuation and rescue lighting	A combination of secondary and tertiary lighting specifically arranged to enable escape, evacuation and rescue.
Escape, Evacuation and Rescue Measures	Any Escape, Evacuation and Rescue arrangement, equipment or procedure.
Essential Capability or Function	A capability or function that the Naval Vessel must have and must retain after a damage scenario(s), to fulfil the vessels operational requirements.
Essential Safety Functions (Part 1)	Those safety functions critical to safeguarding multiple lives across a whole Naval Vessel or major system's contribution to a Functional Objective or Goal of the Rules. An essential safety function safeguards multiple lives in both Foreseeable Operating Conditions and/or solutions following Extreme Threat Conditions, according to approved recoverability policy or agreed in the OSI Some Essential Safety Functions may also be specified as mission-critical by AS ANCA or otherwise agreed in the OSI.
Essential Safety Functions (Part 2 and 3)	Essential Safety Functions following Foreseeable Damage: Those functions necessary to facilitate a Ship Type's Recoverability philosophy to the specified extent agreed in the ConOpS. They shall as a minimum consider: a. Hull girder residual strength b. Reserve of Buoyancy and damaged stability c. Fire fighting & damage control d. Sufficient Escape e. Evacuation to Safe Areas f. Communication to enable C2 g. Power h. Abandonment & rescue To the extent necessary to facilitate the 7-pillars of recoverability.
Essential Services	Primary Essential Services are those services which need to be in continuous operation to maintain propulsion and steering. Secondary Essential Services are those services which need not necessarily be in continuous operation to maintain propulsion and steering but which are necessary for maintaining the vessel's safety.
Evacuation	The movement of persons to a place of relative safety away from the damaged Naval Vessel.
Evacuation Station	An area where embarked persons can gain immediate access to survival craft for the abandonment of the Naval Vessel. Evacuation stations may coincide with muster stations.
Evacuation Time	Time required to provide for the evacuation of the total number of embarked persons, including the time for launching, inflating, securing of survival craft alongside ready for evacuation, boarding the survival craft and safely for clearing all survival craft away from the damaged Naval Vessel. The Evacuation Time is not to be less than the structural fire protection time in Chapter 06.
Existing ship	A ship which is not a new ship.
Expansion Allowance	An allowance made in tank volume to allow for expansion of fuel, typically 5%.
Explosive Ordnance (EO)	All munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents for use by the military. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges; demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices;

	clandestine and improvised explosive devices; and all similar or related items or components that are explosive in nature.
Explosives	The term 'explosive' or 'explosives' includes any chemical, compound or mechanical mixture which, when subjected to heat, impact, friction, detonation or other suitable initiation, undergoes a very rapid chemical change with the evolution of large volumes of highly heated gases that exert pressures in the surrounding medium. The term applies to high explosives, propellants and pyrotechnics that detonate, deflagrate, burn vigorously and generate heat, light, smoke, or sound.
Explosives Safety	The process used to prevent premature, unintentional, or unauthorised initiation of explosives and devices containing explosives; and with minimising the effects of explosion, combustion, toxicity, and any other deleterious effects. Explosives safety includes all mechanical, chemical, biological, electrical and environmental hazards associated with explosives; hazards of electromagnetic radiation to ordnance; and combinations of the foregoing. Equipment, systems or procedures and processes whose malfunction would hazard the safe manufacturing handling, maintenance, storage, transfer, release, testing, delivery, firing or disposal of explosives are also included.
Exposed EO	Explosives not contained in service packaging or a designated EO stowage.
Exposure Action Value	Exposure Action Value (EAV) is a value for either a crewman's daily vibration exposure, A(8) , or a crewman's daily VDV, above which the risks from vibration exposure must be controlled. The EAV is standardised to an eight hour exposure period.
Exposure Limit Value	Exposure Limit Value (ELV) is a value for either a crewman's daily vibration exposure, A(8), or a crewman's daily VDV, above which crew members should not be exposed. The ELV is standardised to an eight hour exposure period.
Extra-low Voltage	See: Voltage.
Extreme event	An event beyond Foreseeable Operating Conditions
Extreme Threat Conditions	Abnormal conditions arising from military operations (weapon attack) by a third party.
Extreme threat damage	See: Damage

Definitions - F

Term	Definition
F-44, Aviation Turbine Fuel	Fuel meeting the specification as defined in DEF(AUST)206F.
F-76, Naval Fuel Distillate	Fuel meeting the specification as defined in DEF(AUST)5213 A.
Fail safe	A state or condition where if any component or function of the plant fails, a system exists to prevent any increase in the risks. Designed such that a failure will cause the system to fail to the least hazardous or known state to prevent further damage to the equipment, platform or personnel.
Failure	Loss of component or system function,

Fairlead	An elongated eye, either closed or open at the top, used to guide a rope or hawser in such a way as to prevent chafing.
False Alarm Rate	A measure of incorrect detections and is a function of the probability of detection.
Fault	A physical condition that causes a device, a component or an element to fail to perform in a required manner.
Fault Current	The maximum current that would flow through an electrical circuit in the event of a fault, resulting from negligible impedance between two points in the circuit.
Fault Rating	The maximum current which an over-current protective device can safely switch.
Field of vision	An angular size of a scene that can be observed from a position on the Naval Vessels Bridge.
Fire Barrier Insulation	A fire-resistant barrier used to prevent the spread of fire for a prescribed period.
Fire Control	The control of all operations in connection with the application of fire on a target.
Fire Control Capability	Fire Control Capability encompasses the designation, acquisition, tracking, and engagement support that a FCS provides to a Command and Control System.
Fire Control Channel	A Fire Control Channel dedicates fire control resources to a Command and Control system and/or Effector to provide engagement support of a Target
Fire Control Radar	Radar used to provide target information inputs to a weapon fire control system.
Fire damper	A device installed in a ventilation duct, which under normal conditions remains open allowing flow in the duct, and is closed during a fire, preventing the flow in the duct to restrict the passage of fire. In using the above definition, the following terms may be associated: 1. automatic fire damper is a fire damper that closes independently in response to exposure to fire products; 2. manual fire damper is a fire damper that is intended to be opened or closed by the crew by hand at the damper itself; and 3. remotely operated fire damper is a fire damper that is closed by the crew through a control located at a distance away from the controlled damper. Automatic and remotely operated dampers are to be capable of local manual operation.
Fire Integrity	A methodology used to determine the Fire Resistance and Insulation requirements based on the Risk and Value of adjacent compartments, considering the combinations in both directions across the boundary. See Chapter 06 Part 3 for details. Note: FI specifically relates to the methodology used to determine the capability requirements of a boundary division. The term 'fire integrity' in ANEP 77 as a generic description of the inherent resistance to fire of a division.
Fire main	Piping system for supplying pressurised water for fire fighting.
Fire Resistance	The ability of an item to fulfil for a stated period of time the required stability and/or integrity and/or thermal insulation, and/or other expected duty specified in a standard fire-resistance test .
Fire Resistance – Notations	S – Smoke Tight – The division has been demonstrated to be smoke tight in accordance with an internationally recognised standard or other standard specified by the ANC Authority.

	H – Hydrocarbon Test – The division has been tested against an internationally recognised standard or other standard defined by the ANC Authority, for a hydrocarbon fire. N – The fire resistance properties of the prototype division have been tested in against a hydrocarbon fire (see notation H), for the times specified by the REI, after a shock test specified by the ANC Authority (for example MIL-SPEC-2030). R – The load bearing capacity, R, is the ability of a fire resisting division to support an external load when exposed to fire on either side for the duration required by the FI Matrix. The ability of a division to maintain its load bearing capacity is represented by the maximum permitted temperature of the structural core, as defined below: a. Steel divisions (Critical elements only) – 400°C b. Aluminium Divisions – 200°C c. Composite Divisions – the temperature where deterioration of the construction will occur to such an extent that the load carrying capability of the division will be impaired. Composite divisions with the 'R' notation will have been tested to the requirements of the FTP Code, part 10 or other standard agreed by the ANC Authority. Note: Other notations can be added to reflect other integrity requirements, e.g. Watertight, Gas Tight, etc.
Fire resisting divisions	Those divisions formed by bulkheads and decks which comply with the following: a. They shall be constructed of non-combustible or fire-restricting materials which by insulation or inherent fire-resisting properties satisfy the requirements of the ANC Rules. b. They shall be suitably stiffened. c. They shall be so constructed as to be capable of preventing the passage of smoke and flame up to the end of the appropriate fire protection time. d. Where required they shall maintain load-carrying capabilities up to the end of the appropriate fire protection time. e. They shall have thermal properties such that the average temperature on the unexposed side will not rise more than 140°C above the original temperature, nor will the temperature, at any one point, including any joint, rise more than 180°C above the original temperature during the appropriate fire protection time. f. A test of a prototype bulkhead or deck to the satisfaction of the ANC Authority in accordance with the FTP Code or other standard agreed by the ANC Authority shall be required to ensure that it meets the above requirements.
Fire Safety Systems Code	The International Code for Fire Safety Systems (FSS), as amended, as adopted by the International Maritime Organisation.
Fire Test Procedures Code	The International Code for Application of Fire Test Procedures (FTP), as amended, as adopted by the International Maritime Organisation.
Fire-restricting materials	Materials which have properties complying with the FTP Code or IMO Resolution MSC.40(64) or other standard agreed by the ANC Authority.
Firesafe Valve	A valve able to withstand a body temperature of 500°C for 10 minutes without leakage through the actuating spindle seal or valve seat seal of more than 160km/hr of fluid either at the elevated temperature or after cooling down.
First aid	Has the same meaning as ADDP 1.2.: Urgent and immediate lifesaving or other measures which can be performed for casualties or performed by the casualty, by non-medical personnel, when medical personnel are not immediately available.
First aid post (FAP)	Space outside the primary health facility and distributed through the ship prepared for the collection, resuscitation, stabilisation and, if necessary, the retention of casualties during incidents, prior to transfer to the primary health facility or evacuation.

Fitness for Purpose	The ability for a system, piece of equipment or component to meet its intended operational and engineering requirements within the stated operational and environmental parameters.
Fixed Pitch Propeller	A propeller whose blade angle at the section under consideration is fixed and cannot be changed.
Fixtures and fittings on Escape Routes	Doors, hatches, stairways, ladders, scuttles, panels, handrails, etc.
Flammable Liquids	Flammable liquid or mixtures of liquids contain solids in solution or suspension which give off a flammable vapour. It includes IMDG Class 3 Flammable liquids and Combustible liquids in accordance with Section 1.7 of NFPA 30. Flammable liquid includes the following definitions: a. Oil fuel b. Lube oil c. Low flash point fuel d. Other flammable liquids Fuels for military use are specified in STANAG 1135. For the transport of flammable liquids in packaged form, see Chapter 06, Rule 13.
Flash	Flash is a product of an explosion embracing transient flame and associated pressure wave and the electromagnetic wave.
Flashpoint	The temperature in degrees Celsius (closed cup test) at which a product will give off enough flammable vapour to be ignited, as determined by an approved flashpoint apparatus. The term 'low flashpoint' is a flashpoint of less than 60˚C. The flash points of common NATO fuels are given in STANAG 1135 Interchangeability of Fuels, Lubricants and Associated Products Used by Armed Forces of the North Atlantic Treaty Nations, Edition 5. The flashpoint of other common products is defined in the IMDG Code.
Fleet Protection	Refers to the use of countermeasures in a multiple platform situation where the host vessel may be required to deploy countermeasures to protect other vessels in the fleet.
Flexing Service Cables	Flexing service cables are those cables designed for use in applications where the cable may be subject to flexing whilst in service. Flexing cables are also used where a cable is to be subjected to a tight bend radius during or after installation, or when a cable is an environment with a high level of mechanical vibration.
Flight Deck	The clear area of deck where air capable Naval Vessels conduct helicopter operations including landing, parking and traversing. The flight deck area includes the total deck area outside of the helicopter landing area. The flight deck area shall provide the means to safely secure aircraft and equipment (e.g. stores and palnets) to the deck.
Floating Shock Platform	A floating barge used for shock testing of heavy equipment using underwater explosive charges.
Flow Rate	The velocity of the flow of sea water through a length of pipe. Measure as volumetric flow rate of a fluid where Flow Rate = Cross-Sectional area of pipe bore (m2) x fluid speed (m/sec).
Flushing Rig	A portable equipment, basically a pump and motor, which is capable of circulating fluid through a hydraulic system at a sufficiently high velocity to dislodge the particulate contamination adhering to the inside surfaces of pipes and fittings and carry it away in suspension to a filter where it is retained and removed from the fluid.
Flushing Valve	A valve permanently fitted at the control valve of each unit. The valves have three positions – 'Flushing', 'Normal', and 'Test'. In the 'Flushing' position the pressure

	main and the return and leakage lines from the pump station are connected together so that a flushing circuit is created without opening the system.
Foreseeable damage	See Damage.
Foreseeable Operating Conditions (includes Foreseeable Damaged Operating Conditions)	Conditions in which the Naval Vessel can be foreseen to operate in an intact, degraded, aged and/or damaged state in, normally defined in the OSI. Subject to ANC Authority approval, Foreseeable Operating Conditions will generally also be limited by the conscious imposition of an environmental or other operating restriction (e.g. a sea state/ speed restriction, a restriction on navigating sea ice, limiting the number of persons that may be embarked, specification of the ship life, reversionary modes and breakdown drills etc.).
Formal Messaging	This is defined as wireless messaging in accordance with ACP127/128
Founder	When the Naval Vessel sinks below the submergence limit (or where the Naval Vessel is sitting on the seabed and would sink below the submergence limit if the water depth is increased).
Fragment Simulating Projectile	A projectile that is manufactured to specified dimensions and material that strikes in such a way that it simulates a fragment.
Fragment Threat	A defined threat, which may be taken as a typical fragment from a particular weapon.
Free cross-sectional area of ventilation duct	The area calculated on the basis of the inner diameter of the duct, even in the case of a pre-insulated duct.
Freeboard	The minimum distance from the edge of the weatherdeck to the maximum depth of submergence of the intact Naval Vessel.
Frequency Switcher	An emitter where the frequency of the RF transmitted changes over a range of pulses or from pulse to pulse.
Fuel Rate	See Specific Fuel Consumption
Full Load Displacement	The displacement of the Naval Vessel when the Naval Vessel is in all respects complete, and is fully loaded with full complement, stores, fuel, water and payload.
Full Load Draught	The draught amidships at the Full Load Displacement.
Full-duplex	Communications in two directions at the same time (e.g. telephone). NB: the use of duplex on its own is not considered a valid statement.
Fuller's Earth	An absorbent clay, used for removing Chemical and Biological agents from equipment, clothing, etc.
Furniture and furnishings of restricted fire risk	Furniture and furnishings of restricted fire risk are such that: a. case furniture such as desks, wardrobes, dressing tables, bureaux, or dressers, are constructed entirely of approved non-combustible materials, except that a combustible veneer not exceeding 2 mm may be used on the working surface of such articles; b. free-standing furniture such as chairs, sofas, or tables, are constructed with frames of non-combustible materials; and for non-steel Naval Vessels fire restricting materials; c. draperies, curtains and other suspended textile materials have qualities of resistance to the propagation of flame not inferior to those of wool having a mass of 0.8 kg/m2, this being determined in accordance with the FTP Code or other standards agreed by the ANC Authority to ensure that it meets the requirements;

	d. upholstered furniture has qualities of resistance to the ignition and propagation of flame, this being determined in accordance with the FTP Code or other standard agreed by the ANC Authority; e. bedding components have qualities of resistance to the ignition and propagation of flame, this being determined in accordance with the FTP Code or other standards agreed by the ANC Authority to ensure that it meets the requirements; f. Additional smoke generation and toxicity requirements may be defined by the ANC Authority; and g. For Naval Vessels not constructed of steel, 'Furniture and furnishings of restricted fire risk' above shall be of fire restricting materials or non-combustible materials.
Fuselage Clearance Area (FCA)	The FCA is that area of the flight deck or landing area outside the TCA for which adequate obstruction clearance is provided to ensure that the fuselage of the helicopter hovering above the landing spot or landing within the TCA is protected. The FCA includes an allowance for hover dispersion.

Definitions - G

Term	Definition
Galley Range Ducts – Lower End	The junction between the duct and the galley range hood.
Galley Range Ducts – Upper End	The end of the gallery range duct nearest the exhaust outlet.
Galleys	Enclosed spaces containing cooking facilities with exposed heating surfaces, or which have any cooking or heating appliances each having a power of more than 5 kW.
Galvanic Action	Spontaneous electrochemical reaction between anode and cathode in electrical contact when immersed in an electrolyte resulting in corrosion of the anode.
Garbage	Garbage has the same meaning as MARPOL Annex V, reg 1.9: Garbage means all kinds of food wastes, domestic wastes and operational wastes, all plastics, cargo residues, incinerator ashes, cooking oil, fishing gear, and animal carcasses generated during the normal operation of the Naval Vessel and liable to be disposed of continuously or periodically except those substances which are defined or listed in other Annexes to the present Convention. Garbage does not include fresh fish and parts thereof generated as a result of fishing activities undertaken during the voyage, or as a result of aquaculture activities which involve the transport of fish including shellfish for placement in the aquaculture facility and the transport of harvested fish including shellfish from such facilities to shore for processing.
Gastight	Structure that is gastight must withstand a vacuum test of 5millibars.
General Emergency Alarm System	An alarm which is used to notify all embarked persons of an emergency incident.
General Purpose Outlet (GPO)	A low voltage socket outlet designed to accommodate a suitable plug connected portable equipment.
General radiocommunications	Operational and public correspondence traffic, other than distress, urgency and safety messages, conducted by radio.

Generator Plant	An assembly of two or more similar Generators, prime movers and associated auxiliaries.
Geospatial	Pertaining to the location and characteristics of natural or constructed features and boundaries on, above or below the Earth's surface; especially referring to data that is geographic and spatial in nature.
Global Maritime Distress and Safety System (GMDSS) identities	Maritime mobile services identity, the Naval Vessel's call sign, Inmarsat identities and serial number identity which may be transmitted by the Naval Vessel's equipment and used to identify the Naval Vessel.
Good/s	Items that can be transferred from one asset to another or from an asset to a stated location. For simplicity within this document, personnel will also be considered a transferable good.
Graceful (fail-safe) Degradation	A description of the mode of failure of a system which, with each successive equipment failure, loses only those functions that can be performed by that piece of equipment alone. I.e. that system may lose a little functionality with each failure, and there is no catastrophic failure of all, or most, of the system. This description also applies to the Systems Architecture.
Green Sea Loading	Mechanical loading due to wave slap. Green sea loading applies to exterior or unsheltered equipment on ships or craft. Mobile equipment that may be placed on vehicles that are carried topside or in landing craft should be considered susceptible to green sea loading.
Green seas	Wash and waves that break over the weatherdeck and exposed Naval Vessel parts.
Grey water	Has the same meaning as MEPC.227(64) 2.7: Grey water is drainage from dishwater, galley sink, shower, laundry, bath and washbasin drains and does not include drainage from toilets, urinals, hospitals, and animal spaces, as defined in regulation 1.3 of MARPOL Annex IV and does not include drainage from cargo spaces.
Gross Deformation	Gross Deformation is used in terms of being serious or total deformation. The extent of deformation that is classified as gross deformation will be different in each case. Gross deformation shall be deemed to have occurred when either of the following two functional performance criteria have been failed due to the extent of the deformation of the material: a. The functionality of the surrounding space, including passageways and systems is maintained; or b. The strength to support the operating loads before and after the defined blast event is maintained.
Gross Tonnage	Calculated in accordance with the tonnage measurement regulations contained in Annex I to the International Convention of Tonnage Measurement of Ships, 1969 or any successor convention. Gross tonnage (GT) is calculated based on the moulded volume of all enclosed spaces of the Naval Vessel and is used to determine things such as a Naval Vessel's manning regulations, safety rules, registration fees, and port dues.
Grossing Factors	Volume increase to account for unusable space in a storage compartment. The grossing factor takes into account non-utilisable space such as gangways and doorways, pipe, cable and ventilation runs, pillars, manholes, insulation, unit coolers.
Grounding and Bonding	See Earth Bond
Guard Channel	Is a frequency used on the aircraft band reserved for emergency communications for aircraft in distress.

Gun Permissible Maximum Pressure (Gun PMP)	Gun PMP Is the chamber pressure that should not be exceeded statistically by more than 13 rounds in 10,000 rounds under extreme service conditions.
Gyrocompass	A gyrocompass is a type of non-magnetic compass which is based on a fast-spinning disc and the rotation of the Earth to find geographical direction automatically, or means of providing heading, pitch and roll.

Definitions - H

Term	Definition
Habitability	Shipboard habitability encompasses Naval Vessels systems and facilities which satisfy the basic human needs of the embarked persons. Included are facilities and systems for eating, sleeping, personal hygiene, ventilation, climate control, and recuperative or leisure activity.
Half-duplex	Communications in two directions but not at the same time (e.g. push-to talk radio systems). NB The use of duplex on its own is not considered a valid statement.
Handling	The manipulation of an item and the associated equipment to enable safe movement, transport or transfer.
Handling/Loading Explosive Ordinance (EO)	Unpackaged Explosive Ordnance (EO) in the process of being installed or attached to its end use platform, i.e. aircraft, launcher or personnel. These activities may involve contact with personnel and metal structures, the performance of build in tests, making or breaking of electrical contacts, removing RF shielding arrangements, etc. Examples include: • installing a CAD into an aircraft; or • loading a containerised missile or decoy into its launcher. This also includes unloading of EO.
Hang Fire	When the time interval between initiation of a cartridge cap or the application of an electrical firing pulse and the initiation of the propellant charge is excessive. An undesired delay in the functioning of a firing system.
Hangar	Enclosed spaces for aircraft storage, maintenance and preparation, into and from which aircraft can be moved and to where crew and non-crew have access.
Hard Reboot	A hard reboot (also known as a cold reboot, cold boot or cold start) is when power to a computer is cycled (turned off and then on) or a special reset signal to the processor is triggered.
Hardened Collective Protective (COLPRO) System	A citadel integrated into the Naval Vessel structure.
Hardening	Increasing the inherent ability within a Naval Vessel system to resist damage. i.e. Blast Hardening, Shock Hardening etc.
Hardware	In computing, a generic term embracing all computer units, peripherals and ancillary equipment such as data preparation equipment.
Hard-wired	The process of connecting electrical systems or components, directly to each other, where each signal is transmitted over one unique path. (i.e. multiplexed signals are, by definition, not considered hard-wired).

Harmful Aquatic Organisms and Pathogens	Are aquatic organisms or pathogens which if introduced into the sea including estuaries, or into fresh water courses, may create hazards to the environment, human health, property or resources, impair biological diversity or interfere with other legitimate uses of such areas. Other commonly used terms include: Potential Marine Pest (PMP), Invasive Aquatic Species (IAS) and Non Indigenous Aquatic Species (NIAS)
Hawser	A large rope used for mooring, towing, etc.
Hazardous area	Any space that represents a risk to personnel or platform. This could be as a result of but is not limited to the following: a. flammable atmospheres including dust laden atmospheres; b. areas that contain electrical and electronic equipment with personnel access which could lead to electric shock; c. confined spaces or spaces where oxygen content may be depleted or a hazardous atmosphere is present; d. gas storage rooms; e. areas of high noise level; f. areas with equipment that may move unexpectedly; g. refrigeration spaces; h. cleaning or chemical stores; i. areas with radiation hazards (including sonar dome spaces, antennas etc.) j. all areas where Dangerous Goods are stowed, handled, maintained or used; k. areas where there is a risk of falling.
Hazardous Atmosphere	A hazardous atmosphere means any atmosphere that is immediately dangerous to life or health. Hazardous atmospheres include, but are not limited to, any of the following conditions where: • there is not a safe oxygen level. i.e. <19.5% • the concentration of oxygen increases the risk of fire. i.e. >23.5% • the concentration of flammable gases, fumes and the like exceeds 5% of their lower explosive limit (LEL), • any dust, fume, mist, vapour, airborne biological matter, gas or other substance exists, the presence of which may be harmful to persons. For example. Hydrogen Sulphide concentrations. i.e. > 5ppm
Hazard Classification Code (see also Classification of Dangerous Goods)	A UN Dangerous Goods Code Classification System giving both the Hazard Division and the Compatibility Group. Defined in the UN Recommendations on the Transport of Dangerous Goods – Model Regulations.
Hazardous Waste	Waste which, due to its nature and quantity, is potentially hazardous to human health and/or the environment and which requires special disposal techniques to eliminate or reduce the hazard.
Head	1. A water closet, a toilet, lavatory. 2. The pressure of a fluid or the component of that pressure may be expressed as the equivalent fluid head, defined as the height of a column of fluid that would exert the fluid pressure at its base.
Heading	In navigation, the heading of a vessel or aircraft is the compass direction in which the craft's bow or nose is pointed.
Heading Control	A type of vessel autopilot providing control of the Naval Vessels heading only. Does not track along a planned route, but only maintains a fixed heading.
Headquarters	Compartment from which damage control, fire-fighting or escape and evacuation activities are controlled.

Heat Release	Thermal energy released per unit time by an item during combustion under specified conditions.
Heave	Translational component of a Naval Vessel's motion in its vertical direction.
Heel	Temporary angle to port or starboard due to temporary external force such as caused by the wind.
Helicopter In Flight Refuelling (HIFR)	Helicopter in-flight refuelling is where a fuel line is winched up to a helicopter in flight and the crew refuel the aircraft in flight.
High dependency care	Has the same meaning as ADDP 1.2.: Involves constant supervision of a patient. Note: The patient will require complete bed rest, frequent treatments and observations, and will usually require intravenous therapy.
High Fire Risk Compartments or Areas	Compartments or areas where the risk of fire is heightened due to the nature of activity in the compartment/area, or where the consequences of a fire external to the compartment or area are increased. High fire risk compartments include but are not limited to: a. Main machinery spaces including diesel generator and gas turbine compartments and their uptakes and downtakes; b. Galleys; c. Switch boards or electrical control rooms; d. Tanks containing liquids with a flash point lower than 60º C; e. Compartments containing liquid oxygen; f. Fuel, petrol, oil or lubricant pump spaces; g. Garbage compartments; h. Aircraft refuelling (including HIFR), arming, landing or take off areas (i.e. hangars and flight decks); i. Magazines, RU Magazines etc. (need to be protected from fire); and j. Escape routes (need to be protected from fire).
High Pressure	Any fluid pressure greater than 24 bar / 350 psi.
High Pressure Cut-out	A pressure-responsive mechanism designed to automatically stop the compressor at a predetermined pressure above the design operating pressure range.
High Pressure Sea Water System (HPSW)	A system for supplying the high pressure sea water requirements of a Naval Vessel.
High Speed Craft	A craft capable of a maximum speed, in metres per second (m/s), equal to or exceeding (3.7 x Displacement^0.1667) where the displacement in cubic metres corresponds to the design waterline.
High Value Compartments	See: Vital Spaces.
High Voltage	See: Voltage.
Host Vessel	The vessel into which the hull mounted sonar system is to be integrated.
Hot Gun	The cumulative heating effects of the gun barrel during extended firing serials creates the situation whereby the propelling charge and/or projectile can, if left within the barrel for extended periods of time, heat to a temperature sufficient to produce a heat-initiated ignition of explosives. This condition is known as cook off.
Hot Surfaces	Any surface at a temperature greater than 160°C.

Hot Swap	The ability to swap recording mediums without powering down the system.
Hover	The condition where the platform is at zero speed: a. relative to the seabed for Naval Vessel; or b. relative to the Naval Vessel and at constant height for aircraft.
Hull	The frame or body of a Naval Vessel, exclusive of masts, yards, sails, and rigging.
Hull Marks	External marks on a Naval Vessel's hull that serve a functional purpose.
Hull Mounted Sonar (HMS)	A sonar system in which the primary transducers are attached to the hull. In these Rules, the term HMS refers to the whole Hull Mounted Sonar system, including the sonar dome, sonar array, cabling, sonar processing systems, recording systems and operator interfaces.
Hull Shock Factor (HSF)	Refers to the damage potential of an UNDEX to the structure of the hull plating or pressure hull.
Human Machine Interface	The direct inputs and output interactions between the human and technological systems.
Human Systems Integration	Human Systems Integration is a multi-disciplinary strategy for the design and lifecycle support of systems. It is executed as a systems engineering activity based on human-centric issues. The main aims of HSI are to maximise total system performance and minimize life cycle cost. HSI can be considered a management process within which all elements relating to a human within the project can be appropriately controlled and handled. HSI, as considered within the context of Australian Defence Forces, organises and integrates the areas of human needs and capabilities into a framework of six domains: • Human Factors Engineering • Crewing • Personnel • Training • Safety • Health Hazards
Hydraulic Equipment	A complete piece of hydraulic machinery capable of performing a specific function on its own, when supplied with fluid power.
Hydraulic System	All interconnected equipment arranged exclusively to supply and control fluid power in such a way as to move a specified load in a specified manner.
Hydrographic	Measurement of the physical characteristics (depth, temperature etc.) of a body of water.
Hygienic	Is maintained in a healthy and clean state.
Hyperbaric system	Means a system and/or associated equipment which provides compressed gases for human consumption. Hyperbaric systems include: diving systems, recompression chamber systems, fire fighting and escape breathing systems, as well as compressors and gas cylinders utilised for breathing purposes

Definitions - I

Term	Definition
Identification	The process of comparing measured parametric features with a list of characteristic features which are held in a threat library.
Ignitability	A measure of the ease with which an item can be ignited under specific conditions.
Ignition source	A source of energy sufficient to ignite a flammable atmosphere and includes naked flames, exposed incandescent material, electrical welding arcs, and electrical or mechanical equipment not approved.
Immersion Suit	Protective suit which reduces the body heat loss of a person wearing it in cold water.
Impressed Current Anode	The electrode connected to the positive terminal of an impressed current power supply.
Impressed Current Cathodic Protection (ICCP)	A method to cathodically protect a structure with a direct current supplied by an external power source.
Improvised Explosive Device (IED)	An IED is an explosive device (bomb) constructed and deployed in ways other than in conventional military action. It may be constructed of conventional military explosives, such as an artillery shell, attached to a detonating mechanism. IEDs are commonly used as roadside bombs
Incendive Sparking	Friction, impact and abrasion processes involving rust and light metals (e.g. aluminium and magnesium) and their alloys may initiate an aluminothermic (thermite) reaction which can give rise to particularly incendive sparking.
In-Service Growth Margin	Is a reserve of any or all of displacement, stability, propulsion power, generator capacity, services, accommodation etc. over and above that required to meet the requirements of the OSI, and intended solely to cater for the growth or increase in demand that inevitably occurs through the life of a Naval Vessel. The In-Service Growth Margin allows for unattributable growth to the platform throughout its service life.
Incident Management System	An automated computer system which aides damage control by providing remote control and monitoring of damage control systems at Damage Control Central, Repair Bases and selected locations throughout the Naval Vessel.
Incinerator ashes	Incinerator ashes has the same meaning as MARPOL Annex V, Reg 1,10: “Incinerator ashes means ash and clinkers resulting from shipboard incinerators used for the incineration of garbage”.
Incompatible Operations (Ops)	incompatible operations refer to military activities that cannot be effectively conducted simultaneously due to conflicting objectives, resources, or strategic considerations. These operations are mutually exclusive and would hinder each other's success if undertaken concurrently.
Independent Magazines	Independent magazines are portable magazines (e.g. containers) greater than 3m3 to which the requirements for integral magazines shall be applied where applicable.
Individual Protective Equipment	The personal clothing and equipment required to protect an individual from biological and chemical hazards and some nuclear effects.
Individual Readiness	A prescribed standard of physical, medical and dental fitness used in conjunction with a member’s trade skill, weapons handling ability and availability, used to assess a Defence member’s suitability to deploy on operations.
Inertial demand	See Dynamic demand.

Infrared Imagery	Imagery produced as a result of sensing electromagnetic radiation emitted or reflected from a given target surface in the infrared portion of the electromagnetic spectrum.
Infrared Radiation	Radiation emitted or reflected in the infrared portion of the electromagnetic spectrum.
Inherent Safety	The ability of an item to retain its safety under specified accidental or intended stimuli due to its design, safety features and materiel employed as an inseparable part of its system.
Inner Bottom	Inner shell of plating in lower section of vessel sometimes called "tank tops".
In-service	A Naval Vessel is in-service at all times after delivery unless it is declared not in service by the ANC Authority, for example when undergoing repairs at a shore based facility, undergoing conversion or is laid-up.
Inspection and Maintenance	All measures for the preservation and/or restoration of the original conditions of the technical elements of a system as well as measures for the determination and evaluation of the actual material condition.
Integrated Bridge System (IBS)	A combination of systems which are interconnected in order to allow centralised access to sensor information or command/control from workstations, with the aim of increasing safe and efficient Naval Vessel's management by suitably qualified personnel.
Integrated Control System	A centralised and interconnected network of electronic systems that streamline operations, optimise performance and enhance safety by integrating and co-ordinating various shipboard functions such as navigational, steering, propulsion, or power generation.
Integral Magazines	Integral magazines are those bounded by the elements of the main hull structure. They are specifically designed and constructed for the safe permanent stowage of the main outfit of designated EO.
Integrated Guided Weapon Magazine	As implied by their name, integrated magazines form an integral part of the guided weapon launch system. Transfer of guided weapons to the launcher is achieved automatically. Integrated systems do not include canisterised weapons that are classed as loaded launchers.
Integrated Navigation Bridge System (INBS)	An IBS that incorporates INS functionality
Integrated Navigation System (INS)	A composite navigation system which performs at least the following tasks: collision avoidance, route monitoring thus providing ‘added value’ for the operator to plan, monitor and safely navigate the progress of the Naval Vessel.
Integrated Platform Survivability	A level that aligns each element of the survivability domain such that they support and reinforce each other and to avoid additional effort being placed in one or more areas to make a platform particularly robust in those areas without a cost effective overall gain in survivability.
Integrity	Capability of a system to satisfactorily perform the required functions under all the stated conditions within a stated period of time.
Intensive care	Has the same meaning as ADDP 1.2.: “Involves total management and constant monitoring of a patient by more than one nurse”. Note: The patient exhibits extreme disturbance of health requiring complete bed rest, continuous treatments, intravenous therapy, and may require airway and respiratory management.
Intercept / Interception	The process of capturing transmitted signal energy in space, frequency and time

Interconnected	Describes a connection between two systems that is used to pass data required by the other system.
Interface	Means the physical or logical boundary between two or more Elements. For logical interfaces, information, data, signals, is passed across the interface. Physical interfaces can be mechanical couplings, or points where electrical energy is transferred.
Interface Control Document	Provides a record of all interface information including drawings, diagrams, tables, definitions, characteristics and constraints of the interfacing items generated for a project.
Interlock	A device that makes operation of a switching device dependent upon the position or operations of one or more other pieces of equipment.
Intermittently-Manned Spaces	Spaces connecting two continuously manned spaces. Spaces not continuously manned, but occupied for more than 5 minutes in any hour, for instance whilst rounds are being undertaken.
Internally Excited Vibration	Is vibration of machinery generated by mass unbalance of a rotor. This type of vibration is classed as TYPE II Vibration.
International voyage	A voyage from a country to a port outside such country, or conversely. It also includes any voyage that takes the vessel outside of its own country's territorial waters.
Interoperability	The ability of systems, units or forces to provide the services to and accept services from other systems, unit or forces and to use the services so exchanges to enable them to operate effectively together.
Is to be	Indicates a mandatory requirement.
Isolated	Separated from all possible sources of electrical energy (supply) and rendered incapable of being energised unintentionally.
Isolation	The disconnection, separation and dissipation of every source of energy from the equipment in such a way that this disconnection and separation is secure.

Definitions - J

Term	Definition
Jitter	Intentional or unintentional variations of the time interval between pulses of RF energy generated by an emitter.
Joint	In the case of interoperability, to mean communications between all three servicers of the ADF.
Joint Interface Control Officer (JICO)	Joint Interface Control Officer (JICO) is the senior multi-TDL interface control officer (ICO) in support of Joint Task Force (JTF) operations and national (homeland) tactical networks. The JICO is responsible for planning, designing the Multi-TDL architecture (MTA), monitoring system performance and procedures, and managing the joint Multi-TDL network (MTN) to ensure the JTF objectives can be achieved. On completion of the operation or exercise the JICO is responsible for analysing the data and reporting issues to the JTF, commands and participants. The JICO may be

	supported by regional and sector ICOs (RICOs and SICOs), as appropriate for the operation and complexity of the MTA.
Joint Operation	An operation in which elements of more than one Service of the same nation participate.

Definitions - K

Term	Definition
Keel Shock Factor (KSF)	The vertical component of the HSF calculated at the keel and is generally used to describe the damage potential to the Naval Vessel's equipment from an UNDEX.
Kick off Velocity	The peak velocity imparted to the hull plating or other structural members in direct contact with the water.

Definitions - L

Term	Definition
LAeq,8h	LAeq,8h means the eight-hour equivalent continuous A-weighted sound pressure level in decibels (dB(A)) referenced to 20 micro Pascals, determined in accordance with AS/NZS 1269.1:2005 Occupational noise management—Measurement and assessment of noise emission and exposure.
Landing Area	The landing area consists of the Touchdown Clearance Area, Fuselage Clearance Area and the Rotor Clearance Area. These areas are calculated for Aft, Amidships and Forward clearance for single and dual main rotor helicopters. (See also Landing Spot)
Landing spot	Unique position marked for aircraft landing and storage which will allow simultaneous landing at other landing spots. (See also Landing Area)
Laser Class	Lasers are classed in accordance with AS/NZS IEC 60825.1. 2011.
Laser Radiation	Electromagnetic radiation emitted by a laser product between wavelengths of 100nm and 1mm which is produced by controlled stimulated emission.
Laser Safe to Fire Zone (LSTFZ)	The Laser Safe To Fire Zone (LSTFZ) reduces the likelihood of firing the Laser Range Finder (LRF) at adjacent equipment. When the LSTFZ has been appropriately set using the azimuth and elevation software cut-outs the laser range finder is prevented from radiating the main mast and Naval Vessel's structure.
Lateral Acceleration	Defines the acceleration in the athwartships direction experienced at any specified location on a Naval Vessel. This acceleration is usually relative to the horizontal plane and as such does not include the component of the gravitational acceleration acting in the plane of the sloping deck. Different ship motion programs define lateral accelerations in different terms and in some codes, the 'Lateral Acceleration' which is output should more accurately be referred to as the LFE.

Lateral Force Estimator	Defines the lateral acceleration experienced at any specified location on a Naval Vessel relative to the Naval Vessel's deck. Unlike a 'pure' lateral acceleration, the LFE, as well as including the accelerations of the Naval Vessel at a particular location, takes into consideration the component of the gravitational acceleration acting in the plane of the deck. The combined effect of these acceleration components tends to have an adverse impact on the incidence of sliding and toppling of unrestrained equipment and personnel when above the nominal roll centre.
Launching Arrangements	Launching station and its equipment.
Launching Equipment	Equipment designated for transferring survival and rescue craft from its stowed position safely to the water and from the water to the stowed position.
Launching Stations	Designated positions for launching survival and rescue craft. Launching stations may coincide with evacuation stations.
LC,peak	LC,peak means the C-weighted peak sound pressure level in decibels (dB(C)) referenced to 20 micro Pascals, determined in accordance with AS/NZS 1269.1:2005 Occupational noise management—Measurement and assessment of noise emission and exposure.
Leak Off	A pipe to carry excess fluid should the pressure in the system become excessive due for instance to expansion of fluid.
Leisure Craft	A vessel used solely for recreation
Length Between Perpendiculars	That length measured between perpendiculars taken at the extremities of the Full Load Displacement. For High Speed Craft, it is the overall length of the underwater watertight envelope of the rigid hull, excluding appendages, at or below the design waterline in the displacement mode with no lift or propulsion machinery active.
Length Overall	That distance measured parallel to the waterline at the Full Load Displacement from the fore side of the stem to the after side of the stern or transom.
Letting Go	This is an anchoring operation where the anchor is released under its own weight from the "slip" (normally termed brake slip), which allows the cable to run freely. Once released the cable is controlled by the use of a brake. If the water is too deep to "let the anchor go" the anchor cable will be veered under power. In this situation the capstan clutch remains engaged, the brake is released and the cable is paid out under power.
Lifting appliance	Stationary or mobile cargo-handling appliances for suspending, raising, lowering or moving loads from one position to another while suspended or supported.
Lifting and Handling Equipment	Specially designed equipment used for storage, assembling, disassembling, handling, transporting, lifting, positioning, rotating or containing conventional weapons, ammunition, explosives, and related components.
Light Weight Shock Machine	Machine for shock testing of light weight equipment to MIL-DTL-901.
Lightship	Lightship condition is a Naval Vessel complete in all respects, but without consumables, stores, cargo, aircraft, embarked persons and effects, and without any liquids on board except that machinery and piping fluids, such as lubricants and hydraulics, are at operating levels.
Lightship Displacement, or Lightweight	The displacement of the Naval Vessel in the lightship condition.
Lightweight	See: Lightship Displacement.

Limit state	A condition at which a structure or structural member fails to perform the function expected of it.
Limit state design	Design to avoid a limit state with an appropriate degree of certainty.
Limit Stops	These physically limit the 'training' and/or 'elevation' or 'depression' of the gun or launcher mounting and include some means of cutting off or reducing the driving torque as it comes up against a buffer or stop. In relatively unobstructed mountings, limit stops provide the simplest and safest method of the normal firing arc.
Limiting Displacement	The maximum weight a Naval Vessel can displace without adversely affecting Naval Vessel stability, Naval Vessel structure or design speed.
Limiting Draught Marks	Marks fixed externally to a Naval Vessel that define the maximum allowable draught. They are generally positioned to ensure the Naval Vessel has sufficient reserve buoyancy
Linear Actuator	A device of cylindrical construction having a moving piston and rod assembly.
Lined Compartment	Any compartment or space which has had an insulation layer for acoustic or environmental purposes added to any boundary surface.
List	Permanent angle to port or starboard due to an asymmetric moment such as caused by shifted weights or damage.
Live Ammunition	Ammunition containing explosives, in contrast to drill ammunition which contains no explosives.
Load Line Marks	For Naval Vessels subject to the International Convention on Load Lines 1966/1988, marks fixed externally to the side of a Naval Vessel to ensure that it has sufficient freeboard. For Naval Vessels not subject to the International Convention on Load Lines 1966/1988, amidships limiting draught mark serves a similar purpose.
Loaded (EO)	Explosive ordnance which has been installed on or attached to the host platform and all loading procedures have been completed.
Loaded Launcher	A magazine designed for the permanent stowage and launch of a guided weapon.
Locating	The finding of Naval Vessels, aircraft, units or persons in distress.
Loose Gear	An article of ships equipment by means of which a load can be attached to a lifting appliance but that does not form an integral part of the appliance or load.
Low Dependency Care	Has same meaning as ADDP 1.2.: "Involves minimal supervision of a patient." Note: The patient is mildly ill, requires little treatment or observation is ambulant, has few medications, and has no intravenous therapy.
Low flame-spread	Means that the surface will adequately restrict the spread of flame, this being determined in accordance with the FTP Code or other standards agreed by the ANC Authority.
Low flash point fuel	Liquid petroleum product with a flash point of less than 60°C (closed cup) carried on board and used for the role of the Naval Vessel e.g. aviation, vehicles, Naval Vessel's emergency power generation or Naval Vessel's emergency fire pumps.
Live	Energised or subject to hazardous induced or capacitive voltages.
Low Pressure	10 bar and below.
Low Pressure Sea Water System (LPSW)	A system for supplying the low pressure sea water cooling requirements A system for supplying the low pressure sea water cooling requirements.

Low Solar Absorption	Greater than 65% reflectance in near infra-red region (800nm).
Low Voltage	See: Voltage.
Low-Location Lighting	Electrically powered lighting or photo luminescent indicators placed throughout a Naval Vessel to readily identify escape routes and escape exits.
Lube oil	Petroleum fractions, vegetable oils or synthetic liquids with a flash point greater than 60°C used for the lubrication of machinery onboard.

Definitions - M

Term	Definition
Machinery control position	An area or areas within the machinery spaces from which the propulsion and manoeuvring machinery may be directly monitored and controlled.
Machinery control room	An area or room, other than the Bridge, from where the propulsion and manoeuvring machinery may be remotely monitored and controlled.
Machinery Enclosure	Machinery may be installed in an enclosure for the reduction of noise, for operation in a CBRN environment and/or to provide a fire boundary. Enclosures containing machinery are to be treated as unattended machinery spaces, independent from the spaces that contain them.
Machinery Spaces	Those machinery spaces of Category A and other spaces containing propulsion machinery, boilers, oil fuel units, steam and internal combustion engines, generators and major electrical machinery, oil filling stations, oil transfer and handling equipment, refrigerating, stabilising, ventilation and air conditioning machinery, and similar spaces, and trunks to such spaces. Also included are steering gear spaces and other spaces containing hydraulic power equipment with an aggregate power rating of more than 110 kW and which use flammable hydraulic fluids.
Machinery Spaces of Category A	Those spaces and trunks to such spaces which contain either: a. internal combustion machinery used for main propulsion; b. internal combustion machinery used for purposes other than main propulsion where such machinery has in the aggregate a total power output of not less than 375 kW; c. any oil-fired boiler or oil fuel unit, or any oil-fired equipment other than boilers, such as inert gas generators, incinerators, pyrolysis units, gasification equipment etc.; or d. gas turbines.
Magazine	Magazines are stowage compartments of ‘walk-in proportions’ having common boundaries with a platform’s structure that are specifically designed for the permanent or temporary stowage of EO as described in the EOS&H Certificate. Magazines may contain exclusively one type of EO such as missiles or torpedoes, or mixed types of EO depending on Naval Vessel size and design. Includes Magazines, WSCs, GW Magazines and Small Magazines. Spaces (integral magazines, independent magazines, small magazines, magazines boxes and pyrotechnics magazines) used for the storage of munitions, explosives and pyrotechnics for use by Naval Vessel Embarked Personnel, and by Embarked Forces.

	Note: Where EO is carried in cargo spaces, no space is considered a Magazines, and the requirements of IMDG Code, and AS 3846 - The handling and transport of dangerous cargoes in port areas, shall apply.
Main Broadcast System	A system that permits one-way verbal communication to all embarked persons, in merchant shipping known as public address system. Where in any referenced IMO documents the term “public address system” is used, it should be read to mean “main broadcast system” for the purpose of the ANC Rules.
Main electrical services	All electrical loads required for maintaining the operational status of the Naval Vessel and habitable crew conditions.
Main Fire zones	A division of the hull, superstructure and deckhouses to contain fire and smoke. They are formed by continuous "A(S)" class divisions, the mean length and width of which is limited. The length or width of a main fire zone is the maximum distance between the furthermost points of the bulkheads bounding it. Main fire zones may be co-incident with damage control or smoke containment zones.
Main Line of Keel	The straight portion of the USK that would contact docking blocks, projected forward or aft as necessary. As designed, this is usually a straight line.
Main Magazine	Any magazine of 'walk-in' proportions which has a common boundary with the vessel's structure.
Main sub-division compartment	An enclosed compartment into which the main hull of the Naval Vessel is divided so as to preserve the maximum amount of buoyancy following damage consistent with the convenient working of the Naval Vessel. Main subdivision compartments are: a. weathertight; b. watertight to the point beyond which the Naval Vessel will be lost as defined in the stability standard; c. able to provide structural fire protection; d. smoke tight; e. gas tight if so determined by the ANC Authority.
Main Switchboard	Electrical switchboard intended to connect directly to the Naval Vessel's generators and distribute electrical power to the Naval Vessel’s major loads (e.g. propulsion motors or service switchboards).
Major Fleet Unit	A major combatant vessel such as destroyers, frigates, submarines, aircraft carriers, etc.
Malicious Act	An intentional act to cause damage not including weapon attack, e.g. collision.
Manned Spaces	1. Continuously Manned Spaces – Spaces such as Messes and Control areas which are expected to be continuously manned during any state or condition for more than 20 minutes at any one time. 2. Intermittently Manned Spaces, including: a. Spaces connecting two continuously manned spaces. b. Spaces not continuously manned, but occupied for more than 5 minutes in any hour, e.g. whilst rounds are being undertaken.
Manoeuvring equipment	Manoeuvring equipment includes the use of conventional electric and electro hydraulic steering gear as well as, but not limited to, Azimuthing thrusters, Athwartships thrusters, water jets and propulsion machinery in the case of ships fitted with more than one shaft.
Manual	The mode of operation in which that operator must initiate each individual action, one at a time, via a remote control system or portable control terminal.

Manual manoeuvring workstation	A workstation at which the helmsman manoeuvres the Naval Vessel manually in normal conditions.
Manual Mode	In manual mode, the system requires input and authorisation from the operator before the system can perform its functions.
Margin	An allowance for predictable and unexpected increases in an estimate of a physical property such as weight. A margin is the Naval Vessel Operators attempt to manage the risk associated with requirements setting, design, build and subsequent in-service changes. Margins, or contingency allowances, on systems and structure are included to manage the impact of uncertainties due to immaturity of the design, during design and build. Additional margins are included to allow for design changes once the capability is in service. (MAP 01-070-,2007).
Margin Line	is a line drawn at least 76 millimetres below the upper surface of the bulkhead deck at side. (US NAVSEA DPC 079-1, MCA Yacht Code Ch.2)
Marine Diesel Engine	Marine diesel engine has the same meaning as MARPOL Annex VI Reg 2.21: "Marine diesel engine means any reciprocating internal combustion engine operating on liquid or dual fuel, to which regulation 13 of this Annex applies, including booster/compound systems if applied. In addition, a gas-fuelled engine installed on a ship constructed on or after 1 March 2016 or a gas-fuelled additional or non-identical replacement engine installed on or after that date is also considered as a marine diesel engine".
Marine Evacuation Systems	Appliance for the rapid transfer of persons from the evacuation station into a floating survival craft.
Maritime safety information	Navigational and meteorological warnings, meteorological forecasts and other urgent safety related messages broadcast to Naval Vessels.
Marker Plate	Also known as Tally Plate, Name Plate or Label. A generic term for a piece of material fixed to the structure of a Naval Vessel, an item of equipment and its sub-assemblies, providing information or identification.
Master Décor Scheme	The Master Décor Scheme (MDS) details the type, colour and finish of materials and equipment used within the accommodation areas of the Naval Vessel.
Materiel	Materials and equipment utilised for defensive or warfare capability or objectives.
Maximum Ahead Service Speed	Maximum ahead service speed is the greatest speed which the Naval Vessel is designed to maintain in service at sea at which the deepest seagoing draught.
Maximum Astern Speed	Maximum astern speed is the speed which it is estimated the Naval Vessel can attain at the designed maximum astern power at the deepest seagoing draught.
May	Expresses permissive guidance to the contractor, by indicating methods of achieving requirements or additional attributes, which are acceptable to the ADF and others. The contractor is not obliged to demonstrate any such item of guidance within the system and non-acceptance cannot be based on such guidance being ignored.
May be	Indicates that an option exists which if preferred, must have prior approval from the Chief Naval Engineer or delegated authority.
May not	Expresses permissive guidance to the contractor. A similar definition applies for 'may'.
Mechanical Locking	Hydraulic locking or any other condition where the equipment becomes mechanically locked and so cannot be operated.

Medical Consultation Facilities	Designated area on board for providing primary health care to embarked persons.
Medical Practitioner	Has the same meaning as in Health Insurance Act 1973: "A person who is registered under the National Law in the medical profession."
Medical Stores	Includes stores for both first aid and Naval Vessels hospital.
Medium dependency care	Has the same meaning as ADDP 1.2.: "Involves some supervision of a patient" Note: the patient requires bed rest, periodic treatments and observations, and may require intravenous therapy.
Medium Pressure	10 - 70 Bar.
Medium Weight Shock Machine	Machine for shock testing medium weight equipment to MIL-DTL-901.
Memorandum Item	A record within the survey records of the Naval Vessel, which documents: a. an unusual feature which should be recorded for future reference; or b. that there is a non-compliance with the relevant rules, standards, criteria or convention but the arrangement has been justified as fully equivalent to the intent of the Standard in accordance with the ANC Framework.
Metadata	Data describing context, content and structure of records and their management through time.
Microbiologically Influenced Corrosion (MIC)	Corrosion influenced by the presence of naturally occurring bacteria in seawater or fresh water. Such bacteria are responsible for accelerated corrosion in tanks, bilges and piping systems.
Millers Flap	Mechanical device used for the safe movement of EO on ammunition routes at hatches below which the vertical drop height is in excess of 6 metres and for use as a platform when transferring EO into and out of a cruet employing guide wires.
Minehunting	The employment of Naval Vessels, airborne equipment and/or divers to locate and dispose of individual mines.
Minesweeping	The technique of searching for, or clearing mines using mechanical or explosive means, which physically removes or destroys the mine, or produces, in the area, the influence fields necessary to actuate it.
Miniature Ensuite	Shower, Toilet, and Basin facilities arranged to minimise space. Intended for Submarines and Small support craft where space is limited.
Minimum Operating Condition	An estimate of the lightest operating displacement that can be achieved or is allowed in peacetime. All load variables are to be between 15% and 35% of Full Load values, at the minimum values that can be achieved and still comply with stability requirements. Tanks set aside for overflow, renovating, contaminated liquids and the like are generally part full or at operating level. Garbage stores are part full.
Minor Structure	Structure that does not in any way contribute to the main structural strength or watertight integrity of the vessel. Examples of minor structure are linings and false deckhead, partitioning, lockers and furnishings and non-watertight bulkheads.
Misfire	• Failure to fire or explode properly. • Failure of a primer of the propelling charge of a round or projectile to function wholly or in part. • Failure of the round to be ejected from the launcher after the application of a firing stimulus.

Mission Abort Shock Loading	The shock loading at which a vessel is expected to survive a single UNDEX, but may need to abort its mission and return to base under its own power.
Mission Critical Functions	Those functions that that the Naval Vessel must have and must retain after a damage scenario(s), to fulfil the vessel's post damage essential capability as agreed in the OSI.
Mission Critical Shock Loading	The Shock loading below which a vessel is expected to survive a single UNDEX and continue with its mission.
Mission equipment	Equipment required for the boat to complete the mission assigned to it. This may be permanently installed or fitted/carried loose as required for the mission.
Mission Planning	To design, or to arrange the scheme of, the mission. In tactical command modes, for example, the mission Planning related tasks include defining the mission, planning the mission (e.g.. establishing directives, rules of engagement, standard operating procedure, tactics, plans, policies and developing schedules), defining Warfare Area control tasks, implementing offensive mission plans and evaluating the mission..
Mode Action Stations	The mode where the full operational capability of the Naval Vessel is able to be employed. Systems including Damage Control are ready for the most intense use within their and the Naval Vessel's complements capabilities. Action Stations normally can be maintained for only limited periods.
Mode Cruising Watches	The mode where there is no anticipated threat. In this mode operational level maintenance may be undertaken. This mode can be maintained continuously unless the Naval Vessel is in a non-operational state.
Mode Defence Watches	The mode where the Naval Vessel is operating in a condition which enables it to assume Action Stations in a timely manner to meet or contain a threat. In this mode all sensors and weapons are able to be operated to the limits of their capability. Defence Watches can be maintained for 24 hours/day for prolonged periods.
Model	A physical, mathematical, or otherwise logical representation of a system, entity, phenomenon, or process. Examples: mathematical models of sensor response; or digital information flow over a network; or computer-aided design models of buildings, armoured vehicles, aircraft; or physical and cognitive process modelling of human beings.
Modelling and Simulation (M&S)	The use of models, including emulators, prototypes, simulators, and stimulators, either statically or over time, to develop data as a basis for making managerial or technical decisions (US DoD 2018).
Modules	This can be hardware or software. It describes some sort of independence (standalone ability) in functioning and testability.
Monochromatic	Electromagnetic radiation having only one wavelength.
Mono-static	A mono-static system uses the same location for transmission and reception.
Motion Induced Fatigue	Fatigue of Naval Vessel's personnel, which results from longer term exposure to Naval Vessel motions, and is usually attributed to the additional energy expended in maintaining balance or concentrating on a task while subject to motions.
Motion Induced Interruption (MII)	The occasion when a crew member would have to stop working on a task to hold on to prevent loss of balance.
Motion Sickness Incidence (MSI)	The percentage of personnel on board that vomit within two hours of exposure to a defined seaway.
Movement	To change the location or orientation of an item within a dedicated space.

Multi Spot Air Capable Ships	Multi spot air capable ships are those with flight decks capable of operating more than one aircraft simultaneously. This may be by having a larger flight deck or by having more than one flight deck. Ships must be certified to operate with particular types of aircraft.
Multipath	Multiple radar signals that bounce of many objects but end up at the same point.
Multi-Static	Refers to when the sonar transmitter/s and receiver/s are spatially separate, usually on different platforms. As an example, a helicopter dipping sonar may provide active transmission to personify a particular area of the ocean and the echoes from contacts in the area can be detected by surface vessels which are some distance away from the helicopter.
Muster Station	An area of relative safety where embarked persons can be gathered in the event of an emergency and prepared for evacuation. Muster stations may coincide with evacuation stations and are otherwise known as emergency or assembly stations.

Definitions - N

Term	Definition
N Class divisions	Class N fire divisions are fire resistant divisions formed by bulkheads and decks (overheads) that are designed to protect against structural failure and prevent the passage of flame or hot gases when exposed to a rapid rise hydrocarbon fire exposure which capability is unaffected by a shock event. (MIL-STD-3020 DOD Standard Practice Fire Resistance of US Naval Ships and MIL-STD-901 Shock Tests, High-Impact Shipboard Machinery, Equipment & Systems, Requirements).
N-0 Class Division	When exposed to fire for 30 minutes after the shock test there is no passage of flame or hot gases to the end of 30 minutes. There is no temperature rise requirement. (Reference: DDS 078-1 Composite Material, Surface Ships, Topside Structural and Other Topside Applications – Fire Performance Requirements). Nominally, N-0 divisions are constructed from steel of 4.5mm thick (MIL-STD-3020 Fire resistance of US Naval Surface Ships).
N-30 Class Division	When exposed to fire for 30 minutes after the shock test, there is no passage of flame or hot gases, and the prescribed temperature rise is prevented on unexposed surfaces for 30 minutes (MIL-STD-3020 Fire resistance of US Naval Surface Ships).
N-60 Class Division	When exposed to fire for 60 minutes after the shock test there is no passage of flame or hot gases and the prescribed temperature rise is prevented on unexposed surfaces for 60 minutes.
NATO Stock Number (NSN)	A discrete 13-digit identification number for each ‘codified’ item of supply.
Naval Stores	All tools, spares and other equipment required to ensure that the Naval Vessel will function.
Naval Vessel	A naval vessel is any maritime vessel operated for State purposes by Defence whether owned, leased, borrowed, or otherwise appropriated and excludes civilian vessels that are used for private or for purely commercial use.
Naval Vessel Operator	A Defence Service or Group that operates a Naval Vessel shall be determined to be the Naval Vessel Operator (NVO).

NAVAREA X	Is the sea area with the boundaries mentioned for Navarea X in subsection 2.2.2 of IMO Circular MSC.1/Circ.1403 Revised NAVTEX Manual.
Navigation	The process of planning, recording and controlling the movement of a Naval Vessel from berth to berth, including operations and evolutions undertaken during the voyage.
Navigation bridge	See Bridge.
Navigation systems	Systems, equipment and aids used to assist in navigation.
Navigational Limit	If a particular draught mark is greater than all other draught marks then it defines the navigational limits.
Navigational Marks	Draught marks indicating the draught of the main hull.
Net Explosive Quantity	The equivalent quantity of TNT in kilograms that the explosive substance represents in a container or magazine. It does not include such substances as white phosphorous, war gases or smoke and incendiary. (see also ENEQ)
Niche Areas	Has the same meaning as MEPC.207(62)- 2011 Guidelines for the control and management of ship's biofouling to minimise the transfer of invasive aquatic species: "Niche areas mean areas on a ship that may be more susceptible to biofouling due to different hydrodynamic forces, susceptibility to coating system wear or damage, or being inadequately, or not, painted, e.g., sea chests, bow thrusters, propeller shafts, inlet gratings, dry-dock support strips, etc.".
No-Fire Threshold (NFT)	The value of power or current at which the probability of firing an EED is 0.1% at the 95% single-sided lower limit of confidence.
Non Vital Spaces	All spaces not considered vital to the safety of embarked persons or a Naval Vessel's safety, or not vital for the ability for a Naval Vessel to complete its intended purpose or mission
Non-Coherent Electronic Attack	Electronic attack techniques based on noise or barrage jamming.
Non-combustible material	Material which neither burns nor gives off flammable vapours in sufficient quantity for self-ignition when heated to approximately 750°C, this being determined in accordance with the FTP Code or other standard agreed by the ANC Authority.
Non-crew	See Embarked Persons.
Neutral	The conductor of a multi-wire system that is maintained at an intermediate and approximately uniform potential in respect of the active or outer conductors, or the conductors of a two wire system that is connected to earth at its origin.
Non-Flexing Service Cables	Non-flexing cables are those cables not designed for flexing service. There are constructed with the larger stranded conductors and thus are not suitable for flexing applications.
Non - Integrated Guided Weapons Magazines	A non-integrated GW magazine is a magazine where the guided weapons stowage does not form an integral part of the launch system. Guided weapons may be stowed in these magazines in or out of weapon shipping containers. An example of a non-integrated magazine is an air weapons magazine.
Non-occupational exposure	All exposure to RF fields received by workers not classified as Occupational, and members of the general public. This definition excludes occupational exposure, exposure of aware users, and medical exposure.

Normal Operating Conditions	In the context of propulsion performance, the environmental operation conditions combined with the speeds and loads in which the Naval Vessel is required to operate, as described by the Naval Vessel specification.
Normal operation	Full functionality of the machinery or system is available.
Normally Occupied Compartment	Any compartment which regularly occupied by embarked persons.
Note	Indicates advice or clarification relevant to a particular requirement.
Novel arrangements	Any piece of equipment or system with an unconventional design, construction, installation or operation. Acceptance of the arrangements shall be agreed with the ANC Authority.
NVD/NVG/NVIS Compatible	Lights that are modified to be visible to the unaided eye but have no adverse impact on NVD performance. NVD Compatible lighting is most commonly used in aircraft cockpits where in general it is not intended to be visible through NVGs, although for certain warning and emergency alerting functions a controlled degree of visibility is intentional. For purposes of this document where the term “Compatible” is used it should be assumed that the NVIS Radiance levels specified in MIL-STD-3009, Lighting, Aircraft, Night Vision Imaging System (NVIS) Compatible, should apply.
NVD/NVG/NVIS Friendly	Lights that are specifically designed or adapted to be visible to both the unaided eye and to Night Vision Devices (NVDs), but which do not degrade, or minimally degrade, the performance of the NVDs in operational use.
NVIS Radiance	The radiance of a light source weighted by the spectral response of the Night Vision Device. The parameter and the method of measuring it are fully defined in MIL-STD-3009. It is usually specified when scaled to a specific luminance level.
NVIS Radiant Intensity (NRI)	The radiant intensity of a light source weighted by the spectral response of the Night Vision Device. In effect the “brightness” of the source as seen by the NVD. It can be related to the range at which the source is visible through the NVD, in a similar way that photopic intensity (I) is related to the range at which a source is visible to the naked eye. The technique for measuring NRI is defined in SAE ARP4392, Lighting, Aircraft Exterior, Night Vision Imaging System (NVIS) Compatible, while SAE ARP5825, Design Requirements and Test Procedures for Dual Mode Exterior Lights, contains information on the ranges at which sources of various NRI levels can be seen through NVDs. NRI is measured in units of Watts per steradian (W/sr).

Definitions - O

Term	Definition
Occupational Exposure (EM Radiation)	Exposure to radiation as a result of one’s occupation.
Occupational Exposure Levels	Occupational exposure levels are calculated and applied to personnel who may be exposed to EM Radiation and who have been educated as to the hazards accordingly. With the exception of persons under age 16 and women who are known to be pregnant, all ADF uniformed members, Defence or civilian personnel working within the RF industry, are considered occupational, for the purposes of allowable exposure to RF radiation.

Officer of the Watch (OOW)	A person who, for the time being, has been delegated responsibility for the conduct of safe navigation and conning (manoeuvring) the Naval Vessel.
Official Hospitality	Official hospitality is identified as formal or informal ceremonies or receptions provided to facilitate the conduct of official Defence business through persons (other than Commonwealth employees) who are able to do so by providing advice or service, or because of their vocational or business interests. Official hospitality must be appropriate or necessary for the conduct of official business.
Oil	Has the same meaning as MARPOL Annex I, Reg 1.1: "Oil means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products (other than those petrochemicals which are subject to the provisions of Annex II of the present Convention) and, without limiting the generality of the foregoing, includes the substances listed in appendix I to this Annex."
Oil fuel	Liquid petroleum product carried on board and used for the role of the Naval Vessel e.g. aviation, vehicles, propulsion or power generation. See also Flash Point.
Oil Fuel Tank	Has the same meaning a MARPOL Annex I, Reg 12A.3.11 ""Oil fuel tank" means a tank in which oil fuel is carried, but excludes those tanks which would not contain oil fuel in normal operation, such as overflow tanks."
Oil fuel unit	Includes any equipment for the preparation of oil fuel and delivery of oil fuel, heated or not, to boilers and engines (including gas turbines) at a pressure of more than 0,18 N/m m2.
Oily mixture	Has the same meaning a MARPOL Annex I, Reg 1.3: "Oily mixture means a mixture with any oil content."
Oil Residue (Sludge)	Has the same meaning a MARPOL Annex I, Reg 1.31: "Oil residue (sludge) means the residual waste oil products generated during the normal operation of a ship such as those resulting from the purification of fuel or lubricating oil for main or auxiliary machinery, separated waste oil from oil filtering equipment, waste oil collected in drip trays, and waste hydraulic and lubricating oils."
Oily Water Settling Tank	The tank into which the oily waste is led immediately prior to it being processed by the oily water separating equipment.
On Board Two-Way Communication	System providing two-way verbal transmission and may include fixed or portable system or a combination of both.
Open Architecture	An architecture whose specifications are public, which may include approved standards. This also may include commercially designed architectures whose specifications are made public.
Open Boat	A boat which within its length is not fitted with a watertight weather deck or is fitted with a watertight weather deck over part of its length.
Open deck spaces	A deck which is completely exposed to the weather from above and from at least two sides.
Open ro-ro spaces	Those ro-ro spaces that are either open at both ends or have an opening at one end and are provided with adequate natural ventilation effective over their entire length through permanent openings distributed in the side plating or deckhead or from above, having a total area of at least 10% of the total area of the space's sides.
Open Ship Condition	When citadels are not in operation and fresh air is not fed through the CBRN filters.
Open System	A system that implements sufficient open specifications for interface, services, and supporting formats to enable properly engineered components to be used across a wide range of on local and remote systems.

Open vehicle and small craft spaces	Those spaces that are either: a. open at two sides providing with adequate natural ventilation effective over the entire space; b. having an opening at one side and provided with adequate natural ventilation effective over the entire space through permanent distributed openings having a total area of at least 10% of the total area of the space's sides.
Operating Conditions	Normally defined in the OSI. Subject to ANC Authority approval, Foreseeable Operating Conditions will generally also be limited by the conscious imposition of an environmental or other operating restriction (e.g. a sea state/ speed restriction, a restriction on navigating sea ice, limiting the number of persons that may be embarked, specification of the Naval Vessel life, reversionary modes and breakdown drills etc).
Operating position	A position from which a system can be controlled.
Operational Availability	Operational Availability (OA) is the probability that, when used under stated conditions and actual support environment, the materiel will operate satisfactorily at any time. It includes the delays caused by scheduled and unscheduled maintenance activities, parts and work force shortages, and administrative paperwork.
Operational lighting (external)	Lighting used for specific military purposes (e.g. aviation, replenishment at sea) or internationally recognised external lighting used in a different manner or at lower intensities to that required in the COLREGs.
Operational lighting (internal)	Fixed lighting as required for special purposes with different levels of illumination from primary and secondary lighting.
Operational State	When the Naval Vessel is available for use. The Operational State has three modes: • Action Stations; • Cruising Watches; and • Defence Watches.
Operating and Support Intent (OSI)	The capability manager's definition of what is required to support the achievement of the operating intent and must evolve, in concert with the operating intent, throughout the CLC.
Ordnance	Is military materiel such as combat weapons of all kinds with ammunition and equipment required for their use. Ordnance includes all the things that constitute armament including guns, ammunition, and all equipment and ordnance related software needed to control, operate, and support the weapons.
Organic aircraft	Aircraft for which there is a permanent facility on board the Naval Vessel for landing, parking and storage.
Other flammable liquids	Petroleum fractions, vegetable oils or synthetic liquids carried onboard and used for the role of the Naval Vessel. This includes hydraulic oil, medical spirits, seed oil, paints and cooking oils etc.
Ototoxic Substances	Exposure to some chemicals can result in hearing loss. These chemicals are known as ototoxic substances. Hearing loss is more likely to occur if a worker is exposed to both noise and ototoxic substances than if the exposure is just to noise or ototoxic alone.
Over Protection	Describes the condition when the structure is over polarised such that the structure/electrolyte potential is more negative than recommended for cathodic protection.
Over-current	Current exceeding the rated value.

Over-current Protective Device	Any device used to provide over-current protection. Usually a fuse or circuit breaker through other devices are possible.
Oxygen Enriched Atmosphere	An environment having an oxygen concentration exceeding 23.5% oxygen by Volume (AS 4774.2).
Oxygen Index	To determine the relative flammability of materials by determining the lowest level of oxygen in a mixture of oxygen and nitrogen at which combustion of a material is just supported at ambient temperature, under specified conditions.
Ozone Depleting Substance	Ozone Depleting Substances has the same meaning as MARPOL Annex VI, Reg 2.25: "Ozone-depleting substances means controlled substances defined in paragraph (4) of article 1 of the Montreal Protocol on Substances that Deplete the Ozone Layer, 1987, listed in Annexes A, B, C or E to the said Protocol in force at the time of application or interpretation of this Annex."

Definitions - P

Term	Definition
Pantries	Spaces containing cooking appliances which may contain: a. toasters, microwave ovens, induction heaters and similar appliances each of them with a power of more than 5kW; b. electrically heated cooking plates and hot plates for keeping food warm each of them with a power greater than 2kW but less than 5kW. c. coffee machines, dish washers and water boilers regardless of their power. Accommodation spaces such as dining rooms or crew ready rooms are not considered pantries and can contain electrically heated cooking and beverage appliances as listed in the definition.
Partially Smooth Waters	Are waters where the water's significant wave height does not exceed 1.5 metres from trough to crest for at least 90% of the time.
Passengers and other embarked persons	See Embarked Persons.
Passive sonar	Passive Sonar refers to a sonar system which has only a listen function (as opposed to active sonar which has both transmit and listen). Many sonar systems may have both an 'active mode' and a 'passive mode'. Typical advantages of a passive system over an active system is that they are covert and provide better narrowband classification information.
Peak Reflected Overpressure	Peak overpressure measured as a shock wave impinges on a rigid surface.
Peak Translational Velocity	The average maximum velocity imparted to the whole structure by a shock wave.
Pendant	A length of rope, secured at one end and having a block or thimble at its free end.
Pennant Number	Alphanumeric Naval Vessel identifier.

Periodically Unattended Machinery Space	See Unattended Machinery Space
Periphery Line	Marking lines at the lateral and aft edge of the flight deck and forward of the helicopter. Aimed to represent an obstruction-free area to prevent collision with the helicopter fuselage on landing. Often, the periphery lines simply mark the edge of the flight deck or a line where obstructions (such as flight deck wash lights) have been installed.
Perpendiculars	Longitudinal references perpendicular to the baseline, usually named: • Aft Perpendicular – At the point where the transom meets the maximum draught waterline or in line with the axis of the rudder stocks, whichever is further aft; and • Forward Perpendicular - At the point where the forward edge of the bow stem meets the maximum draught waterline.
Person Conducting a Business or Undertaking	As defined in Division 3, Subdivision 2, Section 5 of the WHS Act 2011 Person conducting a business or undertaking (PCBU). A person conducting a business or undertaking on behalf of the Commonwealth Government, e.g. the Crown, is a PCBU; and Defence is the responsible agency that discharges the obligations of the PCBU.
Personal Thermal Protection Suits	Suits that are designed to prevent hypothermia and/or cold shock, i.e., immersion suits, anti-exposure suits.
Petroleum, Oil and Lubricant (POL) Products	Fuels and lubricants that may be produced from fossil or synthetic sources used to power or lubricate machinery and equipment
Pilotage	Navigation involving frequent or continuous determination of position or a line of position relative to geographic points, and usually requiring the need for close attention to the vessel's draught with respect to the depth of water. It is practised in the vicinity of land, dangers and navigational hazards
Piping System	Piping system includes pipes and fittings such as expansion joints, valves, pipe joints, support arrangements, flexible tube lengths etc. and components in direct connection with the piping such as pumps, heat exchangers, air receivers, independent tanks, etc. It does not include main and auxiliary machinery such as oil engines, steam and gas turbines, boilers, reduction gears, etc.
Pitch	Oscillatory angular motion about a lateral (y) axis, causing the bow and stern to move up and down out of phase.
Plan Appraisal	Technical review of the platform design plans and related documents to verify compliance with the rules or standards to which the Naval Vessel or system has been designed. The responsibility for undertaking Plan Appraisal activity lies with the ANC Authority.
Planned Maintenance System	A paper and / or software-based system which allows ship Naval Vessel Operators to carry out maintenance in intervals according to manufacturers and relevant rules and regulations.
Plastic Deformation	Permanent deformation of a material caused by stresses in the material exceeding its yield stress.
Platform	A Naval Vessel belonging to the armed forces of a State bearing the external marks distinguishing such ships of its nationality, under the command of an officer duly commissioned by the Government of the State.
Platform Signature	The active and passive characteristics of a Naval Vessel that can be detected, classified, identified, tracked and targeted.

Plunging	The event where the Naval Vessel's submergence limit repeatedly dips below the waterline for a short period.
Point Detection	A Naval Vessel mounted system to provide local warning detection capability.
Point of Defence	Refers to the use of countermeasures to defend or protect a single platform from the threat of weapon (s).
Polar orbiting satellite service	A service which is based on polar orbiting satellites which receive and relays voice or data from satellite earth terminals.
Positive Impulse	Impulse applied to a surface during the positive phase of the blast loading.
Positive Phase Duration	Length of time, measured from the first pressure rise, for the overpressure to return to atmospheric pressure.
Potable Water	Water fit for human consumption that conforms to the requirements in Australian Drinking Water Guidelines. All types of water, treated or untreated, designated for drinking, cooking or other habitability purposes, regardless of its origin or whether it is delivered through a distribution system, from supply vessels, from bottles or other packaging.
Potential	Voltage difference between surface and known voltage source; potentials in this document are measured relative to the Silver/Silver Chloride in seawater cell (Ag/AgCI in seawater).
Power Flux Density	The rate of flow of RF energy per unit surface area expressed in watts per square metre or miliwatts per square centimetre (W/m^2 or mW/cm^2)
Power Supply to Escape, Evacuation and Rescue Systems	Both normal and emergency electrical supplies essential for Escape, Evacuation and Rescue activities.
Power Up	Begin functioning or operating after connecting to a power source.
Power Down	Begin to stop functioning or operating after disconnecting from a power source.
Preparation	The modification of an item that affects its inherent safety parameters.
Prescribed Solution	A specific system type is mandated in a capability/design, but not the specific manufacturer make and model.
Prescriptive requirements	The construction characteristics, limiting dimensions, or fire safety systems, specified in Chapter 06.
Pressure systems	A system containing pressure other than at atmospheric which may include boilers, piping, heat exchangers, accumulators, pumps, compressors and valves.
Primary Ammunition Route	The main route from the point of embarkation to the EO stowage and from the EO stowage to the torpedo tube, weapon launcher or gun and vice versa, along which the EO is moved and /or returned.
Primary Control Position	The position that has the highest priority for the majority of Naval Vessels systems, and the primary position for monitoring all Naval Vessel systems.
Primary Critical Area	Practical Critical Area – applied to an area around the aircraft relating to the aircraft dimensions (is a percentage of the TCA).
Primary Damage	The damage which is a direct result of an incident (where the incident is the occurrence of an event causing injury, or loss of life or asset, resulting from natural or human causes).

Primary Escape Route	The most direct route of escape from a compartment or number of compartments to the evacuation station. The primary escape route may or may not be coincident with the general access arrangements.
Primary health care	Has the same meaning as ADDP 1.2. "Includes basic programs directed at the promotion of health, prevention of disease, and the early diagnosis of disease or disability, and is provided to ambulatory patients." Note: In any episode of illness it is the first patient contact with the health care system.
Primary health facility	Self-contained compartment, or grouping of compartments, containing all the medical consultation, treatment and ancillary spaces required by the OSI, except for casualty first response and secondary medical facilities.
Primary lighting	Fixed lighting provided for safe access around the Naval Vessel and those compartments accessed during normal operations and carrying out operations at control stations.
Primary navigation functions	Functions performed on the Bridge related to determination, execution and maintenance of safe course, speed and position of the Naval Vessel in relation to the waters, traffic and weather conditions. Such functions are route planning, navigating, monitoring safety, manoeuvring, monitoring, conning, docking, external and internal communication, and manual manoeuvring.
Printed Board Assembly	A complete electronic sub-assembly built on a Printed Board. It may be designed as a removable plug-in assembly module and connected via terminals, soldered wiring or solderless wrapping.
Probability of Intercept	The probability of Intercept(POI) is the sum of all the combinations of probable time coincidences of the parametric windows (space, frequency, time, etc.) of the target emitter and receiver system.
Projectile Threat	A defined threat, which may originate from a projectile launching system such as a gun. (See also Ballistic Threat)
Projection Marks	Draught marks indicating the draught of projections – strictly, these define the navigational limits.
Propeller Emergence	Emergence of part or all of a propeller from the water. In the case of seakeeping analysis, this is due to the relative motion between the Naval Vessel and the sea surface in way of the propeller(s).
Propeller Racing	A rapid and uncontrolled increase in propeller rotational speed. Propeller racing can occur due to propeller emergence and the consequent reduction of propeller loading as part of it breaks clear of the water surface or is caused to ventilate.
Propulsion Engines	Engines providing power to drive the propeller shafts directly or through gearing, hydraulic, electrical or other transmission means.
Propulsion machinery	Propulsion machinery includes all the equipment and systems required to generate thrust including but not limited to: • Prime mover (internal combustion engine (e.g. Diesel engine, Gas turbine), Electric motors, Steam turbine); • Combined propulsion and manoeuvring devices (including but not limited to, azimuthing thrusters, athwartship thrusters, water-jets); • Boilers; • Gearing; • Shafting and couplings;

	• Propellers (fixed pitch or controllable pitch); • Auxiliaries (Generators, oil supply, sources of lube oil pressure, sources of water pressure, combustion air supply (if applicable), starting systems, main propulsion control systems (hydraulic, pneumatic, electrical)).
Protected Station	The ballistic protection of spatial volumes which offer the exposed upper-deck personnel a crouch behind defensive position, such as crew manned defensive weapon stations.
Protection Current	Current supplied to a metal surface by electrolytic action in the environment to protect the surface cathodically.
Protective Device	A device that automatically detects and interrupts electrical faults or abnormal conditions to prevent damage to electrical equipment and component, and ensures the safety of the electrical system and its operators.
Pseudo-Velocity	Velocity of a point of a structure as measured by instruments which is affected by the damping of the structure. The use of the term pseudo-velocity indicates that the actual peak velocity would only be reached for mass-less objects.
Public Address System	see Main Broadcast System.
Public spaces	Those portions of the accommodation which are used for halls, mess rooms, wardrooms and similar permanently enclosed spaces.
Pump Shut Valve Pressure	Total pressure rise across the pump at zero flow (equal to static pressure rise).
Purge Time	The period of time needed to exchange the air in a controlled space so as to reduce the hazard to a predetermined level.
Push Point	A nominated location where the Naval Vessel is structurally capable of handling contact forces (from tugs).

Definitions - Q

Term	Definition
Qualification Authority	The authority which will qualify equipment or systems to the requirements of this document.
Qualified Ballistic Performance	The performance level that a ballistic protection system has been tested to pass.
Qualified Products List	A list of ballistic protection products that have undergone testing and the qualified ballistic performance has been identified.
Quasi-static demand	A dynamic or inertial demand that may be treated as static by the inclusion of a load enhancement factor to embrace the inertial or dynamic effects.
Quick-Acting Water-Tight Door	Water-tight doors which include a mechanism to actuate all clips simultaneously.

Definitions - R

Term	Definition
Radar	Any device that determines range, bearing and/or elevation of a target by radiating electromagnetic energy and utilises the echo scattered from a target.
RADHAZ (Radiation Hazard)	Is a general term which refers to the hazards to people, explosives, fuel, and equipment arising from exposure to all forms of ionising and non-ionising radiation. • RADHAZ to Personnel is the danger to personnel from the absorption of electromagnetic energy by the human body. Also known as HERP. • RADHAZ to Fuel is the hazard associated with the possibility of igniting fuel or other volatile materials through radio frequency (RF) energy induced arcs or sparks. Also known as HERF. • RADHAZ to EO is the susceptibility of an EED or EID to RF energy. Modern communication and radar transmitters can produce high electromagnetic environments that are potentially hazardous to ordnance. These environments can cause premature actuation of sensitive EIDs. Also known as HERO.
RADIATE	To emit energy (EMR, light or heat) in the form of rays or waves.
Radiation Hazard	See: RADHAZ
Radio Frequency	Electromagnetic Radiation within the frequency range 3kHz to 300GHz.
Radius of Action	The radius of action is the distance a Naval Vessel can travel in a straight line from one point to another while still being able to sail back again under specified operating conditions and with specified fuel reserves remaining. For a given set of operating conditions and fuel reserves, the radius of action is half the range.
Rake	Slope of the keel from the horizontal when the Naval Vessel is sitting parallel to the designed waterline. Usually expressed as the height difference forward to aft. Sometimes referred to as drag.
Range	The range is the total distance that can be travelled under specified operating conditions and with specified fuel reserves remaining.
Rate Of Fire	The number of rounds fired per weapon per minute.
Rated Load	The maximum load to be lifted, moved, or restrained by the weapons handling equipment without overstress under the specified equipment operating and holding conditions.
RATTAM	The threat from wartime and terrorist presents potential hazards to unprotected munitions. This is known as RATTAM, Response to ATTack on AMmunition and is defined by a threat weapon that will cause an intolerable reaction from susceptible munitions.
Rations	The daily entitlement of food per person or forage per animal.
Raw data	The sensor level data from the sonar transducers. Commonly refers to the digitised sensor level data prior to any deeper level processing.
Reaction Time	The time lapse between reception of “Missile Alarm” information and the end of countermeasure firing.
Ready to use explosive ordinance (EO) Rack	This is an EO stowage sited adjacent to a launcher or weapon (e.g. submerged signal ejector) where designated emergency stores are stored while at sea. (EO

	stored in emergency stowage's shall be returned to a permanent stowage prior to coming alongside.)
Ready Use (Magazine)	The prefix used in conjunction with 'magazine' denoting its use as a temporary stowage for explosive ordnance whilst at sea conveniently located for immediate use at a weapon or EO deployment point. Previously titled Ready Use Locker (RUL).
Real-time	A term used to describe the command control loop of a computer controlled process, where the loop delay is sufficiently short, that there is no detectable deterioration in the process being controlled.
Reasonable Practicable	Means that which is or was at a particular time, reasonably able to be done in relation to meeting the requirements of a DSwMS ACCO compliance obligation.
Receptacle	Fixed section of a device for connecting electrical power by means of a plug and socket arrangement, also known as a socket.
Record	The function of storing system data at operator discretion for later analysis and/or replay.
Recoverability	A measure of the capability of the Mission System, after primary damage effects, whatever the cause, to take action to contain and control the spread of 'secondary' damage, rectify the primary damage, prevent the loss of the damaged Mission System, minimise personnel casualties and restore and sustain primary mission capabilities.
Recovery Time for a Rescue Craft	Time required to raise the craft to a position where persons can disembark from it to the deck of the naval ship. Recovery time includes the time required to make preparations for recovery on board the rescue craft such as passing and securing a painter, connecting the rescue craft to the launching appliance, and the time to raise the rescue craft. Recovery time does not include the time needed to lower the launching appliance into position to recover the rescue craft.
Red	Red data: Information or messages that contain sensitive or classified information that is not encrypted. Red equipment: Equipment that processes unencrypted national security information requiring protection during electronic processing.
Red Risk Zone	The Red Risk Zone is based on damaged waterlines for the prescribed "standard" damage extents with an allowance for list. Symmetrical flooding to the maximum extent of damage applicable to the vessel is assumed. The Naval Vessel is assumed to be in the Full Load Condition with the KG at the limiting KG for the displacement being considered. The Naval Vessel is assumed to be at the limiting draughts set for the ship. The resulting centre-line trim lines are plotted on a profile and the envelope of highest waterlines determined. For each position, the Red Risk Zone is defined at the height of the envelope of damaged trim lines angled each side 15° from the horizontal. The Red Risk Zone is that zone within which all watertight closures, not already closed in accordance with the ordered NBCD condition, need to be closed rapidly in the event of damage or imminent damage.
Reference electrode	Stable, non-polarisable half cell with a reproducible potential value used to measure the surface to electrolyte potential.
Reference Marks	These are raised or indented locators to facilitate renewal of symbol marks.
Refit	The recurrent scheduled period a ship spends in a dockyard while extensive dockyard and Naval Vessel's staff work is carried out to restore a ship's peak operating efficiency.

Refrigerant	The fluid used for heat transfer in a refrigerating system which absorbs heat at a low temperature and a low pressure of the fluid and rejects heat at a higher temperature and a higher pressure of the fluid, involving changes of state of the fluid.
Refrigerating System	An assembly of piping, vessels, and other components in a closed circuit in which a refrigerant is circulated for the purpose of transferring heat.
Registration	Act of giving a record a unique identifier on its entry into a system.
Relative Motions	Motions of a fixed point on the Naval Vessel in relation to the passing wave profile at the same longitudinal and lateral position. Examples are relative motion at the bow or propellers which define the degree of deck wetness, or keel, sonar or propeller emergence.
Relative Wind	The sum total of all wind components. The components are the wind generated by the motion of the vessel, and the true wind due to the prevailing meteorological conditions.
Re-location	The act of changing the location of the item between spaces.
Replenishment Mode	A method that may be available to be used for the act of replenishment. The method (or mode) will include the equipment to be used, operating procedures and personnel.
Replenishment System	All items required to complete the task of replenishment within the scope of this document. This will include, but not limited to, equipment, personnel, methods and policies.
Rescue	The survival and recovery of persons to a safe haven, which offers an equivalent or higher level of safety than that prior to the incident.
Rescue Arrangements	The rescue station and equipment.
Rescue Craft	Craft to rescue persons overboard which may also be used to marshal survival craft which are not self-propelled.
Rescue Equipment	Any equipment that may be used for the recovery of persons from the sea and/or survival craft, i.e. rescue craft, ladders, scramble nets, life buoys, light markers, harnesses, MES etc.
Residual Current Device (RCD)	A device intended to isolate supply to protect circuits, socket-outlets or equipment in the event of a current flow to earth which exceeds a predetermined value.
Resilience	A platform or system's ability to resist catastrophic failure.
Resolution	The smallest change in characteristic, property or attribute being measured that can unambiguously be discerned or detected in a measurement process.
Response to Attack on Ammunition (RATTAM)	The threat from wartime and terrorist presents potential hazards to unprotected munitions. This is known as RATTAM and is defined as a threat weapon that will cause an intolerable reaction from susceptible munitions.
Restricted Fire Risk	See: Furniture and furnishings of restricted fire risk
Restricted Visibility	The term "restricted visibility" means any condition in which visibility is restricted by fog, mist, falling snow, heavy rainstorms, sandstorms or any other similar causes.
Reversionary operation	A machine or system is reconfigured to maintain the agreed level of functionality.

RF Earth	An Earth connection installed to prevent build-up of radio frequency currents developing in the surface of equipment exposed to high electromagnetic fields. (see also Earth Bond)
Ripple Voltage (percent)	Ripple voltage is the alternating component of the unidirectional voltage from a dc power source. Percent ripple voltage is the ratio of the root mean square (rms) value of the ripple voltage to the nominal user voltage expressed in percent.
Risk	Risk is the effect of uncertainty on objectives. Notes: 1. An effect is a deviation from the expected - positive and/or negative 2. Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances or knowledge) and the associated likelihood of occurrence. 3. For safety, risk is a situation or a thing which has the potential to harm a person which requires regular or ongoing monitoring and/or control measures to avoid the realisation of an event.
Risk Category Cat-A Cat-B Cat-C Cat-D Cat-E	For Reg 8, Solution 2, all spaces are categorised to reflect the fire risk of a space, taking into consideration the risk of ignition, the potential for escalation and the means for fire detection and fire suppression within that space. The risk category for a type of space, appropriate to the Naval Vessel type, is to be determined from Reg 8, Table 8-10. Where the risk category of a space cannot be determined from the table, a risk assessment of the space is to be undertaken using a recognised risk assessment methodology and agreed by the ANC Authority. The ANC Authority may change the category of a space to reflect the OSI.
Role 1	Has the same meaning as NATO AJP 4.10: "The role 1 of military healthcare encompasses a set of primary health care capabilities which includes but is not limited to triage, pre-hospital emergency care and essential diagnostics. R1 may also include a limited patient holding and medical supply capability."
Role 2	Has the same meaning as NATO AJP 4.10: "The role 2 of military healthcare encompasses a set of military health care capabilities which enhances the resuscitative spectrum of the role 1 by capabilities essential to preserve life, limb, and function and stabilize the patients' condition for further transport and treatment: Role 2 basic (R2B) capabilities enable life, limb, and function preserving resuscitative and surgical interventions. R2B capabilities may operate highly mobile, afloat or land based and comprise triage, essential diagnostics, damage control resuscitation and damage control surgery, short-term post-operative critical care, limited patient holding and medical supply. R2B capabilities may also be deployed to augment or to enhance other medical capabilities in theatre. Role 2 enhanced (R2E) capabilities may provide diagnostic, specialist and hospital care essential to stabilize and prepare patients for strategic evacuation. In addition to the capabilities of a role 2 basic, this includes but is not limited to surgery, x-ray, laboratory, blood bank, pharmacy and sterilization."
Roll	Rotational component of a Naval Vessel's motion along its longitudinal axis.
Ro-ro spaces	Spaces not normally subdivided in any way and normally extending to either a substantial length or the entire length of the Naval Vessel in which motor vehicles with fuel in their tanks for their own propulsion and/or goods (packaged or in bulk, in vehicles, trailers, containers, pallets, demountable tanks or in or on similar stowage units or other receptacles) can be loaded and unloaded normally in a horizontal direction.
Rotary Actuator	An arrangement whereby an assembly of a rotor and output shaft enclosed in a stator, can be rotated in either direction through a limited arc in response to the application of fluid power.

Rotor Clearance Area (RCA)	This is that area above the flight deck outside the fuselage clearance area (FCA) for which adequate clearance from obstructions is provided to ensure the safety of helicopters operating within that area. The RCA includes an allowance for hover dispersion.
Router	Routers are special purpose computer (or communications equipment) which operate at Layer 3 of the OSI reference model and forward information based on a Layer 3 address which has network wide significance.
Routine Escape, Evacuation and Rescue Procedures	All procedures normally performed on board which are to ensure effective Escape, Evacuation and Rescue performance, except inspection, maintenance and training.
Rudder Actuator	Rudder actuator is the component that directly converts rudder. This may be a hydraulic cylinder or a hydraulic motor.
Rudder or rudder angle.	In this context, will refer to the horizontal component of the sum of aft control surface angles.
Ruggedness	The ability of an apparatus or system, to withstand extreme local and impact loads which may result from a conceivable environment in which it is expected to operate, while retaining its intended functions.

Definitions - S

Term	Definition
Sacrificial Anode	The electrode of a passive CP system where corrosion occurs and metal structure and equipment. Sacrificial anodes for Naval Vessels are typically manufactured from zinc or magnesium alloys.
Safe area	Safe area in the context of a casualty is, from the perspective of habitability, any area(s) which is not flooded or which is outside the main vertical zone(s) in which a fire has occurred such that it can safely accommodate all Embarked Persons to protect them from hazards to life or health and provide them with basic services.
Safe Haven	Refers to a place that can reduce to acceptable levels the risks to a vessel and those persons on board by providing temporary shelter from the sea and weather. A safe haven may include a port, harbour, designated sheltered water area or an inlet or river mouth which offers a good anchorage, depending on the characteristics of the locality, the current weather and wave conditions and the characteristics of the vessel. A safe haven also includes the parent ship in the case of ship's boats and other borne watercraft.
Safe life design	There is a high degree of certainty that no damage will occur during the specified design life. An example might be a fatigue assessment of the hull for the design life.
Safe to Fire Zone	A Weapon Safe to Fire Zone (STFZ) is the area within which the weapon system may be safely pointed and fired without risk of loss or damage to the ship's personnel, structure or equipment. The SFTZ for each weapon allows the maximum field of fire within these constraints. (DNWS).
Safe to Rotate	A safety mechanism that prevents antenna rotation in unsafe conditions.
Safe to Transmit	A safety mechanism that prevents transmission in unsafe conditions.

Safety and Suitability for Service (S3)	S3 is a general term used to summarise the requirements for EO to be acceptably free from hazards and to have inherent characteristics that meet specified requirements during its agreed life cycle. This definition generally excludes operational effectiveness and lethality but may include certain performance characteristics if these aspects are deemed to be part of the item design.
Safety Earth	See Earth Bond.
Safety Firing Gear	Interrupts weapon-firing mechanisms/circuits within restricted arcs of remotely operated guns by means of a combination of 'elevation' and 'training' cams that are suitably cut to allow for the various obstructions.
Safety Functions	A function of a system that contributes to the reduction of risk to human life or to the ship to an acceptable level. Note: Safety Functions manage the risk from foreseeable damage. See also: Essential Safety Functions which are a sub-set of Safety Functions.
Safety Lighting	Lighting provided in accommodation areas, service areas, passageways, gangways etc. to facilitate movement of personnel under darken ship conditions, relaxed state of the dark adaptation lighting.
Safety Management System (for Dangerous Goods)	A formalised set of policy, guidelines, SOP's and documentation developed to manage safety of the platform/facility.
Safety Margin (structure)	Ratio of capacity over expected demand. The factor can be expressed as a series of partial factors of safety (or gamma factors) to represent the likelihood of deviation from the characteristic value or the severity of the consequences. An appropriate factor should be assigned for all design parameters whose calculation involves a degree of uncertainty, including loads, structural modelling, fatigue, corrosion, material imperfections, construction workmanship errors, buckling and residual strength.
Safety Related	A function or system in which a failure or a design error could cause a direct hazard to personnel or materiel. or A term applied to a condition, event, operation, process, or item whose mishap severity consequence is either Marginal or Negligible. (MILSTD-882E)
Safety Significant	Term applied to a condition, event, operation, process, or item that is identified as either safety-critical or safety-related.
Safety System	A system that enables Safety Functions or that contains at least one component that enables Safety Functions.
Salvage and Deballasting System	A system for pumping out water from Naval Vessels bilges under flooding conditions and from Naval Vessels ballast tanks; Normally pumped out using eductors supplied with motive water from the HPSW System.
Sample Collector Station	A station that allows the collection of transportable specimens for detailed onboard or base laboratory analysis.
Sanctuary	A CBRN sanctuary involves using the Naval Vessel structure to protect personnel from chemical and biological liquid agents. Improvised sealing of the sanctuary to provide gastight space/s can mitigate the effects of vaporised chemical and biological agents. It is stressed that the supply of filtered air leading to an overpressure within the sanctuary is essential. Areas that are generally within the sanctuary boundary are the bridge, operations room, damage control centre, heads, bathroom and some accommodation space. It should be noted that a gas tight superstructure with no air filtration or over pressure does not constitute a CBRND sanctuary.

Sanitary facilities	Has the same meaning as AMSA MO11, except tubs are not required on Naval Vessels: "Dedicated space containing at least: • 1 toilet; and • 1 washbasin; and • 1 tub or shower."
Sauna	A hot room with temperatures normally varying between 80°-120°C where the heat is provided by a hot surface (e.g. by an electrically-heated oven). The hot room may also include the space where the oven is located and adjacent bathrooms.
Scan Type	The path or manner in which an emitter's energy beam transverses in a free state environment. There are two basic categories of scan types simple and complex.
Scantling(s)	The size and strength of structural elements: the dimensions of the ship frames, girders, stiffeners and plates.
Scatter Diagram	In seakeeping analysis, a two-dimensional description of the probability of particular sea conditions in a given area in terms of the significant wave height and wave characteristic period.
Scuttle	Small opening in the Naval Vessel's deck or side with a removable lid or cover.
Sea area A1	An area within the radiotelephone coverage of at least one VHF coast station in which continuous DSC alerting is available, as may be defined by a Contracting Government.
Sea area A2	An area, excluding sea area A1, within the radiotelephone coverage of at least one MF coast station in which continuous DSC alerting is available, as may be defined by a Contracting Government.
Sea area A3	An area, excluding sea areas A1 and A2, within the coverage of an Inmarsat geostationary satellite in which continuous alerting is available.
Sea area A4	An area outside sea area A1, A2 and A3.
Sea Boat	Any boat intended for carrying personnel or boarding parties, where the personnel are preferably lowered / recovered in the boat.
Sea Day	Is any cumulative period, of 12 hours or more, during the course of a calendar day that a vessel is at sea either underway or at anchor, or alongside and available for sea.
Sea State	Generic term describing the roughness or severity of the sea. Sea State scales have been defined which associate Sea State Numbers with given ranges of significant wave height. The Sea State scale adopted for use within the Department of Defence is that of the World Meteorological Organisation (WMO). This scale is only related to Significant Wave Height. It is not associated with wind speed and also does not define other characteristics of the sea such as the wave period. The World Meteorological Organisation Sea State scale is now essentially the standard for sea state definition.
Secondary Ammunition Route	The route from the point of embarkation to the EO stowage and from the EO stowage to the torpedo tube, weapon launcher or gun and vice versa along which the EO is moved, if the primary ammunition route is not available.
Secondary Control Position	The position RCS with the 2nd highest priority for the majority of Naval Vessels systems. This will normally be in the bridge in most Naval Vessels.

Secondary Damage	The damage which has cascaded from the primary damage (does not include the primary damage).
Secondary Escape Route	Escape route which provides an alternative option to the primary escape route.
Secondary lighting	Fixed replacement lighting in the event of primary lighting failure. This may be at a lower illumination level.
Secondary medical facility	Alternate medical treatment facility that may not be a dedicated medical facility but has been designed to rapidly convert to a medical facility in case of loss of the primary medical facility or in case of surge of casualties.
Security Enclave	A network or collection of networks that are separated based on security classification and releasability requirements
Seduction Mode	Firing short range rockets and ejecting chaff and/or infrared decoys, possibly in conjunction with manoeuvring of the Naval Vessel, to seduce a locked-on missile away from the Naval Vessel.
Selective Coordination	The configuration of electrical protection devices in a way that ensures they operate promptly to disconnect faulty electrical equipment before damage occurs, without affecting upstream devices, thus minimising the impact of faults on the electrical distribution system.
Sensitiveness	The degree to which the Dangerous Good will respond to external stimuli outside of its design mode.
Sensitivity	Sensitivity is the required level of electromagnetic energy delivered to the front end of a receiver that will allow a single unambiguous emitter report to be presented at the Human Machine Interface (HMI).
Sensor	Equipment that detects, and may indicate and/or record objects and activities by means of energy or particles emitted, or reflected by objects.
Sensor Fusion	The fusing of data from different sensors so as to derive greater information than would otherwise be derived from data using a single or a lesser number of sensors.
Service spaces	Those spaces used for galleys, pantries containing cooking appliances, lockers, mail and specie rooms, storerooms, workshops other than those forming part of the machinery spaces, and similar spaces and trunks to such spaces.
Sewage	Sewage has the same meaning as MARPOL Annex IV, Reg1.3: "Sewage means: 1. drainage and other wastes from any form of toilets and urinals; 2. drainage from medical premises (dispensary, sick bay, etc.) via wash basins, wash tubs and scuppers located in such premises; 3. drainage from spaces containing living animals; or 4. other waste waters when mixed with the drainages defined above."
Sewing	The point at which the keel touches the blocks (also known as suing).
Shaft Power / Shaft Horsepower	The power transmitted to the propulsion shafting, typically at a point on the inboard side of the stern tube. Unless stated otherwise, it is the total power for all propulsion shafts.
Sharps	Refers to used or waste medical materials such as syringes, scalpels, needles, intravenous sets, razor blades or laboratory glass capable of causing punctures or cuts.

Sheath	The sheath or jacket is the outer layer of electric cables and optic fibre cables which is there to prevent mechanical damage to the cable. Some sheathing materials are also designed to protect the cable from environmental factors such as the presence of fluids.
Ship	Any Naval Surface Vessels >24m and includes “ship”, “vessel”, “craft”, “cutter” and “boat”.
Shipboard Incinerator	Has the same meaning as MARPOL Annex VI Reg 2.1.27 "Shipboard incinerator means a shipboard facility designed for the primary purpose of incineration."
Ship Arrangements	The physical, positional and procedural processes for equipment, systems, structure and personnel whose design, and operation ensures the safe management of the safety risks associated with the carriage and use of dangerous goods.
Ship Aviation Facilities Designation	The designation of a ship’s helicopter facility shall consist of three parts: 1. level of the operation; 2. class of the facility; and 3. types of aircraft to be operated.
Ship Aviation Requirements	Ship aviation requirements are defined as those facilities and systems necessary for the safe and efficient conduct of aviation operations at sea. Ship’s aviation facilities that are provided specifically for the operation and support of aircraft are permanent and shall remain on board whether or not aircraft are embarked. They include the following: 1. Flight deck and associated equipment for starting, launching, recovery, movement and securing of aircraft; 2. Fire fighting equipment dedicated to aviation operations; 3. Communication systems, wind recording instruments, visual lighting and recovery aids installed specifically for aviation purposes; 4. Hangars, workshops, stores, offices, aircrew briefing rooms, crew rooms and their associated equipment provided specifically for aviation purposes; 5. Storage and maintenance facilities for air launched weapons, ammunition and any pyrotechnics required for aircraft operations; and 6. Facilities for storage of aviation fuel, engine oil, hydraulic fluid and other special fluids and compounds for aircraft operations and maintenance.
Ship Class (Air Capable Ships)	In this context, Ship Class indicates the operating capability of an Air Capable ship in respect of maintenance facilities and logistic support: Class 1. Landing area with full service and organisational level maintenance facilities for the specified aircraft to be operated on a continually embarked basis, with accommodation for flight personnel and dedicated stowage for the full entitlement of spares and support equipment. For other aircraft types that are cleared to the flight deck and can be hangared, the facilities and stowages may not be specifically designed to accommodate that aircraft, however a Class 1 facility may be afforded that ship/helicopter combination. Class 2. Landing area with service facilities for the aircraft to be operated on a short term embarked basis with accommodation for flight personnel and storage available for limited spares and support equipment. For embarkations longer than 72 hours a hangar is normally required. Class 2A. Landing area with limited service facilities e.g. no aircraft power. Class 3. Landing area without service or maintenance facilities. Class 4. The ship has a VERTREP area with a maximum obstruction height of 1.52m within fuselage and landing gear clearance zones and 4.6m within the rotor clearance zone. Class 5. The ship has a VERTREP area with a maximum obstruction height of 4.6m within fuselage and landing gear clearance zones and 7.6m within rotor clearance zone. Class 6. The ship has a Helicopter In–Flight–Refuelling (HIFR) capability.

	Class 7. The ship has a helicopter transfer facility for transferring personnel and light cargo (normally up to about 250kg) by means of aircraft hoist or handline. Level is determined by the type of environmental conditions in which the ship is capable and certified to conduct aviation operations: Level I. The ship's facilities shall be capable of supporting day and night helicopter operations in both Visual Meteorological Conditions (VMC) and Instrument Meteorological Conditions (IMC). Level II. The ship's facilities shall be capable of supporting both day and night helicopter operations under VMC only. Level III. The ship's facilities shall be capable of supporting day helicopter operations under VMC only.
Ship Service Generator	Electric generator(s) sourcing the electrical power supply to the ship service loads.
Ship Types	Ship Type A: Any naval ship with a total number of Embarked Persons of 240 or greater, or which will foreseeably carry greater than 36 passengers. Ship Type B: Any naval ship with between 60 and 239 total number of Embarked Persons, of which there are no more than 36 passengers. Ship Type C: Any naval ship with less than 60 Embarked Persons in total, of which there are no more than 12 passengers.
Ship / Submarine	A maritime vessel belonging to the armed forces of a State bearing the external marks distinguishing such ships of its nationality, under the command of an officer duly commissioned by the government of the State.
Ship's Boat	In the context of this standard, the term ship's boat refers to any boat that is normally carried on and operated from a ship but is not expected to undertake sustained operation independent of the ship.
Ships Not Constructed of Steel	Ships on which the material of construction of the hull, bulkheads and decks (or significant parts thereof) are not constructed from steel, e.g. ships constructed of aluminium or composite (a material with an organic or inorganic matrix reinforced by fibres with suitable orientation).
Shock Isolator	Type of mounting designed to reduce the transmission of a shock impulse to the equipment it supports.
Shock Rated Platforms	Platforms that have been assessed against varying shock levels for each class based on mission requirements and threats. They are allocated a specific shock level assigned to the Mission Critical Shock Loading and the Mission Abort Shock Loading.
Shock Response Spectrum/Spectra	The maximum required response of a system of linear vibrating single mass elements with a defined damping function of the natural frequency.
Shock Wave	A pressure wave generated by an underwater explosion.
Short-circuit Current	Refer to: Fault Current.
Signature Definition Templates	Template for each signature tailored as required and completed by Sponsor.
Significant Wave Height	The Significant Wave Height is the mean value of the highest one-third of all the peak to trough wave heights measured over a reasonable time period (say 10-20 minutes). The wave height estimated by an observer is approximately equal to the Significant Wave Height.
Simple Scan	A simple scan is a scan which operates in one of either two axes: horizontal or vertical.

Simplex	Communications in one direction only (e.g. broadcast).
Simulation	1. A device which employs simulation to replace a real-world system or apparatus, e.g. for training purposes. A simulator generally has three elements – a modelled process, which represents the real-world system, a control system, and a human-machine interface. 2. A method for implementing a Model over time (US DoD 2018).
Simulation Control	System A system which is responsible for controlling and coordinating the Simulation scenario(s).
Simulator	A device which employs simulation to replace a real world system or apparatus, e.g. for training purposes.
Simultaneous Threats	Multiple number of threat emissions which are not capable of being resolved in time, and thus are not able to be distinguished based on a time of arrival reference point. A decision will then have to be made on which threat to counter.
Singing (propellers)	Underwater noise generated by vortex shedding exciting the higher mode frequencies of a propeller's blades often over a narrow frequency band.
Situational Awareness	Situational Awareness is having sufficient awareness to inform effective decision making regarding the movement and position of the mission system, and to ensure that, where necessary, others are aware of the position, movement and intentions of the mission system.
Slamming	An event that occurs when part of the Naval Vessel impacts the water, at a rate that is above the threshold velocity in a manner that creates a high, short duration pressure load on the structure. For example: • Bottom slamming – when the bottom of the hull (near the keel) hits the wave surface after it had emerged from it; • Flare slamming – when the flared section of a hull form, typically in the bow region above the design waterline, impacts an oncoming wave during the downward motion of the bow of the Naval Vessel; and • Stern slamming – when a wide transom stern hits the wave surface.
Slant Range	Distance between an explosive charge and the closest point on the Naval Vessel's hull.
Slip	A hinged hook, used to hold the cable prior to letting go the anchor; to act as a preventer when the Naval Vessel is riding on the brake of the cable holder; to hold the cable temporarily so that the inboard part can be handled or to house the anchor securely in the hawse pipe.
Slipway	Consists of keel blocks with side stays or a cradle mounted on a bogie system running on rails laid on incline to below the low tide mar. The bogie arrangement is run of to receive the vessel and is then hauled up until it is clear of the water.
Slop Tank	A tank specifically designated for the collection of tank drainings, tank washings and other oily mixtures.
Small Magazines	A small magazine is a self-contained magazine of such a shape or size that it does not permit "walk-in" and the contents are handled while standing outside. It is designed and constructed for the safe and permanent stowage or Ready Use stowage of EO. It is free standing or recessed into the ship's structure, but its boundaries are not part of the ship's structure.
Small oil fuel tank	Has the same meaning a MARPOL Annex I, Reg 12A.3.12: "Small oil fuel tank is an oil fuel tank with a maximum individual capacity not greater than 30 m3"

Smart Sensor	A sensor with in-built computing abilities, sending highly processed data to the final processing system.
Smoke	The visible part of fire effluent (ISO 13943) and is a hazard (in part) because it causes impairment of visibility.
Smoke damper	A device installed in a ventilation duct, which under normal conditions remains open allowing flow in the duct, and is closed during a fire, preventing the flow in the duct to restrict the passage of smoke and hot gases. A smoke damper is not expected to contribute to the integrity of a fire rated division penetrated by a ventilation duct. In using the above definition the following terms may be associated: 1. automatic smoke damper is a smoke damper that closes independently in response to exposure to smoke or hot gases; 2. manual smoke damper is a smoke damper intended to be opened or closed by the crew by hand at the damper itself; and 3. remotely operated smoke damper is a smoke damper that is closed by the crew through a control located at a distance away from the controlled damper. Automatic and remotely operated dampers are to be capable of local manual operation.
Smoke tight or capable of preventing passage of smoke	A division made of non-combustible or fire-restricting materials which is capable of preventing the passage of smoke demonstrated in accordance with a suitable standard defined by the ANC Authority.
Smoke Zone	A space enclosed by a boundary formed by bulkheads, decks and smoke curtains, for the purpose of preventing the passage of smoke from the space in which it originated.
Smooth Waters	Waters where the significant wave height does not exceed 0.5 metres from trough to crest for at least 90% of the time.
Societal Risk (SR)	SR reflects the likelihood of accidents involving multiple casualties and specifically indicates the relationship between event frequency and the number of fatalities. SR is often shown on an Accident Frequency vs No of Fatalities (F–N) curve. The F–N curves plot the frequency of events with casualty numbers greater than or equal to N against N itself. In order to calculate SR, the number of fatalities in the surrounding area must be assessed for all possible population distributions and explosion scenarios, together with the respective frequency of occurrence.
So Far As Reasonably Practicable (SFARP)	The principle under which Defence conducts any activity that involves non-ionising radiation. SFARP applies to all other non-ionising radiation exposures and to hazards in the WHS context. Good practice under SFARP is the establishment of thresholds. Thresholds are necessary but not always sufficient in reducing risks SFARP.
Soft Reboot	A soft reboot (also known as a warm reboot) is restarting a computer under software control, without removing power or (directly) triggering a reset line. It usually, though not always, refers to an orderly shutdown and restarting of the machine.
Software Assurance	The process of verifying that the software developed meets the quality, safety, reliability, security requirements as well as technical and performance requirements. Assurance looks at both the process used to develop the software and the analyses and tests performed to verify the software.
Sonar	SONAR systems have two main categories, Active and Passive. Active sonars transmit a pulse of sound through a transducer or transducer array. After transmitting, the transducer receives all reverberations and contacts and displays them visually on the operators console as range and bearing, and through a speaker/headset audibly as an echo. Passive sonar does not transmit acoustic energy into the water and the transducers work as hydrophones (e.g. receive only).
Sonar track	A contact that has been identified by the sonar system and is being followed (tracked) by the combat management system.

Space	Any other area of a Naval Vessel that is not a main sub-division compartment or a compartment.
Space and Weight	Where used with respect to equipment or systems means that only space and weight allowances for the equipment or systems shall be provided during design and construction in the expectation that the equipment or systems might be fitted at a later date.
Spaced Armour	Armour in which significant (>50mm) gaps are incorporated between an array of elements.
Spatial	Of, or relating to space.
Spatial Coverage	Spatial volume covered by the antenna radiation reception pattern within 3 dB of the peak value of the antenna gain pattern.
Special category spaces	Spaces which contain other vehicles and payload e.g. Vehicle and Well Dock Spaces, Hangars, RoRo Spaces, Flight Decks, Boat bays, UMV or AUV garage.
Special Functions	Special Functions are specific parts of a Naval Vessel's role. For each Special Function there are additional Rules within the ANC Rules. The Special Functions that exist are: >50% Note: The ANC Rules are not applicable to Naval Vessels that carry substantial quantities of fuel with a flash point less than 60°C. Small quantities can be carried in accordance with Chapter 06, Rule 14. Note: Fuel includes all oil fuel – Naval Vessel's fuel, aviation fuel and cargo fuel.
Special Operating Modes	Additional operating modes to facilitate special tasks for example, onboard training mode, maintenance mode or diagnostic mode, without affecting normal system operation.
Special personnel	See Embarked Persons.
Specific Fuel Consumption	The ratio of mass of fuel used to the output power of an engine, also referred as 'fuel rate'. Normal units of which are g/kWh or kg/kWh.
Specific Magazines	Specific magazines include RU magazines and detonator magazines designed for the temporary stowage of small amounts of EO approved by the issue of an EO stowage and Handling (EOS&H) certificate.
Specification	A clear and accurate description of the technical requirements for a material, product and service including the procedure by which by which it will be determined that the requirements have been met.
Spectrum	A function defining the relationship between the amplitude and the frequency of a process, such as the energy in an irregular wave system or the Naval Vessel response thereto.
Spread Spectrum	Spread spectrum systems utilise transmission bandwidths that are much greater than the minimum bandwidth required for information transfer. The advantages gained by these systems include: multiple user access (of the same transmission band), precise timing measurement (navigation systems) and the ability to operate below the ambient noise floor (LPI).
Spring	A berthing rope extending from a Naval Vessel either forward or aft to a bollard ashore to resist fore and aft motion caused by wind or current.
Stability	The ability of a Naval Vessel, under certain states and modes of operation, to return to its original upright position when laterally displaced.

Stagger	A pre-determined and structured variation in the PRI/PRF of an emitter.
Stairs	In accordance with ANEP 26 Ergonomic Data for Shipboard Space Design in NATO Surface Ships, Edition 1, acceptable angles for stairs are 20° - 50°.
Standard Deviation	The measure of dispersion of a set of data from its mean. It measures the absolute variability of a distribution; the higher the dispersion or variability, the greater is the standard deviation and greater will be the magnitude of the deviation of the value from their mean.
Standard fire test	A test in which specimens of the relevant bulkheads or decks or other construction are exposed in a test furnace by a specified test method in accordance with the FTP Code or other standard satisfying the FTP requirements and agreed by the ANC Authority. Additional tests may be required by the ANC Authority.
Standard or Standards	Published technical specifications against which an item, equipment or system can be certified for compliance. Includes criteria, conventions, specification or, drawings, against which the design, construction, maintenance and procedures are assessed.
Standard Sea Trials	Trials undertaken to confirm that the manoeuvring requirements of a Naval Vessel have been satisfied and to provide the data required by the manoeuvring handbook.
Standby	The state in which the system is powered or energised, however no energy is being emitted from the system.
Stand-off Detection	A Naval Vessel mounted system with a distance detection capability.
Static demand	A demand that can be considered as permanent.
Station Keeping	Maintaining a seagoing vessel in a position relative to other vessels or a fixed point
Steel or other equivalent material	Any non-combustible material which, by itself or due to insulation provided, has structural and integrity properties equivalent to steel at the end of the applicable structural fire protection time when exposed to the tests required by the FTP code or other standard agreed by the ANC Authority.
Steradian (Sr)	The solid angle (apex of a cone) which, having its vertex in the centre of a sphere, cuts off an area of the surface of the sphere equal to that of a square with sides of length equal to the radius of the sphere. 4π Sr describes a sphere.
Stimulate	To provide input to a system in order to observe or evaluate the system's response.
Stimulation	The use of Simulations to provide an external stimulus to a system or sub-system. An example is the use of a Simulation representing the radar return from a target to drive (Stimulate) the radar of a missile system within a hardware/software-in-the loop Simulation.
Stimulator	A hardware device that injects or radiates signals into the Sensor system (s) of operational equipment to imitate the effects of platforms, munitions, and environment that are not physically present; or A battlefield entity consisting of hardware and/or software modules that inject signals directly into the Sensor systems of an actual battlefield entity to simulate other battlefield entities in the virtual battlefield.
Stopper	See Slip.
Stowage	The act of storing an item such that its inherent safety parameters are preserved.

Strategic Escape, Evacuation and Rescue Position	A position which is important for managing aspects of Escape, Evacuation & Rescue operations. Examples include the operations room, bridge, machinery control room, engine room, damage control headquarters and stations etc.
Strength Deck	Normally the uppermost continuous deck. Other decks may be considered as the strength deck provided that such decks are structurally effective.
Stress Concentration	Change in geometry of part of a structure such that the stress distribution changes significantly e.g. Naval Vessel's hull girder.
Stretchers	Equipment designated to transport persons who are incapable of walking to muster and/or evacuation stations.
Structural capacity	Structural strength of the Naval Vessel defined in terms of, but not limited to the following: deflection, corrosion, buckling, yielding and fatigue.
Structural Fire Protection Time (SFP)	The time during which the structure maintains sufficient load bearing capabilities when tested to the FTP Code or standard approved by the ANC Authority. The ANC Authority may define an enhanced structural fire protection time in the OSI. For non-steel Naval Vessels the SFP shall be between 60 and 30 minutes depending on evacuation time of the ship.
Structural Permeability	Unless established by direct calculation, an allowance of 2% should be included in reducing the moulded tank volume to an actual volume to account for the structural permeability of tanks including stiffeners, brackets, piping and fittings.
Structure	All items of the Naval Vessel's hull, superstructure and deckhouses that contribute to its ability to withstand global and local loads, maintain watertight and weathertight integrity, support all equipment or other applied loads.
Sub Citadel	An independent group of interconnecting compartments enclosed by a vapour tight boundary, within which air can be recirculated to provide collective chemical, biological, radiological and nuclear protection. A grouping of sub citadels may form the Naval Vessel's citadel.
Submergence Limit	That limit approved by the ANC Authority in accordance with the agreed stability standard up to which the main subdivision vertical boundaries are to be watertight and which determines where equipment and systems for essential safety functions may be located. Note: This may be referred to as the margin line or the V-line and may lead to the designation of a bulkhead deck (the uppermost deck up to which the transverse watertight bulkheads are carried) or a damage control deck (the deck, or combination of linked decks, on which damage control operations are co-ordinated).
Subsystem	Major functional part of a system; usually consisting of several components which are essential to the operational completeness of the system.
Superstructure	A decked structure on the strength deck, extending from side to side of the vessel or with the side plating not being inboard of the shell plating more than 4% of the breadth.
Surge (in the context of personnel)	Refers to personnel embarked for short durations for special operations, exercises, or mobilisations. Surge personnel accommodations require provision for a berth only. When unqualified reference to troops is made herein, it excludes surge troops.
Surge (in the context of ship)	Oscillatory horizontal motion of a ship's centre of gravity in its longitudinal direction.
Surplus Valve	Where necessary installed to the HPSW pump to ensure the HPSW system is not over-pressurised when the pump is working at no delivery.

Surveillance	The systematic observation of aerospace, surface or subsurface areas, persons, places or things, by visual, aural, electronic, photographic or other means.
Survey	The examination of the design and/or material state of a Naval Vessel, equipment or system to ascertain whether it is in compliance or otherwise with: a. the intent of a defined specification, standard or drawing, or b. the intended duties of the Naval Vessel, system or equipment. Note: A survey is said to be complete when the deficiencies or other departures have been rectified or justified as adequate. Surveys are normally carried out under the direction of a Competent Organisation, not directly responsible for operations, repair or maintenance of the item under survey
Survivability	The ability of a Mission System to undertake its mission by avoiding being damaged, minimising the degree of damage sustained, recovering from the damage in a time efficient manner and allow for the escape, evacuation and rescue of the personnel. This is applicable whether the damage is encountered during combat or as the result of a non-combat related incident or accident. The principal components of survivability are Susceptibility, Vulnerability, Recoverability and Escape, Evacuation and Rescue.
Susceptibility	A measure of the capability of the Mission System to avoid and/or defeat an attack. Susceptibility reduction is primarily achieved by the state of readiness of the Mission system to threats, tactics and procedures, the reduction of Mission System signatures, use of weapons and the deployment of countermeasures.
Swamped Vessel	A vessel is said to be swamped when it has had ingress of water up to the top of the main decks, bulwarks or gunwales, or freeing ports (whichever is lower)
Sway	Oscillatory horizontal motion of a Naval Vessel's centre gravity in its lateral direction.
Symbol Mark	Symbol marks convey information regarding features such as bulbous bow, push points, stabilisers and thrusters
Synthetic Greenhouse Gas (SGG)	Synthetic Greenhouse Gas has the same meaning as Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 Part II.7: “SGG or Synthetic Greenhouse Gas means any of the following: (a) an HFC; (b) nitrogen trifluoride; (c) a PFC; (d) sulphur hexafluoride”."
System Permissible Maximum Pressure (System PMP)	The pressure at each point in a cannon/gun or mortar which, for reasons of safety, should not be exceeded. The value of weapon system (cannon, gun, etc.) PMP or projectile PMP whichever is the lower for a specified system.
System Track	A Track produced by the Command and Control system through the correlation of one or more Local Tracks

Definitions - T

Term	Definition
Tactical Awareness	Tactical Awareness is a subset of Situational Awareness and consists of the following:

	a. understand the defined tasking and its tactical objectives b. build a tactical picture c. perform, confirm or update a threat, target or task evaluation d. determine target allocation and effector assignment if required e. manage detector and effector activities f. perform post activity or engagement assessment including feedback of learnings to inform future operations.
Tactical Communications	Communications in which information of any kind, especially orders and decisions, are conveyed from one command, person, or place to another within the tactical forces, usually by means of electronic equipment, including communications security equipment, organic to the tactical forces.
Tactical diameter	The perpendicular distance in a turn from the point that a Naval Vessel has changed heading by 180 degrees to the projection of the original course from the point of execute.
Tactical Digital Information Link (TADIL)	Is a standardised communications link that is suitable for transmission of digital information, and is characterised by standardised message formats and transmission characteristics.
Tactical Environment Support System	Tactical Environmental Support System (TESS) is a software program for SONAR range prediction. The required oceanographic data is fed into the computer via a direct interface from the Mk 12 Expendable Bathythermograph (XBT) system. TESS can be used to calculate the best range of the day for all MFUs and SONAR systems both Active and Passive.
Tactical Information Exchange (TIE)	TIE consists of a number of systems and capabilities that enable C2 and SA, these include but are not limited to: (a) 1. Joint Data Network (JDN) consisting of: (i) Multi-Tactical Data Link (TDL) (ii) Network (MTN) utilising bit-orientated messaging systems (iii) The Integrated Broadcast service (IBS) utilising Common Message Format (CMF) messaging; and (iv) Capabilities and systems supporting the Common Operating Picture (COP) / Common Tactical Picture (CTP) such as GCCS-M and JCDX. (b) Other proprietary tactical and sensor data networks and systems used by the ADF and allies including but not limited to: (i) CDL/T-CDL, (ii) CEC, (iii) TTNT
Tailpipe Allowance	The tailpipe allowance is the ratio of the Burnable Fuel to the Fuel Load in the tanks. This factor accounts for the quantity of fuel that remains in the tanks but which is unavailable for use due to the configuration of the tailpipes in the tanks. This factor can be established either by direct calculations of unusable fuel volume in each fuel tank based on tank geometry and fuel transfer pipe arrangement, or can be assumed to be 0.95 if the majority of tanks are broad and shallow or 0.98 if the tanks are narrow and deep. If the direct method of calculation is used, consideration should be given to the impact of air entry in the fuel lines as a result of motions of the Naval Vessel while drawing fuel.
Target	A vehicle for which fire control functionality is required. This may be for either the practice or real engagement by Effectors, or confirmation of Combat System alignment
Technical Integrity	An item's fitness for service, safety and compliance with regulations for environmental protection, i.e. its compliance with Technical Regulatory Requirements.
Telebrief	An internal communications system for connection to aircraft whilst manned on the flight deck to facilitate communications between the aircraft crew and stations within the ship

TEMPEST	A short name referring to investigations and studies of compromising emanations.
Tertiary lighting	Fixed independent lighting system to provide a minimum level of illumination on failure of primary and secondary lighting.
The Code	Refers to the NATO Naval Ship Code, Naval Submarine Code or Naval Boat Code.
Thimble	A metal insert, either circular or teardrop shaped, with a concave groove on the outside, used to line a rope eye to prevent chafing.
Threat	1. Any conventional or non-conventional weapon strike that has the ability to cause system failure or damage. 2. A vehicle (subsurface, surface or above surface) that is showing hostile intent towards the host platform, taskforce, or Mission.
Threat Emitter	Emitter which is defined by the system as a threat based on a library match or based on meeting/exceeding some pre-defined set of emitter attribute(s). E.g. signal type or emitter mode.
Threat Set	A collection of predefined Threats of similar characteristics (such as type, velocity, acceleration, altitude, flight profile and signature) that may be used for the purpose of developing operational modes or assessing performance
Threat Warning	The prompt alerting of operator, and reporting to Combat Management System (CMS) of all threat emitters.
Thruster	A propulsion device built into, or mounted to a vessel to assist in slow speed manoeuvring. Often referred to as a side thruster or bow thruster
Top-Side or Weather Deck	Refers to any space, opening or deck area directly exposed to the weather.
Torpedo and Launch Tubes	Explosive ordinance (EO) stowages which can be used for the stowage and launch of a guided weapon.
Torpedo Countermeasures	The material and tactical measures that are adopted by Naval Vessels for protection against torpedoes.
Total Range	The theoretical range that can be travelled from full fuel load to to nil usable fuel remaining.
Touchdown Clearance Area (TCA)	The TCA is that area of the flight deck or landing pad within which the landing gear of a helicopter may alight. It is centred on the optimum landing position, includes allowance for landing dispersions, and ensures clearance from obstacles for the landing gear.
Toxicity	Toxic fume emission refers to the release of toxicants in any form. A toxicant is defined as a "substance which causes an adverse effect upon a living organism
Track	A continually updated representation of a vehicle, or other physical object, in a coordinate system.
Track Control	A type of vessel autopilot providing control of the Naval Vessel's movement along a planned route, through turns to the destination waypoint.
Track Reach	The length of the course traced by a Naval Vessel in the water during a manoeuvre.
Transfer	The act of moving an item and the responsibility for its safety to or from the Naval Vessel.

Transfer Capable Vessels	Transfer capable vessels are those vessels which do not have a flight deck or suitable area for vertical replenishment (VERTREP) operations but which still have a requirement for aviation operations in the form of light cargo or personnel transfer. These vessels normally have minimum equipment and select the most suitable obstacle free area to which to conduct such operations and have them suitably marked and certified.
Transit or Ferry Tanks	Some Naval Vessels may be fitted with fuel tanks which remain empty under normal operating conditions, but which may be filled to provide additional range for unusually long voyages. Such tanks are typically referred to as Transit or Ferry Tanks. Use of these tanks typically limits available cargo capacity due to considerations of freeboard or stability. Where such tanks are included in the calculation of achievable range, this shall be clearly indicated.
Transitional lighting	Fixed lighting provided upon loss of primary lighting and prior to the operation of the secondary lighting, where a level of continuous illumination must be maintained for operational purposes.
Treated Effluent	Effluent whose properties have been altered to meet discharge requirements.
Trial Authority	An authority agreed upon to undertake responsibility for conducting trials.
Trim	Equilibrium inclination of the Naval Vessel about a transverse axis.
Trunnion	A pin or pivot forming one of a pair on which something is supported. Cylindrical projection on each side of a cannon/gun or mortar.
Type Approved	Safety critical
Type III response (Explosion)	Ignition and rapid burning of the confined energetic material build up high local pressure leading to violent pressure rupture of the confining structure. Metal cases are fragmented (brittle fracture) into large pieces that are often thrown long distances. The un-reacted and/or burning energetic material is also scattered about. Air shocks are produced that can cause damage to nearby structures. Fire and smoke hazards will exist. The blast and high velocity fragments can cause minor ground craters and damage (break-up, tearing, gouging) to adjacent metal plates. Blast overpressure at 5m between 7 and 70 kPa (depending on size of store). Hazardous fragments may be beyond 15 m.
Type IV response (Deflagration)	Ignition and burning of the confined energetic material lead to non- violent pressure release because of low strength case or venting through the case walls (outlet gap, initiation capsule, etc…). The case may rupture but does not fragment; orifice covers may be expelled and un-burnt or burning energetic material may be scattered about and spread the fire. Pressure releases may propel an unsecured test item, causing an additional hazard. No blast effect or significant fragmentation damage to the surroundings, only heat and smoke damage from the burning energetic material. Blast overpressure at 5 m between 0.7 and 7 kPa (depending on size of store)
Type V response (Burning)	The least violent type of explosive event. The energetic material ignites and burns non-propulsively. The case may split up non-violently; it may melt or weaken sufficiently to allow slow release of combustion gases; the internal pressure may dislodge the case covers. Debris stays in the area of the fire although covers may be thrown up to 15 metres. This debris is unlikely to cause fatal wounds to personnel. Blast overpressure less than 0.7 kPa

Definitions - U

Term	Definition

Ullage	The unused or unusable storage space within a storeroom. The aim is to maximise efficient use of all storage space, while maintaining access and adequate air circulation around stored items (especially for refrigerated spaces).
Ultimate limit state (ULS)	That condition beyond which a loss of equilibrium or failure of a part or whole of the structure may be expected to occur (e.g. collapse, fracture).
Unattended Machinery Space	A machinery space that is arranged with controls, alerts and alarm systems to permit machinery to operate without the direct attention of an engineer either in or remote from the space. Periodic visits for routine machinery inspection are expected. Alert and alarm systems are arranged to inform duty engineers of any deviations from normal system operating parameters. The system would include a hierarchical notification protocol for engineers.
Unhardened Collective Protective System (COLPRO) System	An inflatable chemical, biological, radiological, nuclear (CBRN) liner providing a toxic free area onboard a vessel.
Unit	Means the physical items forming the basis of a particular acquisition.
Unmanned Spaces	Spaces that do not meet “Manned Spaces" definition criteria.
Upper deck	See: Weatherdeck Any part of the Naval Vessel or submarine outside the weathertight boundary or outside the pressure hull for a submarine.
Upper Deck Pointing System	A pointing system used manually by operators to provide designation to visual Targets
Upright	For intact, near vertical; for damaged, the angle of list and trim acceptable to the ANC Authority.
Usage Upkeep Cycle	Period between the end of one depot level maintenance period and the end of the next (or initially from construction to the end of the first depot level maintenance period)

Definitions - V

Term	Definition
V Lines	V-Lines define the required vertical extent of watertightness. The V-lines are intended to define the extent of watertightness for such things as open penetrations of bulkheads, air intakes, vents and air escapes that are normally open. They do not define a level that will exclude all flooding. Rather, they are set at a practical level that would preclude all but nuisance flooding in the assumed damage environment. Means of readily closing openings is therefore an important adjunct to the V-line provisions.
V50 or Ballistic Limit	The velocity at which 50% of projectiles perforate and 50% of projectiles are defeated by armour. This figure must be accompanied by a measure of the statistical spread of the results, such as the standard deviation.
Validation	The process of demonstrating that the ANC Compliance nominated for a specific ship, small craft or submarine is acceptable to the ANC Authority. Validation will demonstrate that the nominated standards and acceptance criteria against which the

	design is being verified (whether it adopts the Part 2 solution, Classification Rules, International Convention or other set of criteria), are appropriate for the OSI. Note: Performance criteria such as Classification Rules, International Conventions, national standards or defence standards that have been Justified as meeting the performance requirements, functional objectives and goals and the Sample OSI is not significantly different to the Naval Vessel's OSI, will not need to be re-validated.
Value Category Cat -5 Cat-4 Cat-3 Cat-2 Cat-1	For Reg 8, Solution 2, all spaces are categorised to reflect the importance of keeping the space free from the effects of fire and smoke, to protect life and/or maintain operational capabilities. The value category for a type of space, appropriate to the Naval Vessel type, is to be determined from Chapter 06, Reg 8, Table 8-10. Where the value category of a space cannot be determined from the table, an assessment of the space is to be undertaken using a recognised assessment methodology and agreed by the ANC Authority. The ANC Authority may change the category of a space to reflect the OSI.
Variable Pitch Propeller	A propeller for which the geometric pitch varies over the span of its blades. A variable pitch propeller may be fixed pitch, adjustable pitch or controllable pitch. (See also Controllable Pitch Propeller)
Vehicle and small craft spaces	Spaces intended for carriage, maintenance and operation of wheeled or tracked motor vehicles, unmanned vehicles and/or small craft with fuel in their tanks for their own propulsion.
Ventilation Ducts –A-60 Integrity	Where a ventilation duct passes through a space bounded by divisions with an integrity of A-60, without serving the space, and is required to maintain the integrity of the division, the duct shall be either: Constructed of steel having a thickness of at least 3 mm, and is suitably stiffened and supported; or Fitted with a fire damper at all boundary penetrations. Note: For ducts with an alternative construction, the arrangement is to be tested to the satisfaction of the ANC Authority to demonstrate the arrangement is able to maintain the integrity of divisions penetrated. Note: Where a duct penetrates a watertight division the wall thickness may need to be increased to maintain the watertight integrity of the division. Note: For very large ducts, the wall thickness may need to be increased for structural reasons, especially where there is insufficient stiffening or support.
Verification	The process of ensuring that a ship, small craft or submarine meets the ANC Rules. Solution agreed by the ANC Authority. Evidence of the verification can be in the form of plan approval, analysis, testing or survey. The verification evidence is to be maintained for the life of the ship, small craft or submarine. See ANC Record.
Vertical Replenishment (VERTREP)	Re-supply of stores, munitions or other equipment of a Naval Vessel by aircraft. Normally this term applies to replenishment by helicopter in which the helicopter does not land on the Naval Vessel, but rather transfers stores as under-slung loads.
Vibration Dose Value (VDV)	ISO 2631-1:1997 defines alternative methods, including the vibration dose value (VDV) for evaluating the severity of vibrations containing occasional shocks, The VDV is expressed in units of m/sec1.75 and is defined for a particular direction of vibration. The VDV is more sensitive to peaks in the acceleration than Daily Vibration Exposure A(8) and will provide a better indication risks to health when there have been shocks during the exposure period.
Vigilance	The ability to maintain a given level of alertness over a long period of time.
Vital Control Function	Propulsion and steering controls.

Vital Spaces	Vital spaces are those in which continued operation is essential for maintaining Naval Vessel control, propulsion, communications, seaworthiness, and mission capability. This can be broken down into: a. Platform Vital – Spaces in which continued operations are essential for maintaining navigation and propulsion, communication, and recoverability systems. Platform Vital spaces are needed to enable the platform to stay afloat and move; and b. Mission Vital – Spaces in which continued operations are essential for the Naval Vessel's mission to be completed as required in the Operational Concept Document. In warships, this would be the weapons systems, surveillance systems, fire control systems and associated systems. Mission Vital spaces are needed to enable the platform to fight.
Vital Supply	An electrical supply that powers the electrical equipment of the Naval Vessel, enabling it to meet its survivability and mission capabilities.
Vital Systems	Vital Systems, Vital Services or essential services, in the context of survivability, are those systems required to provide the defined retained capability.
Vital for Survivability	A category of electrical equipment required for the safety of the Naval Vessel and personnel, for the Naval Vessel to float and move, and fight in a limited capacity.
Vital for Mission	A category of electrical equipment required for the Naval Vessel to fight or to fulfil its mission objective(s).
Voltage	Difference of potential normally existing between conductors or between conductors and earth as follows: **Extra low voltage (ELV)** – voltage that does not exceed 50 V a.c. or 120 V ripple-free d.c.; **Low voltage (LV)** – voltage that exceeds ELV and does not exceed 1000 V a.c. or 1500 V d.c.; **High voltage (HV)** – voltage that exceeds LV.
Vulnerability	A measure of the capability of the Mission System to withstand initial damage effects from conventional, CBRN or asymmetric threat weapons or accidents and to continue to perform assigned primary warfare missions and protect crew from serious injury and death.

Definitions - W

Term	Definition
Wardroom Stores	Alcohol and mess gear for the officers.
Warfare Area	One or more of: undersea warfare; anti-surface warfare; or anti-air warfare, in context.
Washroom Corridor	A dedicated sanitary space onto which a number of individual wet space cubicles open. It may be a separate sanitary space or a branch of a corridor. Where open to a corridor it should be treated as a separate space and not used as a through escape route.
Wastewater	Wastewater is a collective term for both sewage and grey water.
Waterplane Area	The area of the immersed horizontal section (plan view) at the waterline of a vessel hull and all appendages.

Watertight	Prevent the passage of water in either direction with a head of water commensurate with the submergence limit in all Foreseeable Operating Conditions.
Wave Zero Crossing Period	The time period between successive wave up-crossings or successive wave down crossings measured at a fixed location. In general terms, 'Zero Crossing Period' is the mean of many measurements of the periods between successive zero up crossings or successive zero down crossings. See also Zero Crossing.
Wavelength (λ)	The horizontal distance between successive wave crests in the direction of advance. In the case of irregular waves, there a number of different ways of defining wavelength, as the distance between crests will not be constant in either space or time.
Way Finding System	Any system which is provided to enable embarked persons to find escape routes and escape exits.
Weapon	An offensive or defensive instrument of combat used to destroy, injure, defeat or threaten an enemy, e.g. gun bomb, bomber. By extension, any device, method or circumstance that can be used either directly or indirectly to destroy, injure or defeat an enemy, e.g. food shortage, radar or electrical power failure.
Weapon Park	An area designated for the pre-positioning of EO prior to loading onto an aircraft, landing craft and vehicle or for immediate use.
Weapon Preparation Area (WPA)	A Designated Dander Area specified for weapon preparation, transit positions where EO may be held for a short period and includes RAS dump points, temporary holding areas for EO, weapon parks and EO handling areas.
Weapon System	The equipment that loads and/or launches the EO onto a specified target. Includes the missile and launch assembly, torpedo and launch assembly; or gun/cannon barrel, breech, mount assembly and sighting assembly. Does not include the EO S&H System, combat system, directors with sighting systems or related interfaces.
Weatherdeck	Any deck that is uncovered or has at least one side exposed to the weather.
Weatherproof	The equipment is designed and constructed to meet the Ingress Protection rating of IP65, as specified in AS 60529, indicating its ability to withstand and protect against dust and water ingress, making it suitable for outdoor use and adverse environment conditions.
Weathertight	Prevent the passage of water into the Naval Vessel in all Foreseeable Operating Conditions.
Well	A well is any area on the deck exposed to the weather, where water may be entrapped. Wells are considered to be deck areas bounded on two or more sides by deck structures.
Wet-Lip Bench	A bench with a lip around the edge designed to prevent liquids from running off the bench.
Wheelhouse	An enclosed area of the Bridge.
Whipping	Transient vertical vibration of the hull girder caused by impact loading which may be the result of an underwater explosion, slamming event or other similar causes.
Whipping Damage	Plastic deformation of the vessel's hull beam girder caused by a matching of the natural frequency of the Naval Vessel hull beam girder with the pulsation of the explosive products gas bubble.
Whipping Response	Response of the Naval Vessel girder in bending due to a matching of the natural frequency of the Naval Vessel hull beam girder with the pulsation of the explosive products gas bubble.

Whole Body Vibration	In relation to seakeeping, oscillating, motion of a person as a result of motion of the platform on which they are on board. Limits are defined for Whole Body Vibrations (WBV) from consideration of motion sickness, fatigue and motion induced interruptions.
Workstation	Any location that a person onboard is required to stand or sit during the normal operation of the Naval Vessel. See also Bridge Workstation
Worst Heading	In the context of this standard refers to the heading on which the most severe motion occurs. This will depend on the motion or set of motions under consideration.
Wounded Personnel	See Embarked Persons.

Definitions - Y

Term	Definition
Yaw	Oscillatory ship motion around the vertical axis of a Naval Vessel. This will cause the bow and stern of a Naval Vessel to move out of phase of one another in the horizontal plane.

Definitions - Z

Term	Definition
Zero Crossing	Zero up crossings (or upper zero crossings) refer to instances where the wave profile passes through the mean water level in the upward direction and zero down crossings (or downward zero crossings) refer to the equivalent situation in which the wave profile at a point is moving downwards. Refer also to zero crossing period.
Zero Crossing Period	See wave zero crossing period.
Zone	One or more main sub-division compartments grouped for the purposes of damage control in accordance with a definition determined by the ANC Authority.
Zone of Convenient Reach (ZCR)	This is the area between the user and the locus swept-out by the user's extended arms as they intersect with the console control surfaces. Controls placed closer than the ZCR can be operated without requiring the body to lean forward unsupported. Controls outside the Normal Working Area but within the ZCR should be those less frequently activated.
Zoning	The sub-division of a Naval Vessel for the purpose of containing and restricting the spread of damage, while also allowing for a determined level of Naval Vessel functionality and/or capability to be retained (having adequate zoning so that ship systems can be made redundant and separated).

Abbreviations

Abbreviations - A

Abbreviation	Definition
AAP	Adaptive Autopilot
ABT	Automatic Bus Transfer
AC	Alternating Current
ACA	Ammunition Container Assembly
ACB	Air Circuit Breaker or Anti Circuit Breaker
ACH	Anti-Condensation Heater
ACS	Autonomous Control System
ACMA	Australian Communications and Media Authority
A-coil	Athwartships coil
ACOS	Automatic Change Over Switch
ACP	1) Allied Communication Publication 2) Alternate Conning Position
ACV	Air Cushion Vehicle
ADCC	Alternative Damage Control Central
ADF	Australian Defence Force
ADFP	Australian Defence Force Publication
ADG	Australian Dangerous Goods
AEL	Automatic Emergency Lantern
AFAP	Allied Fire Assessment Publications (published by NATO)
AFFF	Aqueous Film Forming Foam
AFU	Air Filtration Unit
Ag	Silver
Ag/AgCl	Silver / Silver Chloride
AGC	Anti-Grounding Cone
AGO	Australian Geospatial-Intelligence Organisation

AHU	Air Handling Unit
AIO	Action Information Organisation
AIRAH	Australian Institute of Refrigeration, Air conditioning and Heating
AIS	Automatic Identification System
ALARA	As Low As Reasonably Achievable
ALES	Authorised List of Explosive Stores
AMD	Active Missile Decoy
AML	Additional Military Layers
AMPS	Asset Management and Planning System
AMSA	Australian Maritime Safety Authority
AMWC	Australian Maritime Warfare Centre
ANC	Australian Naval Classification
ANCA	Australian Naval Classification Authority
ANCR	Australian Naval Classification Rules
ANEP	Allied Naval Engineering Publication
AOP	Allied Ordnance Publication
AOR	1) Auxiliary Oiler Replenishment; or 2) Area of Responsibility.
APCO-25	Association of Public-Safety Communications Officials – Standard 25
AREMA	Air Conditioning and Refrigeration Equipment Manufacturers of Australia
ARM	Anti-radiation Missile
ARPA	Automatic RADAR Plotting Aid
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
AS	Australian Standard
AS/NZS	Australian and New Zealand Standard
ASC	1. Armament System Certification 2. Aviation Support Cell
ASCII	American Standard Code for Information Interchange
ASG	Active Shaft Grounding
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers
ASIC	Application Specific Integrated Circuit

ASIST	Aircraft Ship Integrated Secure and Traverse.
ASM	2) Anti-Ship Missile
ASW	Anti-Submarine Warfare (naval mission)
ATP	Allied/Multinational Tactical Publication (NATO)
ATU	Air Treatment Unit
AUP	All Up Round
AUSCANNZUKUS	Australia, Canada, New Zealand, United Kingdom and the United States
AUSFLTCSG	Australian Fleet Combat Support Group
AUSTEO	Australian Eyes Only
AUV	Autonomous Underwater Vehicle
AWS	1) Automatic Weather Station
AY	Lateral Acceleration
AZ	Vertical Acceleration

Abbreviations - B

Abbreviation	Definition
B	Beam
BA	Breathing Apparatus
BDW	Below Deck Wireless
BAM	Bridge Alert Management
BHP	Brake Horsepower (see also brake power)
BIBS	Built In Breathing System
BIT	Built In Test
BITE	Built In Test Equipment
BNWAS	Bridge Navigational Watch Alarm System
BoM	Bureau of Meteorology
BR	1) Book of Reference (Royal Navy) 2) British Book of Reference
BS	British Standards

BV	Bureau Veritas

Abbreviations - C

Abbreviation	Definition
C2	Command and Control
CASEVAC	Casualty Evacuation
CASG	Capability, Acquisition and Sustainment Group
CBR	Chemical, Biological and Radiological
CBRN	Chemical, Biological, Radiological and Nuclear
CBRN-D	Chemical Biological Radiological and Nuclear Defence
CCITT	Consultative Committee for International Telephony and Telegraphy
CCTV	Closed Circuit Television
CD	1) Crush/Collapse Depth 2) Compact Disc
CDF	Chief of the Defence Force
CDRL	Contract Data Requirement List
CENTRIC	Combined Enterprise Regional Information Exchange
CFC	Chlorofluorocarbon
CFD	Computational Fluid Dynamics
CFE	CENTRIX Four Eyes
CG	1) Centre of Gravity 2) Compatibility Group
CIC	Communications Information Centre
CIWS	Close in Weapon System
CLC	Capability Lifecycle
CM	Configuration Management
CMP	Contract Management Plan
CMS	Combat Management System
CMT	Communications Management Terminal.

CoA	Commonwealth of Australia
COLREG	International Regulations for Prevention of Collision at Sea
COMMCEN	Communications Centre
CONREP	Connected Replenishment, see RAS
COP	Common Operating Picture
COS	Change Over Switch
COSWP	Code of Safe Working Practices for Merchant Vessels
COTS	1) Commercial Off-The-Shelf 2) Commercial Off-The-Shelf System
CP	Cathodic Protection
CPP	Controllable Pitch Propeller
CPS	Collective Protective System
CRE	Configuration, Role and/or operating Environment
CRES	Corrosion Resistant Steel
CRM	Corrosion Related Magnetic
CRT	Cathode Ray Tube
CS	Communication Systems.
CSR	Configuration Status Record
CT	Current Transformers
CTG	Commander Task Group
CuNi	Copper Nickel Alloy (usually 90/10)
CW	1) Chilled Water 2) Continuous Wave

Abbreviations - D

Abbreviation	Definition
DA	Design Authority
DAA	Design Approval Authority
DAR	1) Design Acceptance Representative 2) Data Analysis and Recording

DArmEng COE	Director Armament Engineering Centre of Expertise
DASA	Defence Aviation Safety Authority
DC	1) Direct Current 2) Damage Control
DCAL	Director Concepts and Liaison (part of DNPS)
DCC	1) Damage Control Central 2) Damage Control Centre.
DCERT	Design Certificate
DCL	Detection, Classification, and Localisation
DCO	Damage Control Officer
DCZ	Damage Control Zone
DDA	Damage Decision and Assessment System
DDC	Deck Decompression Chambers
DDD	Deep Diving Depth
DDG	Guided Missile Destroyer
DDS	Data Design Sheet
DE	1) Destroyer Escort 2) Diesel
DEFLOGMAN	Defence Logistic Manual
DEF(AUST)	Australian Defence Standard
DEFSTAN	Defence Standards (UK)
DFDA	Defence Force Discipline Act 1999
DFT	Dry Film Thickness
DG	Degaussing
DGPS	Differential Global Positioning System
DIA	Diameter
DIE	Defence Information Environment
DNID	Data Network Identifier
DNE	Directorate of Navy Engineering
DNV	Det Norske Veritas
DNWS	1) Directorate of Naval Weapons Systems

	2) Director of Navy Weapon Systems 3) Director Navy Warfare Systems
DoD	Department of Defence (Australian)
DOR	Detailed Operational Requirements
DR	1) Design Pressure 2) Distribution Panel 3) Dynamic Positioning
DPG	Defence People Group
DPNU	Disruptive Pattern Navy Uniform
DPS	Defence Publishing Service
DRFSI	Defence Radiation Source and Facility Inventory
DRSM	Defence Radiation Safety Manual
DSC	Digital Selective Calling
DSE	Direct Support Element
DSPF	Defence Security Principles Framework
DSTG	Defence Science and Technology Group
DSwA	Defence Seaworthiness Authority
DSwMS	Defence Seaworthiness Management System
DSwR	Defence Seaworthiness Regulator
DVD	Digital Versatile Disk
DVRE	Digital Voice Recording Equipment
DVRS	Digital Voice Recording System
DW	Duty Watch
DWL	Design Waterline

Abbreviations - E

Abbreviation	Definition
EA	1) Engineering Authority 2) Electronic Attack
EAV	Exposure Action Value

ECDIS	Electronic Chart Display and Information Systems
ECM	Electronic Counter Measures
ECORR	Free Corrosion (open circuit) Potential of a Metal
EDC	Electrical Distribution Centre
EEBD	Emergency Escape Breathing Device
EED	Electro-Explosive Device
EEH	Electro Explosive Hazard
EGC	1) Enhanced Group Calling 2) Exhaust Gas Cleaning
EHF	Extremely High Frequency
EIA	Electronics Industries Alliance
EID	Electrically Initiated Device
EIRP	Equivalent Isotropic Radiated Power.
ELF	Extremely Low Frequency
ELFE	Extremely Low Frequency Electromagnetic
ELSA	Emergency Life Support Apparatus
ELSRD	Emergency Life Support Respiratory Device
ELV	Exposure Limit Value
EM	Electromagnetic
EMC	Electromagnetic Compatibility
EMCON	Emission Control
EME	Electromagnetic Environment
EMF	Electromotive Force
EMI	Electromagnetic Interference
EMP	Electromagnetic Pulse; or
EMR	Electromagnetic Radiation
EMS	Environment Management System
EMSEC	Emanation Security
ENC	Electronic Navigational Charts
ENEQ	Effective Net Explosive Quantity

EO	1) Explosive Ordnance 2) Electro-Optic
EOL	End of Life
EOS	Emergency Operating Stations
EOS&H	Explosive Ordnance Stowage and Handling
EOTS	Electro Optical Tracking System
EP	Electronic Protection
EPA	Environmental Protection Authority
EPB	Environment Protection and Biodiversity
EPIRB	Emergency Position Indicating Radio Beacon
EPM	Electronic Product Model
ER	Emergency Rations
ESD	Electro-static discharge
ESM	Electronic Support Measures
ESP	Emergency Steering Position
ETA	Estimated Time of Arrival
Etc.	Etcetera
ETL	Emergency Troop Lift
EVDS	Electronic Visual Distress Signal
EW	Electronic Warfare

Abbreviations - F

Abbreviation	Definition
FAC	Free Available Chlorine
FAT	Factory Acceptance Test
FBD	Fast Break Detergent
FBI	Fire Barrier Insulation
FBL	Functional Baseline
FCCS	Flooding Casualty Control System

FCS	Fire Control System
FDM	Flight Deck Marshall
FDO	Flight Deck Officer
FEA	Finite Element Analysis
f-e-v	Fish Eye Viewing
FEG	Force Element Group
FF	Fire Fighting
FF&V	Fresh Fruit & Vegetables
FFH	Fast Frigate Helicopter
FFL	Frigate Light
FHA	Functional Hazard Analysis
FI	Fire Integrity
FIAM	Flight in Air Material
FI-QI	Forecastle Induced - Quarterdeck Induced (Degaussing Coil)
FP-QP	Forecastle Permanent - Quarterdeck Permanent (Degaussing Coil)
FLYCO	Flying Control Officer
FM	Frequency Modulation
FMEA	Failure Modes and Effects Analysis
FOC	First of Class
FOV	Field Of View
FP	Forward Perpendicular
FPP	Fixed Pitch Propeller
FPS	Function and Performance Specification Functional Performance Specification
FPZ	Fire Protection Zones
FRL	Fire Resistance Level
FRP	Fibre Reinforced Plastic
FSC	Fire System Characterisation
FTA	Fault Tree Analysis
FTP	Fire Test Procedure

FW	Fresh Water
Fwd	Forward

Abbreviations - G

Abbreviation	Definition
GA	General Arrangement drawing(s)
GBR	Great Barrier Reef
GCU	Gun Control Unit
GDP	1) Gun Design Pressure 2) Gun Direction Platform
GENSPEC	General Specification for Ships of the US Navy
GL	Germanischer Lloyds
GM	Distance Between Metacentre and Vertical Centre of Gravity
GMDSS	Global Maritime Distress and Safety Systems
GME	Generic Maritime Environment
GMP	Garbage Management Plan
GNSS	Global Navigation Satellite System
GP	Growth Plan
GPO	General Purpose Outlet
GPS	Global Positioning System
GRP	Glass Reinforced Plastic
GSE	Ground Support Equipment
GT	1) Gross Tonnage 2) Gas Turbine
GUI	Graphical User Interface
GW	Guided Weapon
GWP	Global Warming Potential

Abbreviations - H

Abbreviation	Definition
HADR	Humanitarian Assistance & Disaster Relief
HAT	Harbour Acceptance Test
HAZMAT	Hazardous Material
HCC	Hazard Classification Code
HCO	Helicopter Control Officer
HD	1) High Definition 2) Helicopter Director 3) Hazard Division
HDD	Hard Disk Drive
HEPA	High Efficiency Particulate Air
HERF	Hazards of Electromagnetic Radiation - Fuel
HERO	Hazards of Electro Radiation to Ordnance
HERP	Hazards of Electromagnetic Radiation - Personnel
HF	1) High Frequency 2) Human Factors
HFI	Human Factors Integration
HHP	High Holding Power (anchor)
HIFR	Helicopter In-Flight Refuelling
HMS	Hull Mounted Sonar System
HMI	Human Machine Interface
HP	1) High Pressure (68 Bar and above) 2) High Profile
HPA	Hearing Protection Area
HPD	Hearing Protection Devices
HPSW	High Pressure Sea Water
HPU	Hydraulic Power Unit.
HRA	Hazard Risk Assessment
HSC	High Speed Craft
HSE	Health Safety & Environment

HSF	Hull Shock Factor
HSIS	Hazardous Substances Information Systems
HSLA	High Strength Low Alloy (Steel)
HV	High Voltage
HVAC	Heating, Ventilation and Air Conditioning
HVC	High Value Compartments

Abbreviations - I

Abbreviation	Definition
I/O	Input / Output
IACS	International Association of Classification Societies
IAM	Identity and Access Management
IAPP	International Air Pollution Prevention
IAW	In Accordance With
IBS	Integrated Bridge System
IC	Internal Communications.
ICA	Interim Capability Acceptance
ICCP	Impressed Current Cathodic Protection
ICD	Interface Control Document
ICS	Integrated Control System
ICT	Information and Communications Technology
ID	1) Identification 2) Intermediate Docking
i.e.	That is
IEC	International Electrotechnical Commission
IED	Improvised Explosive Device
IEEE	Institute of Electrical and Electronics Engineers, (a professional association)
IETM	Interactive Electronic Technical Manual
IFF	Identification Friend or Foe

IHO	International Hydrographic Organisation
ILS	Integrated Logistic Support
ILSP	Integrated Life Support Plan
IMC	Instrument Meteorological Conditions
IMD	Incident Management Display
IMDG	International Maritime Dangerous Goods
IMF	Incident Management Facility
IMM	International Maritime Mobile
IMMB	International Maritime Mobile Band
IMO	International Maritime Organisation
IMP	Item Management Plan
INCOSE	International Council on Systems Engineering
Inmarsat (SES)	International Maritime Satellite Organisation (Ship Earth Station)
INBS	Integrated Navigation Bridge System
INS	Integrated Navigation System
IOR	Initial Operational Release
IP	1) Persons and Equipment Electrical Protection Code 2) Internet Protocol 3) Ingress Protection
IP (Rating)	Ingress Protection (Rating)
IPMS	Integrated Platform Management System
IPS	Integrated Platform Survivability
IR	Infrared
IRSS	IR Suppression System
IRS	Infra-Red Signature
ISA	International Standard Atmosphere
ISD	Ignition Safety Device
ISM	Information Security Manual
ISO	International Standardisation Organisation
ISPS	International Ship and Port Security Code
ITEA	Integrated Test Evaluation and Acceptance

ITTC	International Towing Tank Conference
ITU	International Telecommunications Union
IWMS	Integrated Waste Management System

Abbreviations - J

Abbreviation	Definition
JP	Joint Project
JRCC	Joint Rescue Coordination Centre

Abbreviations – K

Abbreviation	Definition
KG	The vertical distance from underside of keel (K) to the centre of gravity (G)
KM	The vertical distance from USK (K) to the metacentre (MG)
KSF	Keel Shock Factor

Abbreviations - L

Abbreviation	Definition
L	Length of Ship or Submarine
LAN	1) Local Area Network 2) Local Area and data Networks
LASER	Light Amplified Stimulated Emission Radiation
LBP or Lbp or Lpp	Length Between Perpendiculars
LCB	Longitudinal Centre of Buoyancy
LCF	Longitudinal Centre of Flotation
LCG	Longitudinal Centre of Gravity
LCM	Landing Craft Medium

L-coil	Longitudinal coil
LEL	Lower Explosive Limit
LF	Low Frequency
LFE	Lateral Force Estimator
LFH	Low Fire Hazard
LHD	1) Landing Helicopter Dock 2) Amphibious Assault Ship (multi-purpose)
LLL	Low Location Lighting
LLW	Low Level White Lighting
LO	Lube Oil
LOA	Length Over All
LOP	Local Operating Panel
LOX	Liquid Oxygen
LP	Low Pressure (up to 10 Bar)
LPSW	Low Pressure Sea Water
LRA	Lightweight Refuelling Assembly
LRF	Laser Range Finder
LRIT	Long Range Identification and Tracking
LSA	1) Low Solar Absorption 2) Life Saving Appliance
LSDC	Lightship Displacement Check
LSP	Laser Safety Paper
LSTFZ	Laser Safe to Fire Zone
LWL or L_{WL}	Length at Water Line

Abbreviations - M

Abbreviation	Definition
MARORDS	1) Maritime Orders 2) Marine Orders

MARPOL	IMO The International Convention for the Prevention of Pollution from Ships 1973 as modified by the protocol of 1978
MC	Maritime Commander
MC1	Nylon tie-down Lashing
MCC	Machinery Control Centre
MCM	Mine Counter Measures (naval mission)
M-coil	Main coil
MCOS	Manual Change Over Switch
MCR	1) Machinery Control Room 2) Maximum Continuous Rating
MCTC or MCT1cm	The moment to change the trim between perpendiculars of the ship by one centimetre, expressed in tonne metres
MDS	Master Décor Scheme
MEAS	Maritime Environment Assessment Statement
MP	Medium Pressure [10-70 bar]
MEN	Multiple Earth Neutral
MEPC	Marine Environment Protection Committee (IMO)
MES	Marine Evacuation System
MFMB	Mineral Fibre Marine Board
MFU	Major Fleet Unit (Frigate size or larger)
MGPS	Marine Growth Protection System
MHC	Minehunter Coastal
MHE	Mechanical Handling Equipment
MIC	Microbiologically Influenced Corrosion
Mid	Amidships
MII	Motion Induced Interruption
MIL	Military
MIL-HDBK	US Military Handbook
MIL-STAN or MIL-STD	US Military Standard
MinOp	Minimum Operating Condition
MMP	Margins Management Plan

MMSI	Maritime Mobile Service Identity
MOAS	Mine and Obstacle Avoidance Sonar
MOTS	Military of the Shelf
MP	Manoeuvring Panel
MRGB	Main Rotor Gearbox
MRH	Main Rotor Head
MRP	Master Reference Plane
MS	Military Standard
MSAS	Materiel Seaworthiness Assurance System
MSC	Maritime Safety Committee (of IMO)
MSI	1) Motion Sickness Incidence 2) Maritime Safety Information 3) Motion Sickness Index
MSLS	Maritime Survivor Locating System
MTN	Multi-Tactical Data Link Network
MWC	Maritime Water Centre
MWL	Maximum Working Load
MWV	Minor War Vessel

Abbreviations - N

Abbreviation	Definition
N/A	Not Applicable
NAB	Nickel Aluminium Bronze
NAP	Naval Air Publication
NATA	The National Association of Testing Authorities
NATO	North Atlantic Treaty Organisation
NAVAIDS	Navigational Aids
NAVSAFE	RAN's Safety Program
NAVSEA	Naval Sea Systems Command (US Navy)

NB	Number of Bunks
NDE	Non-destructive Examination
NDS	Navigation Display System
NDT	Non-destructive Test
NEQ	Net Explosive Quantity
NES	Naval Engineering Standard
NFA	1) Naval Flag Authority 2) Naval Flag Administrator
NFC	Natural Fibres
NFT	No Fire Threshold
NIHL	Noise-Induced Hearing Loss
NOHSC	National Occupational Health and Safety Commission
NOx	Nitrogen Oxides
NRI	Night Vison Imaging System (NVIS) Radiant Intensity
NRS	Navigation Radar System
NSC	Naval Ship Code
NSCV	National Standard for Commercial Vessels
NSN	NATO Stock Number
NVD	Night Vision Device
NVG	Night Vision Goggles
NVIS	1) Night Vision Imaging System 2) Near Vertical Incident Skywave
NVO	Naval Vessel Operator

Abbreviations - O

Abbreviation	Definition
OAL	Outfit Allowance List
OBTS	On Board Training System
OCCABA	Open Circuit Compressed Air Breathing Apparatus

OCD	Operational Concept Document
ODS	Ozone Depleting Substances
OE	Objective Evidence
OEM	Original Equipment Manufacturer
OF	Optical Frequencies
OHS or OH&S	Occupational Health and Safety (now replaced by Workplace Health & Safety -WHS)
OLM	Operational Level Maintenance
ONFA	Office of Naval Flag Authority
OOW	Officer of the Watch
OQE	Objective Quality Evidence
OR	Operational Release
OSA	1) Ordinary Ship's Anchor 2) Open Systems Interconnection
OSI	1) Operating and Support Intent 2) Open Systems Interconnection
OT	Operational Technology
OVZ	Optimal Visual Zone (see definitions)
OWS	Oily Water Separator
OWST	Oily Water Settling Tank

Abbreviations - P

Abbreviation	Definition
PA	Project Authority
PAS	Personal Abandonment Suits
PC	Personal Computer
PCB	1) Printed Circuit Board 2) Polychlorinated Biphenyl
PCBU	Person Conducting a Business or Undertaking
PCRF	Primary Casualty Receiving Facility
PCT	Portable Control Terminal

PE	Permissible Evidence
PED	Personal Electronic Device
PFC	Perfluorocarbons
PHA	Platform Hazard Assessment
PID	Proportional Integral Derivative
PIR	1) Passive Infra-Red 2) Polyisocyanurate
PLB	Personal Locator Beacon
PLC	Programmable Logic Controller
PL LLL	Photoluminescent Low Location Lighting
PM	Pierside Monitoring
PMCW	Phase Modulation Continuous Wave
PMP	1) Permissible Maximum Pressure 2) Project Management Plan 3) Potential Marine Pest
PMS	Pantone Matching System
POL	Petrols, Oils and Lubricants
PP	Proof Pressure
PPD	Positive Phase Duration
PPE	Personal Protective Equipment
PPM	Parts per million
PPS	Personnel Protection State
PRF	Pulse Repetition Frequency
PSP	Primary Steering Position
PSPF	Protective Security Policy Framework
PSTN	Public Switched Telephone Network
PTFE	Polytetrafluoroethylene
PVC	Polyvinyl Chloride
PW	Potable Water
PWO	Principal Warfare Officer
Pwps	Preliminary Welding Procedure Specification

Abbreviations - Q

Abbreviation	Definition
QA	1) Quality Assurance 2) Quick Assessment

Abbreviations - R

Abbreviation	Definition
RADAR	Radio Aid to Detection And Ranging
RADAR	Radio Detection And Ranging
RADHAZ	1) Radiation Hazard 2) Radiation Hazard Comprising HERP, HERO, HERF
RAM	1) Reliability Availability and Maintainability 2) Radar Absorbing Material
RAN	Royal Australian Navy
RAS	Remote and Autonomous Vehicles
RAS (A)	Replenishment at Sea (Ammunition)
RAS(L)	Replenishment at Sea (Liquids)
RAST	Recovery Assist, Secure and Traverse
RATTAM	Response to Attack on Ammunition
RAU	Ranges and Assessing Unit
RCC	1) Rescue Co-ordination Centre 2) Recompression Chamber and Associated Systems
RCD	Residual Current Device
RCM	Reliability Centred Maintenance
RCS	Radar Cross Section
RCU	Remote Command Unit
REA	Rapid Environmental Assessment
RF	Radio Frequency

RFP	Request for Proposal
RFQ	Request for Quote
RIS	Radio Interference Suppressor
RMP	Risk Management Plan
RMS	Root Mean Square
RN	Royal Navy
RNC	Raster Navigational Charts
RO-RO	Roll On - Roll Off
ROV	Remotely Operated Vehicle
RPS 3	Radiation Protection Series 3
RRSS	Rapid Reaction Spray System
RSA	Residual Strength Assessment
RSD	Rapid Securing Device
RTM	Requirements Traceability Matrix
RU	Ready Use
Rx	Receiver

Abbreviations - S

Abbreviation	Definition
S&TE	Support and Test Equipment
SA&IW	Situation Awareness and Indications and Warning
SAD	Safety and Arming Device
SAFETYMAN	Defence Safety Manual
SAR	Search and Rescue
SART	Search and Rescue Transponder
SAS	Situational Awareness Systems
SATCOM	Satellite Communications
SAWE	The Society of Allied Weight Engineers

SC	Safety Case
SCB	System Configuration Baseline
SCF	Safety Critical Function
SCR	Silicon Controlled Rectifier
SCUBA	Self Contained Underwater Breathing Apparatus
SD	Standard Definition
SDLJ	Special Duties Life Jacket
SDOF	Single Degree of Freedom
SEMP	System Engineering Management Plan
SESC	Ship/Submarine Explosive Safety Case
SESC-R	Ship/Submarine Explosive Safety Case Report
SFARP	So Far As Reasonably Practicable
SFC	1) Static Frequency Changer 2) Static Frequency Converter (solid state) 3) Specific Fuel Consumption, normal units of which are g/(kW hour) or kg/(kW hour). This term is also referred to as the fuel rate
SGG	Synthetic Greenhouse Gas
SGSI	Stabilised Glide Slope Indicator
SHHP	Super High Holding Power (anchor)
SHOL	Ship Helicopter Operating Limit
SI	System International – metric system of measurement
SINS	Ships Inertial Navigation System
SIRT	Standard Infrared Target
SLDMB	Self Locating Datum Marker Buoy
SMP	1) Signature Management Plan 2) Software Management Plan
SMS	Safety Management System
SOLAS	International Convention for the Safety of Life at Sea
SONAR	Sound Navigation And Ranging
SOP	Standard Operating Procedure
SOW	1) Statement of Work 2) Swimmer of the Watch

SOx	Sulphur Oxides
SPT	Sound Powered Telephone / Self Powered Telephone
SQDL	Shock Qualification Data List
SQEP	Suitably Qualified and Experienced Personnel
Sr	Steradian
SRA	Safety Risk Assessment
SRE	Sound Reproduction Equipment
SRS	Shock Response Spectra
SSAS	Ship Security Alert System
SSP	Secondary Steering Position
SSS	1) Software Systems Safety 2) Synchro Self Shifting
STANAG or STANAG (NATO)	Standardisation Agreement (NATO)
STBD	Starboard
STCW	Standards of Training, Certification and Watchkeeping
STD	Standard
STE / S&TE	Support Test Equipment
STEL	Short-term Exposure Limits
STFZ	Safe to Fire Zone
STOVL	Short Take off and Vertical Landing
STP	Sewage Treatment Plant
STR	Safe to Rotate
STT	Safe to Transmit
STW	1) Set To Work 2) Setting to Work
SSCB	SUBSAFE Certification Boundary, also called Pressure Boundary
SVTT	Surface Vessel Torpedo Tubes
SW	Salt Water
SWL	Safe Working Load
SWSP	Software Support Plan

Abbreviations - T

Abbreviation	Definition
T&E	Test and Evaluation
T&S	Trim and Stability
TAS	1) Towed Array System 2) Towed Array Sonar
TBA	To be Advised
TBD	To Be Determined
TBT	Tributyltin
TCA	Touchdown Clearance Area
TCD	Test Concept Document
TCG	Transverse centre of gravity, from the centreline, positive to starboard
TCP	Transmission Control Protocol
TCS	Transfer Control Station
TD1A/B	A Chain Tie-down Lashing
TDL	Technical Data List
TDS	Total Dissolved Solids
TEMP	1) Test and Evaluation Management Plan 2) Test and Evaluation Master Plan
TEMPEST	Compromising Emanations
TES	Target Echo Strength
THA	Threat Hazard Assessment
THD	Transmitting Heading Device
TIE	Tactical Information Exchange
TMA	Target Motion Analysis
TNT	Trinitrotoluene (Explosive)
TPC	The increase in displacement required to cause the draught of the ship to increase by one centimetre, expressed as tonnes per centimetre
TREE	Transient-Radiation Effects on Electronics

TS	Top Secret
TWA	Time Weighted Average
Tx	Transmit

Abbreviations – U

Abbreviation	Definition
UASS	Upper Air Sounding System
UAV	Unmanned Aerial Vehicle
UEP	Underwater Electric Potential (signature) (also SE)
UHF	Ultra High Frequency
ULP	Unleaded Petrol
UN	United Nations
UNDEX	Underwater Explosion
UPS	Uninterruptible Power Supply
UR	Unified Requirements (Published by IACS)
URN	Underwater Radiated Noise
USK	The underside of keel at the longitudinal reference (generally midships)
USN	United States Navy
USV	Uncrewed Surface Vehicle
UTC	Universal Time Code
UWT	Underwater Telephone

Abbreviations - V

Abbreviation	Definition
V&V	Verification and Validation
V&VP	Verification and Validation Plan
VCG	Vertical Centre of Gravity, above the baseline, positive up

VCRM	Verification Cross Reference Matrix
VDR	Voyage Data Recorder
VDS	Variable Depth Sonar (towed body)
VHF	Very High Frequency
VLF	Very Low Frequency
VLS	Vertical Launch System (missile)
VMC	Visual Meteorological Conditions
VMF	Variable Message Format
VOD	Video on Demand
V or U	Ship's speed in metres per second (ms-1)
Vth	Vertical Threshold Velocity (slamming)

Abbreviations – W

Abbreviation	Definition
WAN	Wide Area Network
WBV	Whole Body Vibration
WC	Water Closet
WEMS	Wet End Mechanical System
W-ECDIS	Warship Electronic Charts Display and Information System
WHS	Workplace Health and Safety
WI	Work Instruction
WL	Waterline
WLL	Working Load Limit
WMO	World Meteorological organisation W/sr Watts per second
WP	1) Working Pressure 2) White Phosphorous
WPAs	Weapon Preparation Areas
WPS	Welding Procedure Specification

WSC	Weapon Stowage Compartment Note: Not to be confused with Weapon Stowage Compartment, a term applicable to submarines only.
WT	Water Tight

Abbreviations - X

Abbreviation	Definition

Abbreviations - Y

Abbreviation	Definition

Abbreviations - Z

Abbreviation	Definition
ZSR	Zoning, Separation and Redundancy