

Useful Acronyms

CBRNE	Chemical, Biological, Radiological, Nuclear, Explosive
ERIFS	Emergency Responder Interface with Ferry Systems
FEMA	Federal Emergency Management Agency
FOIA	Freedom of Information Act
HSI	Homeland Security Institute
HSPD	Homeland Security Presidential Directive
ICS	Incident Command System
IED	Improvised Explosive Device
IFSTA	International Fire Service Training Association
NIMS	National Incident Management System
OGT	Office of Grants and Training
SSI	Sensitive Security Information
USFS	US Ferry System
WMD	Weapons of Mass Destruction
WSF	Washington State Ferry

AB	Able-Bodied Seaman
AED	Automated External Defibrillators
AHJ	Authorities Having Jurisdiction
CBRNE	Chemical, Biological, Radiological, Nuclear, Explosive
CO ₂	Carbon Dioxide
IFSTA	International Fire Service Training Association
MES	Marine Evacuation Systems
MSDS	Material Safety Data Sheets
OS	Ordinary Seaman
PFD	Personal Floatation Devices
SCBA	Self Contained Breathing Apparatus
SOLAS	Safety of Life at Sea
VHF	Very High Frequency
WMD	Weapons of Mass Destruction

HC	Hydrogen Cyanide
CBRNE	Chemical, Biological, Radiological, Nuclear, Explosive
ICS	Incident Command System
IFSTA	International Fire Service Training Association
PPE	Personal Protective Equipment
SCBA	Self Contained Breathing Apparatus
WMD	Weapons of Mass Destruction
HAZMAT	Hazardous Materials
EMS	Emergency Medical Supplies
NIMS	National Incident Management System

ACP	Area Contingency Plan
CBRNE	Chemical, Biological, Radiological, Nuclear, Explosive
CIRG	Critical Incident Response Group
COTP	Captain of the Port
DOD	Department of Defense
DUI	Driving Under the Influence
EMS	Emergency Medical Services
EOC	Emergency Operation Center
ERT	Evidence Response Team
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FMSC	Federal Maritime On Scene Coordinator
FRP	Federal Response Plan
HAZMAT	Hazardous Materials
HMRU	Hazardous Material Response Unit
HSAS	Homeland Security Advisory System
HSPD	Homeland Security Presidential Directive
ICS	Incident Command System
IFSTA	International Fire Service Training Association
MARSEC	Maritime Security
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NBC	Nuclear, Biological & Chemical
NIMS	National Incident Management System
NRP	National Response Plan
OSHA	Occupation Safety & Health Administration
PFD	Personal Floatation Devices
PFO	Principal Federal Official
PPE	Personal Protective Equipment
SAC	Special Agent in Charge
SFLEO	Senior Federal Law Enforcement Officer
SWAT	Special Weapons and Tactics
USCG	United States Coast Guard

WMD	Weapons of Mass Destruction
WSDOT	Washington State Department of Transportation
WSP	Washington State Patrol

Some: Glossary of Terms

A

Abeam – Directly off the side of a vessel; in a direction at right angles to the middle of the vessel's length. An object is said to be abeam when it is the side of a vessel.

Aboard – In or on a vessel; opposite of ashore.

Hydrogen Cyanide (AC) - A type of blood agent. A colorless gas with the odor of almonds, it is used in pesticides, fumigating, electroplating, gold and silver extraction.

Accommodation Ladder – Vessel's own gangway (usually one on each side) fitted with means of raising and lowering; also a set of steps or ladder used for getting from one deck to another.

Accommodation Spaces – Areas of a vessel (cabins) designed for living. They are subdivided into officer, crew, and passenger accommodations.

ACE – Area Coordination Exercises

ACP – Area contingency plan

Adrift – To float about, not under control, at the whim of the wind and tide; a vessel floating at random. Something abandoned at sea is said to be "cast adrift".

Aft (After) – Direction towards the back end or stern of a vessel; term used relative to some other part of a vessel indicating the direction toward the stern.

Afterpeak – Area in the hull at the extreme rear or aft end of a vessel; usually used for storage. *Also see Forepeak*

Aground – Vessel resting wholly or partly on the ground instead of being entirely supported by the water. If done intentionally, a vessel is said to "take the ground"; if by accident, it is said to have "run aground"

Ahead – In front of a vessel; may indicated direction (an object may "lie ahead") or to indicate movement (proceed at "full speed ahead").

AHJ – Authority Having Jurisdiction

Alpha Radiation - One of the three main types of radiation (alpha, beta, and gamma) emitted from radioactive materials. Alpha particles are the heaviest and most highly charged of these type particles. However, they cannot travel more than a few inches in air and are completely stopped by a piece of paper.

Amidships – Center of a vessel's length, halfway between the bow and stern.

Anchorage – Designated areas, identified on navigational charts, where ships may safely anchor. *Also see* Mooring (3).

Angle of Roll – angle at which an imbalanced vessel is leaning and to which the vessel will stabilize. *Also see* Roll and List.

Anthrax A - bacterial biological agent. It is naturally occurring and can be spread to humans by handling products from infected animals or by breathing in spores from infected animal products.

Ashore – Leaving a vessel and stepping on land; opposite of aboard.

Assessment - The evaluation and interpretation of measurements and other information to provide a basis for decision-making.

ASTM (ASTM Standard 2413) – ASTM is an international organization that establishes standards and norms. Standard 2413 is a guide for standard hospital preparedness and response.

ATF (See BATF)

Atropine - An anti-cholinergic used as an antidote for nerve agent poisoning to block the effects of the neurotransmitter or chemical causing the over-stimulation.

Atwartship – Direction from side to side. To move across a vessel is to move athwartships.

Awareness Training Level - Addresses training requirements for emergency responders who are likely to witness or discover an incident involving the terrorist/criminal use of weapons of mass destruction (WMD) or who may be sent out to initially respond or support the response to the report of such an incident. Generally, all actions to be taken by these individuals should be conducted from within the cold zone. Should personnel find themselves in the warm or hot zones, they are to remove themselves and to encourage others, if ambulatory, to move to a staging area away from the immediate threat and attempt to minimize further contamination. The requisite competencies for this level of training are to recognize (RECOGNITION) a WMD terrorism incident and to notify (NOTIFICATION) appropriate authorities of the incident. This course is at the awareness training level.

B

Backstay – Line made of rope or wire supports a mast (vertical poke); extends from the top of the mast to the stern.

Bacteria - Single-celled organisms that cause a variety of diseases in animals, plants, and humans. They may also produce extremely potent toxins inside the human body.

Ballast – Additional weight placed low in the vessel's hull to improve its stability; may be steel, concrete, or water. *Also see* Ballasting, Ballast Tank, and Trim.

Ballasting – Process of filling empty tanks with seawater to increase a vessel's stability. *Also see* Ballast, Ballast Tank, and Trim.

Ballast Tank – Watertight compartment that holds liquid ballast. *Also see* Ballast, Ballasting, and Trimming Tank.

Barge – Long, large vessel (usually flat-bottomed, self-propelled, or towed or pushed by another vessel) used for transporting goods on inland waterways.

Barrel – Measure of liquid volume used in the marine industry; for petroleum, 1 barrel = 42 U.S. gallons (159 liters).

BATFE - Bureau of Alcohol, Tobacco, Firearms, and Explosives. A law enforcement agency within the US Department of the Treasury whose responsibilities include enforcing federal laws and regulations regarding explosives and arson. <http://www.atf.treas.gov/>

Batten – (1) Thin iron bar used to hold down the coverings of hatches on merchant vessels. (2) Strip of wood used to keep cargo away from the hull of a vessel or to prevent it from shifting.

Beam – Width of a vessel measured at the widest point.

Below – Anywhere on board below the level of the upper deck; downstairs.

Berth – (1) Mooring or docking a vessel alongside a pier, wharf, or bulkhead. (2) Sleeping space. *Also see* Berthing Area and Mooring (3).

Berthing Area – Space at a wharf or pier for docking a vessel; place where a vessel comes to rest. (2) Bed or bunk space on a vessel. *Also see* Berth and Mooring (3).

Beta Radiation - One of the three main types of radiation (alpha, beta, and gamma) emitted from radioactive materials. Beta particles are smaller and travel much faster than alpha particles. They can travel several millimeters through skin tissue but generally do not penetrate far enough to reach vital organs. Exposure to beta particles from outside the body is not normally considered a serious hazard.

Bilge – Lowest inner part of a vessel's hull; flat part of bottom of a vessel.

Bilge Pump – Small pump located in the bilge used to remove internal water.

Bill of Lading – Document that establishes the terms of a contract between a shipper and a transportation company; serves as a document of title, a contract of carriage, and a receipt for goods

Biological Agents - A microorganism that causes disease in humans, plants, or animals or causes the deterioration of material. Includes bacteria, viruses, and toxins.

Bioterrorism - Terrorism using germ warfare, an intentional human release of a naturally-occurring or human-modified toxin or biological agent.

Bits – Single or twin set of upright wood or metal posts located on deck along the sides of a vessel used for securing mooring lines.

BLEVE - Boiling Liquid Expanding Vapor Explosion

Blister Agent - A chemical agent (also called a vesicant) that causes severe blistering and burns to the eyes, skin, and tissues of the respiratory tract. Exposure is through liquid or vapor contact. Also referred to as mustard agents.

Blood Agent - A chemical agent that interferes with the ability of the blood to transport oxygen and causes asphyxiation. These agents cause human injury by interfering with cell respiration (the exchange of oxygen and carbon dioxide between blood and tissues).

Boat – Small vessel for traveling on water: a small, often open vessel for traveling on water.

Boat Deck – Uppermost deck on which lifeboats and other lifesaving appliances are stowed; used as a promenade space on passenger vessels. *Also see Deck.*

Boat Hook – Long pole with distinctive hook at the end used for fending off other boats and retrieving or picking up mooring lines.

Boatswain (Bosom) – Petty officer on a merchant vessel who has charge of the

deck crew, hull maintenance, and related work.

Boiler Room – Compartment containing boilers but not containing a station for operating or firing the boilers.

Bollard – Stout vertical post (single or double) on a pier or wharf used for securing a vessel's mooring lines; common along piers where large vessels are moored.

Boom – (1) Pole rigged for use as a crane on board a vessel. (2) Floating object used to confine materials upon the surface of the water.

Bow – Front end or forward part of a vessel; opposite of the stern.

Bow Thruster – Large propeller mounted in a tunnel located in the forward part of the vessel used to assist the vessel in docking and undocking; reduces the need for assistance from tugs.

Break Bulk Cargo – Loose, non-containerized cargo commonly packaged in bags, drums, cartons, crates, etc.

Bridge – (1) Control center on modern mechanized vessels; forward part of a vessel's superstructure. (2) People in charge of a vessel.

Bulk Cargo – Homogeneous (of the same kind) cargo (for example, oil, grain, coal, bricks, lumber, or ore) stowed loose in a hold and not enclosed in any container such as boxes, bales, or bags.

Bulkhead – (1) Upright, vertical partition (wall) dividing a vessel into compartments (rooms); serves to retard the spread of liquids or fire.

Bulk Terminal – Handling area for cargoes (unpackaged commodities carried in holds and tanks of cargo vessels and tankers) that are loaded and unloaded by conveyors, pipelines, or cranes. *A liquid bulk terminal handles cargoes such as fuel, lubricating oils, and chemicals. Also see Dry Bulk Terminal.*

Bulwark – Wall built around the edge of a vessel's upper deck.

Buoyancy (B) – (1) Tendency or capacity to remain afloat in a liquid. (2) Upward force of a fluid upon a floating object. *Also see Center of Buoyancy.*

Butterworth System – Arrangement of water nozzles installed in the cargo tanks of a tanker for purposes of tank cleaning. Tank-cleaning system may be means of introducing fire suppression agents into a tank.

BWC - Biological Weapons Convention - Simultaneously opened for signature in Moscow, Washington and London on 10 April 1972 and entered into force on

26 March 1975. It prohibits the development, production and stockpiling of bacteriological (biological) and toxin weapons.

C

Cargo Manifest – Document that lists all cargo carried on a specific vessel voyage. *Also see Dangerous Cargo Manifest.*

Cargo Plan – View of a vessel showing all the storage space available for cargo; shows the amount and type of cargo carried, its destination, and how it will be stored.

Car Terminal – Facility for loading and unloading vessels specially designed to transport automobiles.

CBRNE - Common acronym pertaining to the five major categories of terrorism incidents: chemical, biological, radiological, nuclear, and explosive weapons or materials.

CCG - Canadian Coast Guard – Marine law enforcement and rescue agency in Canada.

CCL- Contamination Control Line - The established line around the Contamination Reduction Zone that separates the Contamination Reduction Zone from the Support Zone.

CDC- Centers for Disease Control and Prevention <http://www.cdc.gov/>

Centerline – Imaginary line running the length of a vessel from the point of the bow to the center of the stern; equidistant from the port and starboard sides of a vessel.

Center of Buoyancy – Geometrical center of the underwater volume of a body; considered to be the point through which all forces of buoyancy are acting vertically upwards with a force equal to the weight of a body. *Also see Buoyancy.*

Center of Gravity – Point through which all the weight of a vessel and its contents may be considered as concentrated so that if supported at this point, the vessel would remain in equilibrium in any position.

CG - Phosgene - A choking agent. A colorless gas with the odor of freshly mown hay or corn.

Chief Engineer – Senior Engineering officer responsible for the satisfactory working and upkeep of the main and auxiliary machinery on board a vessel.

Chief Officer – Deck officer immediately responsible to a vessel's Master aboard a merchant vessel; officer next in rank to the Master; also called *Chief Mate or First Mate*.

Chief Steward – Person in charge of the steward department; responsible for the comfort and service of passengers on passenger vessels; obtains and regulates the issue of provisions and stores and is in charge of the inspection and proper storage of provisions.

Chemical Agents- A chemical substance that is intended to kill, seriously injure, or incapacitate people through its physiological effects. The agent may appear as a vapor, aerosol, or liquid; it can be either a casualty/toxic agent or an incapacitating agent. Classified as toxic agents, blister agents, blood agents, choking agents, and nerve agents.

Chemical Weapons Convention (CWC) - An arms control agreement, which outlaws the production, stockpiling and use of chemical weapons. Signed in 1993 and put in force in 1997.

Chlorine -A commercially available, non-persistent chemical choking agent, usually disseminated in liquid or gas form. Has a strong, offensive bleach odor.

Chloropicrin (PS) - A choking agent. Chloropicrin vapor is highly poisonous if inhaled.

Chock – (1) Cast metal ring mounted to the deck edge to control a mooring line or prevent chafing of the line; closed chock requires one end of the mooring line to pass through the center of the chock; open chock allows the line to be dropped in from the top. (2) Piece of wood or other material placed at the side of cargo to prevent rolling or moving sideways. *Also see Fairlead.*

Choking Agent - A chemical agent that causes physical injury to the lungs. In extreme cases, membranes swell and lungs fill with liquid, which can result in asphyxiation. Death is caused by a lack of oxygen. Also referred to as pulmonary agents.

CI/KR - critical infrastructures and key resources

Cyanogen Chloride (CK) - A blood agent. A colorless liquid with a sharp, pungent odor, found in dyes and pigments and in the production of nylon.

Cleat – (1) Fitting consisting of two arms fastened on deck around which mooring lines may be secured. (2) Strip of wood or metal to give additional strength, prevent warping, or hold in place.

Coaming – Raised framework around deck or bulkhead openings; used to prevent entry of water.

Coastal Warning Display Signals

DAYTIME SIGNALS

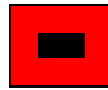
SMALL CRAFT ADVISORY



GALE WARNING



STORM WARNING



HURRICANE WARNING



NIGHT (LIGHT) SIGNALS

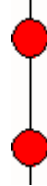
SMALL CRAFT ADVISORY



GALE WARNING



STORM WARNING



HURRICANE WARNING



Explanation of Warnings

SMALL CRAFT ADVISORY: An advisory issued by coastal and Great Lakes Weather Forecast Offices (WFO) for areas included in the Coastal Waters Forecast or Near shore Marine Forecast (NSH) products. Thresholds governing the issuance of small craft advisories are specific to geographic areas. A Small Craft Advisory may also be issued when sea or lake ice exists that could be hazardous to small boats. There is no precise definition of a small craft. Any vessel that may be adversely affected by Small Craft Advisory criteria should be considered a small craft. Other considerations include the experience of the vessel operator, and the type, overall size, and sea worthiness of the vessel. There is no legal definition of "small craft". The Small Craft Advisory is an advisory in Coastal Waters and Nearshore forecasts for sustained winds, frequent gusts, or sea/wave conditions, exceeding defined thresholds specific to geographic areas. A Small Craft Advisory may also be issued when sea or lake ice exists that could be hazardous to small boats.

GALE WARNING: To indicate winds within the range 34 to 47 knots are forecast for the area.

STORM WARNING: To indicate winds 48 knots and above, no matter how high the speed, are forecast for the area. However, if the winds are associated with a tropical cyclone (hurricane), the STORM WARNING indicates that winds within the range 48-63 knots are forecast.

HURRICANE WARNING: Issued only in connection with a tropical cyclone (hurricane) to indicate that winds 64 knots and above are forecast for the area.

NOTE: A "HURRICANE WATCH" is an announcement issued by the National Weather Service via press and television broadcasts whenever a tropical storm or hurricane becomes a threat to a coastal area. The "Hurricane Watch" announcement is not a warning, rather it indicates that the hurricane is near enough that everyone in the area covered by the "Watch" should listen to their radios for subsequent advisories and be ready to take precautionary action in case hurricane warnings are issued.

NOTE: A SPECIAL MARINE WARNING is issued whenever a severe local storm or strong wind of brief duration is imminent and is not covered by existing warnings or advisories. No visual displays will be used in connection with the Special Marine Warning Bulletin; boaters will be able to receive these special warnings by keeping tuned to a NOAA Weather Radio station or to Coast Guard and commercial radio stations that transmit marine weather information.

Cofferdam – Narrow, empty space (void) between compartments or tanks of a vessel that prevents leakage between them; used to isolate compartments or tanks.

COFR - Certificate of Financial Responsibility – Document providing evidence that a vessel owner/operator is adequately insured.

COG – continuity of government, also council of governments.

Collision Bulkhead – Transverse watertight bulkhead located in the forward 5 percent of a vessel's length to control flooding in the event of a head-on collision.

Cold Zone - A hazardous material response term referring to the clean (uncontaminated) area outside the inner perimeter where the command post and necessary support functions are located; special protective clothing is not required in this area. Also referred to as the clean zone, green zone, or support zone.

Companionway – Interior stair-ladder used to travel from deck to deck (usually enclosed).

Compartment – Interior space (room) of a vessel; numbered from forward to aft with odd numbers on starboard side and even numbers on port side.

Compartmentation – Subdividing of a vessel's hull by transverse watertight bulkheads; may allow a vessel to stay afloat under certain flooding conditions. *Also see* One-Compartment Subdivision.

CONOPS - Unified Concept of Operations Development.

Consequence Management - A term defined in both PDD-39 and the Terrorism Incident Annex to the National Response Plan (NRP). It refers to measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of a WMD/terrorism incident.

Containers – Boxes of Standardized size used to transport cargo by truck or rail car when transported over land and by cargo vessels at sea. *Also see* Refrigerated Containers and Container Terminal.

Container Terminal – Facility for loading and unloading cargoes shipped in containers and their stowage; usually accessible by truck, railroad, and marine transportation. *Also see* Containers and Refrigerated Containers.

Control Zones - The designation of the areas at the hazardous materials incident based on safety and the degree of hazard. Usually hot, warm and cold zones are designated. Other terms used to designate the three zones are the Exclusion Zone, Contamination Reduction Zone, and Support Zone.

COOP – continuity of operations

COTP - Captain of the Port – U.S. Coast Guard officer who has broad powers over all vessels in a port area in the United States.

CRC- Contamination Reduction Corridor - That area within the Contamination Reduction Zone where the actual decontamination is to take place. Exit from the Exclusion Zone is through the Contamination Reduction Corridor (CRC). The CRC will become contaminated as people and equipment pass through to the decontamination stations.

Credible Threat Intelligence - based; presented in oral, written, electronic, or other form. Based upon the terrorist's ability to attack, their proven desire, and the group possessing the means to attack.

Crew List – Part of a vessel's papers listing the names and nationalities of every member of the crew giving the capacity in which each member serves.

Crisis Management - A term defined in both PDD-39 and the Terrorism Incident Annex to the National Response Plan (NRP). It refers to measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism.

CRZ - Contamination Reduction Zone - That area between the Exclusion Zone and the Support Zone. This zone contains the Personnel Decontamination Station. This zone may require a lesser degree of personnel protection than the Exclusion Zone. This area separates the contaminated area from the clean area and acts as a buffer to reduce contamination of the clean area.

CST – Civil Support Team. Teams established to deploy rapidly to assist a local incident commander in determining the nature and extent of an attack or incident; provide expert technical advice on WMD response operations; and help identify and support the arrival of follow-on state and federal military response assets. They are joint units and, as such, can consist of both Army National Guard and Air National Guard personnel, with some of these units commanded by Air National Guard lieutenant colonels.

CT- Counterterrorism - Offensive measures taken to prevent, deter, and respond to terrorism.

Current – Horizontal movement of water; formed by wind, tides, rotation of the earth, and the effects of temperature.

Cyberterrorism - Generally understood to mean unlawful attacks and threats of attack against computers, networks, and the information stored therein when done to intimidate or coerce a government or its people in furtherance of political or social objectives.

D

Damage Control Locker – Compartment containing fire-fighting/emergency equipment.

Dangerous Cargo Manifest – Listing of hazardous cargos carried on a vessel; format is specified by the International Maritime Organization. *Also see* Cargo Manifest.

DCO – Defense Coordinating Officer. If appointed by the Department of Defense (DOD), the DCO serves as Dept. of Defense's (DOD's) single point of contact at the Joint Field Office (JFO). With few exceptions, requests for Defense Support for Civil Authorities (DSCA) originating at the JFO will be coordinated with and processed through the DCO.

DDC - Disaster District Committee

Deadlight – Round glass window that cannot be opened, this is located in the side of a vessel. *Also see* Porthole and Portlight.

Deadweight – Total weight of cargo, fuel, crew, passengers, baggage, consumable stores, potable water, and boiler waste that a vessel is designed to carry.

Deck – Continuous, horizontal surface (floor) running the length of a vessel; some may not extend the whole length of a vessel but always reaches from one side to the other. *Also see* Boat Deck, Main Deck, Tank Top, 'Tween Deck, Poop Deck, Upper Deck, and Weather Deck.

Deckhead – *See* Overhead

DEST - Domestic Emergency Support Team. The DEST may be deployed to provide technical support for management of potential or actual terrorist incidents.

Deta Sheet - A plastic explosive that is manufactured in flat sheets and is used for both military and commercial purposes. It is available in either a flexible or rigid form.

Delivery System - The delivery system (container) may be selected for maximum concealment, such as an IED in a stuffed animal. Or the container may be designed to produce fragmentation, such as a metal cooler or fuel can. Items may also be placed into the IED container to increase injuries in the area of detonation. Examples include ball bearings, nails, or BBs. Nonmetallic examples can include glass shards or marbles. The delivery system may also be a vehicle or person.

Dewatering – Process of removing water from a vessel.

DHS - Department of Homeland Security www.dhs.gov

Diphosgene (DP) - A choking agent. The vapor is a lung irritant and can be lethal in high concentrations.

Dirty Bomb -*See* Radiological Dispersion Device

Displacement – Weight or volume of water displaced by a floating vessel of equal weight; weight of the vessel (including its load) is measured in long tons (1 long ton = 2,240 pounds or 1 ton [1,000 kilograms]).

Diurnal – Tide pattern that has one high and one low in a 24-hour period.

DOD - Department of Defense www.dod.mil

Dog – Locking levers or bolts and thumbscrews on watertight doors.

Dog the Hatches – Close the doors.

DOJ - Department of Justice www.usdoj.gov

Domestic Terrorism - Refers to activities that involve acts dangerous to human life that are a violation of the criminal laws of the US or of any state; appears to be intended to intimidate or coerce a civilian population; to influence the policy of a government by mass destruction, assassination, or kidnapping; and occur primarily within the territorial jurisdiction of the US. [18 U.S.C. 2331(5)].

DOT - Department of Transportation <http://www.dot.gov/>

Double Bottom – Top of a series of tanks and void spaces placed along the bottom of a vessel; extra watertight floor within a vessel above the outer watertight hull; void or tank space between the outer hull of a vessel and the floor of a vessel. Also known as the *inner bottom* or *tank top*.

Draft – Vertical distance between the water surface and the lowest point of a vessel; depth of water a vessel needs in order to float. Draft varies with the amount of cargo, fuel, and other loads on board. *Also see* Draft Marks.

Draft Marks – Numerals on the ends of a vessel indicating the depth of the vessel in the water. *Also see* Draft.

Dry Bulk Terminal – Facility equipped to handle dry goods (such as coal or grain) that are stored in tanks and holds on a vessel. *Also see* Bulk Terminal.

Dry Dock – Enclosed area into which a vessel floats but where water is then removed leaving the vessel dry for repairs, cleaning, or construction.

DUMBELS - First responder acronym for the effects of a nerve agent attack. Defecation, Urination, Miosis (pupil contraction), Bronchospasm (wheezing), Emesis (nausea, vomiting), Lacrimation (profuse tearing), Salivation.

Dunnage – Loose packing material (usually wood boards and wedges) that is placed around cargo in a vessel's hold to support, protect, or prevent it from moving while the vessel is at sea.

E

Ebb Tide – Falling tide; opposite of Flood Tide.

Economizer – Assembly of coils in a vessel's stack (chimney) designed to transfer heat rising up the stack to water within the tubes. *Also see Fiddley and Stack.*

Eco-terrorism - The use or threatened use of violence of a criminal nature against innocent victims or property by an environmentally oriented, sub-national group for environmental-political reasons, or aimed at an audience beyond the target, often of a symbolic nature. Any crime committed in the name of saving the environment. [James F. Jarboe, Domestic Terrorism Section Chief, Counterterrorism Division, FBI; Feb. 12, 2002]

Egress - The place or means of exiting.

Elicitation -A type of surveillance activity. Elicitation involves people or organizations attempting to gain information about operations, capabilities, or people. Elicitation attempts may be made by mail, fax, telephone, or in person.

Emergency - A term used by FEMA and defined in the Stafford Act as “any occasion or instance for which, in the determination of the President, federal assistance is needed to supplement state and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States.”

Emergency Responder - Local police, emergency medical services, emergency management services, fire service, hazardous material services, public works, governmental administrative personnel, public safety communication, healthcare personnel, and public health agencies who during an incident take action to save lives, protect property, and meet basic human needs.

EOC - Emergency Operations Center -The physical location at which the coordination of information and resources to support local or state incident management activities normally takes place.

EOP- Emergency Operations Plan - A planning document that 1) assigns responsibility to organizations and individuals for implementing specific actions at projected times and places in an emergency that exceeds the capability or routine responsibility of any one agency; 2) sets forth lines of authority and organizational relationships, and shows how all actions will be coordinated; 3) identifies personnel, equipment, facilities, supplies, and other resources available for use during response and recovery operations; and 4) identifies steps to address mitigation issues during response and recovery activities.

Epidemiological - Related to disease in humans.

Eradicate - To get rid of, wipe out, and destroy.

ERT- Emergency Response Team -The FEMA group, composed of a headquarters element and a regional element that is deployed by the Director of FEMA to the scene of a disaster/incident to coordinate the overall federal response.

ERT- A - Emergency Response Team-Advance Element - The ERT-A conducts assessments, and initiates coordination with the State and initial deployment of Federal resources. It is headed by a team leader from FEMA and is composed of program and support staff and representatives from selected ESF primary agencies.

ERT- N - National Emergency Response Team - The ERT-N deploys for large-scale, high-impact events, or as required. An ERT-N may pre-deploy based on threat conditions.

Escape Trunk – Vertical, enclosed shaft with a ladder providing an escape path for crew stationed in low areas of a vessel.

ESF- Emergency Support Function - A grouping of government and certain private-sector capabilities into an organizational structure to provide the support, resources, program implementation, and services that are most likely to be needed to save lives, protect property and the environment, restore essential services and critical infrastructure, and help victims and communities return to normal, when feasible, following domestic incidents. The ESFs serve as the primary operational-level mechanism to provide assistance to State, local, and tribal governments or to Federal departments and agencies conducting missions of primary Federal responsibility.

ESF 8 – Resources provided by FEMA are grouped into 12 emergency support functions (ESFs). ESF 8 is Health and Medical Services. Providing assistance for public health and medical care needs. Lead agency for ESF 8 is the U.S. Public Health Service under the U.S. Department of Health and Human Services. FCO - Federal Coordinating Officer. The Federal officer who is appointed to manage Federal resource support activities related to Stafford Act disasters and emergencies. The FCO is responsible for coordinating the timely delivery of Federal disaster assistance resources and programs to the affected state and local governments, individual victims, and the private sector.

Evacuation - A procedure for moving people from a dangerous location to a place of safety. Evacuation of a section of a community constitutes a major undertaking. People have to be alerted, mobilized, transported, and sheltered until the incident is over and it is safe for them to return to their homes or place of employment. Evacuation should not be undertaken without serious planning as to the event. Ideally, this planning should take place prior to an actual incident.

Exclusion Zone - The area immediately around a spill or release. That area where contamination does or could occur. The innermost of the three zones of a hazardous substance/material incident. Special protection is required for all personnel while in the zone.

EEZ - Exclusive Economic Zone - Under the law of the sea, an Exclusive Economic Zone is a sea-zone over which a state has special rights over the exploration and use of marine resources.

Explosion proof Equipment – Encased in rigidly built container so it withstands an internal explosion and also prevents ignition of a surrounding flammable atmosphere; designed to not provide an ignition source in an explosive atmosphere.

Explosives - Any chemical compound mixture, or device, the primary or common purpose of which is to function by explosion; the term includes, but is not limited to, dynamite and other high explosives, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord, and igniters. [18 USC]

F

Fairlead – Chock or opening, sometimes fitted with a roller device designed to lead a rope or line from one part of a vessel to another (change line direction); also controls lines and minimized chafing. *Also see Chock (1).*

Fantail – Back part of a vessel that hangs out over the water; stern overhang.

Fast – Term referring to a vessel being securely attached to a wharf or a dock.

FBI - Federal Bureau of Investigation

FEMA - Federal Emergency Management Agency. The federal agency responsible for consequence management planning, coordination, and federal response and recovery efforts.

Fender – Buffer between the side of a vessel and a dock or between two vessels to lessen shock and prevent chafing.

FEU - Forty-Foot Equivalent Unit - Standard cargo container measuring 40 feet long, 8 feet wide, and 8 feet high (12mx2.4mx2.4m) used to measure the container-carrying capacity of a vessel.

Fiddley – Vertical space extending from the engine room to a vessel's stack (chimney). *Also see Economizer and Stack.*

Fire Alarm Signal – Usually the continuous rapid ringing of a vessel's bell for a period of not less than 10 seconds supplemented by the continuous ringing of the general alarm bell for not less than 10 seconds; mobile offshore drilling units may use different signals.

Fire Control Plan – Set of general arrangement plans for each deck that illustrate fire stations, fire resisting bulkheads, and fire-retarding bulkheads together with particulars of fire detecting systems, manual alarm systems, fire extinguishing systems, fire doors, means of access to different compartments, and ventilating systems (including locations of dampers and fan controls). Plans are stored in a prominently marked weather tight enclosure outside the house for the assistance of land-based fire-fighting personnel.

Fire Main System – System that supplies water to all areas of a vessel; composed of fire pumps, piping (main and branch lines), control valves, hose and nozzles.

Fire Pump – Centrifugal or reciprocating pump that supplies seawater to all fire hose connections.

Fire Station – Location on a vessel with fire-fighting water outlet (fire hydrant), valve, fire hose, nozzles, and associated equipment.

Fire Wire – Length of wire rope or chain hung from the bow and stern of a vessel in port to allow the vessel to be towed away from the pier in case of fire; also called *fire warp* or *emergency towing wire*.

FIRST- Federal Incident Response Support Team -The FIRST is a forward component of the ERT-A that provides on-scene support to the local Incident Command or Area Command structure in order to facilitate an integrated inter-jurisdictional response. The FIRST is designed to be a quick and readily deployable resource to support the Federal response to Incidents of National Significance.

First Responder - The Department of Homeland Security uses the following definition, taken from Homeland Security Presidential Directive 8, Preparedness: "Those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 11), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) that provide immediate support services during prevention, response, and recovery operations."

Flag State – Nation in which a vessel is registered.

Flood Tide – Rising tide, opposite of Ebb Tide.

Forecastle (Fo’c’s’le or Fok-sul) – Section of the upper deck located at the bow of a vessel; forward section of the main deck; a superstructure at the bow of a vessel where maintenance shops, rope lockers, and paint lockers are located.

Forepeak – Watertight compartment at the extreme forward end of a vessel; usually used for storage. *Also see* Afterpeak.

Forward (Fore) – Direction toward the front (bow) of a vessel.

Fragmentation Effect - Occurs when pieces of the explosive device or its container come apart and spread out from the seat of the explosion. This effect normally involves casings, but it can also involve components such as batteries and switches. Fragmentation adds to the destructive force of the explosive device, tearing into materials in its path.

Frames – Structural members of a vessel’s framework that attach perpendicularly to the keel to form the ribs of the vessel. *Also see* Keel.

FRC- Federal Resource Coordinator - The FRC manages Federal resource support activities related to non-Stafford Act Incidents of National Significance when Federal-to-Federal support is requested from the Department of Homeland Security by another Federal agency.

Freeboard – Vertical distance between a vessel’s lowest open deck and the water surface; measured near the center of the vessel’s length where the deck is closest to the water.

Free Surface Effect – Tendency of a liquid within a compartment to remain level as a vessel moves, which allows the liquid to move unimpeded from side to side. Liquid with a free surface anywhere in a vessel impairs stability. *Also see* Center of Gravity, Center of Buoyancy, and Stability.

Frontline Responder - For the purposes of this course, security personnel who are responsible for protecting the facilities and the assets contained inside, and who are responsible for maintaining a front line of security through protective measures that deter, delay, detect, and deny to reduce potential threats to their property. Site-based security personnel who are first to arrive at the scene of an incident or threat are considered the frontline responders.

Fire Service (FS) - Individuals, who on a full-time, volunteer, or part-time basis provide life safety services including fire suppression, rescue, arson investigation, public education, and prevention.

G

Galley – Vessel's kitchen facility.

Gamma Radiation - One of the three main types of nuclear radiation (alpha, beta, and gamma) emitted from radioactive materials. Because gamma rays are pure energy they are the most penetrating type of nuclear radiation. They can travel great distances quickly and penetrate most materials creating serious problems for humans because they can attack all tissues and organs.

Gangway – The opening in the side of a ship used to embark and disembark; the ramp used to enter or exit the ship.

Gantry – Overhead cross-girder structure on which a traveling crane is mounted or from which heavy tackle is suspended. Supporting towers at each end of the structure are on wheels.

GAR- Governor's Authorized Representative - The GAR represents the governor of the impacted state.

Gas-Free Certificated – Document stating that an authorized and trained person has evaluated the atmosphere of a space, tank, or container (using approved equipment and methods) and determined that the atmosphere is safe for a specific purpose. Also called *gas certificate* or *certified gas-free*.

GDEM - Governor's Division of Emergency Management

Global Positioning System (GPS) - A satellite-based navigation system made up of a network of 24 satellites placed into orbit by the US Department of Defense. GPS was originally intended for military applications, but in the 1980s, the government made the system available for civilian use. GPS works in any weather conditions, anywhere in the world, 24 hours a day.

GM - Metacentric Height – Measure of a vessel's initial stability; a geometric relationship between the center of gravity, the center of buoyancy, and the metacenter distance of the metacenter above the center of gravity of a floating body. *Also see* Metacenter, Center of Gravity, and Center of Buoyancy.

G&T- Office of Grants and Training - is a component of the U.S. Department of Homeland Security's Preparedness Directorate. We are responsible for preparing the nation against terrorism by assisting states, local and tribal jurisdictions, and regional authorities as they prevent, deter, and respond to terrorist acts. G&T provides a broad array of assistance to America's first responders through funding, coordinated

Gross Decontamination - Refers to the initial phase of the decontamination process during which the surface contaminants are removed to reduce and

prevent the spread of contamination from persons and equipment used at a hazardous materials incident.

Gunwale (Gunnel) – Raised edge along the side of a vessel that prevents loose items on deck from falling overboard; sometimes called *fishplate*.

H

Harbor Master – Person in charge of a port (anchorage, dock spaces, etc.) in the United Kingdom; equivalent to U.S. Coast Guard Captain of the Port in the United States.

Hatch – Opening in the deck of a vessel that leads to a vertical space down through the various decks (hatchway); covered by a hatch cover (hinged or sliding).

HazMat - Hazardous Materials

Head – (1) Toilet facility on board a vessel. (2) Extreme forward end of a vessel.

Heel – Angle a vessel leans to one side due to wind, waves, or turning of the vessel; measured in degrees. *Also see* Critical Angle of List, Heeling, and List.

Heeling – (1) tipping or leaning to one side. (2) Causing a vessel to list (continuous lean to one side). *Also see* Heel and List.

Hog – Vertical distance of a vessel's keel at amidships above a vessel's keel at the bow and stern; to bow up in the middle and sag at the ends as a result of improper loading. *Also see* Hogging, Sag, and Sagging.

Hogging – Straining of a vessel that tends to make the bow and stern lower than the middle portion; the middle section has greater buoyancy. *Also see* Hog, Sag, and Sagging.

Hot Work – Any construction, alteration, repair, or shipbreaking operation involving riveting, welding, burning, or similar heat-producing operations.

Hot Zone - A hazardous material response term referring to the area immediately around the incident where serious threat of harm exists. It should extend far enough to prevent adverse effects from CBRNE agents to personnel outside the zone. Entry into the hot zone requires specialized training in the use of proper personal protective equipment (PPE). Also referred to as the exclusion zone or red zone.

House – Structure located above the main deck. *Also see* Superstructure.

HRSA - Health Resources Services Administration – a division of the US Dept. of Health and Human Services.

HSAS - Homeland Security Advisory System - The HSAS, created by HSPD-3 and administered by DHS/IAIP, is a comprehensive and effective means for disseminating information regarding the risk of terrorist attacks and coordinating appropriate response measures across jurisdictions and with the private sector.

HSGP - Homeland Security grant program

HSIN-CI - Homeland Security Information Network-Critical Infrastructure

HSOC- Homeland Security Operations Center - The HSOC is the primary national hub for domestic incident management operational coordination and situational awareness.

Hull – Main structural frame or body of a vessel below the weather deck.

HVAC - Acronym for heating, ventilation, and air conditioning system.

HZ - Hazardous Materials Personnel - Individuals, who on a full-time, volunteer, or part-time basis, identify, characterize, provide risk assessment, and mitigate/control the release of a hazardous substance or potentially hazardous substance.

I

IAIP- Information Analysis and Infrastructure Protection - A FEMA directorate that is an element of the Homeland Security Operations Center (HSOC).

IC - Incident Commander - The person responsible for the overall management of the incident, approval of action plans, and providing direction and control for the command and staff sections of the incident command structure. In a Unified Command structure, the IC collaborates and consults with the chiefs and experts from the other disciplines involved in the response.

ICP- Incident Command Post - The field location at which the primary tactical-level, on-scene incident command functions are performed. The ICP may be collocated with the incident base or other incident facilities and is normally identified by a green rotating or flashing light.

ICS- Incident Command System - A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and

communications operating with a common organizational structure, designed to aid in the management of resources during incidents. ICS is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is to be used by jurisdictions and functional agencies, both public and private, or organized field-level incident management operations.

IED – Improvised Explosive Device - Any device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic or incendiary chemicals. Designed to destroy, disfigure, distract or harass.

IIMG - Interagency Incident Management Group - The IIMG is a Federal headquarters-level multi-agency coordination entity that facilitates Federal domestic incident management for Incidents of National Significance. The Secretary of Homeland Security activates the IIMG based on the nature, severity, magnitude, and complexity of the threat or incident.

IMO - International Maritime Organization – Specialized agency of the United Nations devoted to maritime affairs. It first met in 1959. Over the years, IMO has developed and promoted the adoption of more than 30 conventions and protocol as well as 700 codes and recommendations dealing with maritime safety. Its main purposes are safer shipping and cleaner oceans.

Improvised Nuclear Device - Sometimes referred to as radiological dispersal device or dirty bomb.

Incendiary - Any mechanical, electrical, or chemical device intentionally used to initiate combustion and start a fire. It consists of three basic components: (1) igniter (fuse), (2) container, (3) incendiary material (fuel), or filler.

Inclinometer – Instrument that measures the angle at which a vessel is leaning to one side or the other.

Ingress - The place or means of entering; entrance.

Initiators (Firing Device) - Blasting caps or flame-producing components like fuse igniters are common examples of initiators. Examples of improvised initiators can include a modified flash bulb, a percussion primer, or even hobby fuses.

Intermodal Container – Shipping container having standard dimensions so that it can be secured for shipment by rail, truck, or vessel.

International Shore connection – Pipe flange with a standard size and bolt pattern allowing land-based fire department personnel to charge and supply a vessel's fire main.

International Terrorism - involves violent acts or acts dangerous to human life that are a violation of the criminal laws of the US or any state, or that would be a criminal violation if committed within the jurisdiction of the US or any state. These acts appear to be intended to intimidate or coerce a civilian population, influence the policy of a government, or affect the conduct of a government. These acts transcend national boundaries in terms of the means by which they are accomplished, the persons they appear intended to intimidate, or the locale in which perpetrators operate. [18 U.S.C. 2331(1)]

Intrinsically Safe Equipment – Incapable of releasing sufficient electrical energy to cause the ignition of a flammable atmospheric mixture.

Irritating Agents - Also known as incapacitating agents or tear gas. Agents that produce physiologic or mental effects, or both, that may persist for hours or sometimes days after exposure, rendering an individual helpless.

J

Jacob's Ladder – Flexible ladder made of rope or chain but having solid rungs (wood or iron); may be used for boarding a vessel or scaling the sides of a vessel.

Jettison – To throw objects or cargo overboard in order to lighten a vessel's load in time of distress.

JFO - Joint Field Office - The JFO is a temporary Federal facility established to coordinate operational Federal assistance activities to the affected jurisdiction(s) during Incidents of National Significance. The JFO is a multi-agency center that provides a central point of coordination for Federal, State, local, tribal, non-governmental and private-sector organizations with primary responsibility for threat response and incident support and coordination.

JIC - Joint Information Center - A facility established to coordinate all incident-related public information activities. It is the central point of contact for all news media at the scene of the incident. Public information officials from all participating agencies should collocate at the JIC.

JOC- Joint Operations Center - The JOC Branch is established by the Senior Federal Law Enforcement Officer (SFLEO) (e.g., the FBI Special Agent in Charge during terrorist incidents) to coordinate and direct law enforcement and criminal investigation activities related to the incident. The JOC Branch ensures management and coordination of Federal, State, local, and tribal investigative/law enforcement activities. The emphasis of the JOC is on prevention as well as intelligence collection, investigation, and prosecution of a criminal act. This emphasis includes managing unique tactical issues inherent to a crisis situation (e.g., a hostage situation or terrorist threat).

Joiner Construction – Bulkheads that subdivide the ship into compartments but do not also contribute to the structural strength of the ship. Also known as *nonstructural bulkheads*.

JTTF - Joint Terrorism Task Force - Task forces located throughout the United States that receives and processes terrorism information and intelligence.

Jurisdiction - Typically counties and cities within a state, but states may elect to define differently in order to facilitate their assessment process. (State-specific definition other than counties or cities should be specified.) The responsible entity for providing coordinated responses to a WMD terrorist incident.

K

Keel – Principal structural member of a vessel running fore and aft extending from bow to stern; forms the backbone of a vessel to which frames are attached; lowest member of a vessel framework. *Also see* Frames.

Kiloton - Unit of measurement of energy for measuring the yield of a nuclear weapon. A one-kiloton blast is equivalent to the explosive energy of 1,000 tons of TNT.

Knot – International nautical unit of speed; 1 knot = 6,076 feet or 1 nautical mile per hour (1.4 miles or 1.85 kilometers per hour).

L

Ladder – Any stairway or ladder (often nearly vertical) on board a vessel.

Lash – Secure or tie anything down or to something else with rope or line.

LASH – Lighter Aboard Ship – Ship type that loads barges (lighters) for transport.

Lay-by Berth – Berth for vessels waiting for cargo or other employment.

LE - Law Enforcement - Individuals, full-time, or on a voluntary basis, who work for agencies at the local, municipal, and state levels with responsibility as sworn law enforcement officers.

Lewisite - A blister agent distinguished by its odor of geraniums. It is a dark oily liquid and causes more pronounced blistering than most blistering agents.

LFA - Lead Federal Agency - A term used in Presidential Decision Directive 39

(PDD-39) to delegate which federal department is responsible for coordinating the federal government's crisis and consequence response efforts.

Life Safety - The joint consideration of both the life and physical well being of individuals.

Lighter – Large boat or barge (usually non-powered) for conveying cargo to and from vessels in harbor. *Also see* Barge.

Lightering – Process of loading or unloading cargo into barges or vessels rather than at a pier.

Line – Length of rope in use on a vessel; term is not used in maritime practice to refer to a fire hose.

List – Continuous lean or tilt of a vessel to one side due to an imbalance of weight within the vessel. *Also see* Heel, Heeling, Critical Angle of List, and Angle of Roll.

LOA – Length Overall – Total length of a vessel, including any spars or guards that may extend out from a vessel's ends. *Also see* Length on the Waterline.

Load Line – Maximum draft to which a vessel may be loaded in accordance with international regulations to ensure adequate freeboard and strength of the vessel. *Also see* Plimsoll Mark.

Longitudinal Stability – Ability of a vessel to return to an upright position when forced from its rest condition by pitching. *Also see* Stability and Static (Initial) Stability.

Longshoreman – Person who loads and unloads cargo on and from a vessel. *Also see* Stevedore.

Long Ton – Unit of weight used in the marine industry; 1 long ton = 2,240 pounds or 1 ton (1,000 kilograms). A short ton = 2,000 pounds or 0.9 ton (900 kilograms).

LWL- Length on the Waterline – Measurement of a vessel from front to back at the level at which it floats in the water when carrying its designed load capacity. *Also see* Length Overall.

M

Machinery – Vessel's main and auxiliary engines, pumps, deck winches, steering engine, hoists, etc.

Main Charge - The main charge can include commercial, military, or improvised explosive materials. Depending on the type of explosive, and how it is used, the force of the explosion can be used to inflict injury or death to one person or many people, as well as severe property damage.

Main Deck – Highest continuous deck of a vessel that runs from bow - stern.
See Deck.

Main Transverse Bulkheads – Watertight bulkheads that subdivide a vessel into watertight compartments. *Also see* Bulkhead (1) and Main Watertight Subdivision.

Main Watertight Subdivision – Space between two main transverse watertight bulkheads. *Also see* Bulkhead (1) and Main Transverse Bulkheads.

Manifest – See Cargo Manifest and Dangerous Cargo Manifest.

Marina – Special harbor facilities constructed for yachts and other pleasure craft.

Maritime Law – Laws relating to commerce and navigation on the high seas and other navigable waters; a court exercising jurisdiction over maritime cases. Also known as *admiralty law*.

Maritime Transportation Security Act of 2002

Source: G-IPA/G-MP

The Maritime Transportation Security Act of 2002 (MTSA), signed on November 25, 2002, is designed to protect the nation's ports and waterways from a terrorist attack. This law is the U.S. equivalent of the International Ship and Port Facility Security Code (ISPS), and was fully implemented on July 1, 2004. It requires vessels and port facilities to conduct vulnerability assessments and develop security plans that may include passenger, vehicle and baggage screening procedures; security patrols; establishing restricted areas; personnel identification procedures; access control measures; and/or installation of surveillance equipment. By creating a consistent security program for all our nation's ports, we are better able to identify and deter threats.

Developed using risk-based methodology, the MTSA security regulations focus on those sectors of maritime industry that have a higher risk of involvement in a transportation security incident, including various tank vessels, barges, large passenger vessels, cargo vessels, towing vessels, offshore oil and gas platforms, and port facilities that handle certain kinds of dangerous cargo or service the vessels listed above.

MTSA also requires the establishment committees in all the nation's ports to coordinate the activities of all port stakeholders, including other federal, local and

state agencies, industry and the boating public. These groups, called Area Maritime Security Committees, are tasked with collaborating on plans to secure their ports so that the resources of an area can be best used to deter, prevent and respond to terror threats.

Related Cards:

[Automatic Identification System](#)

[Homeland Security](#)

[International Port Security Program](#)

[Maritime Safety and Security Teams](#)

More Information on the Web:

[MTSA-ISPS Information Site](#)

[June 21, 2004 Department of Homeland Security Press Release](#)

[July 1, 2003 MTSA Press Release, Fact Sheet](#) (Adobe

Mast – Vertical pole rising from the keel or deck of a vessel supporting sailing rigging; also used for radio antennas and signal flags.

Master – Commander of a merchant vessel. *Also see* Captain.

Mate – See Chief Officer.

Mayday – international distress signal broadcast by voice.

MIPT - Memorial Institute for the Prevention of Terrorism - located in Oklahoma City is dedicated to expanding and sharing knowledge to help prevent terrorism and mitigate its effects.

Metacenter (M) – Point through which the force of buoyancy works; point of intersection of the vertical through the center of buoyancy of a floating body with the vertical through the new center of buoyancy when the body is displaced. *Also see* Metacentric Height and Center of Buoyancy.

MMRS - Metropolitan Medical Response System

Midship – (1) Center part of a vessel between the bow and stern. (2) Midpoint of a vessel's length on the waterline.

Mitigate - To make less severe.

Mobile Offshore Drilling Unit (MODU) – Platform designed for offshore drilling that can be moved either by tugboats or by its own propulsion system.

MODU – Abbreviation for Mobile Offshore Drilling Unit.

Mooring – (1) Permanent anchor equipment (attached by a chain to a buoy) to which a vessel may connect a line, wire, or chain, eliminating the need to use the vessel's anchor. (2) Act of securing a vessel. (3) Location where a vessel is berthed. *A/so see Anchorage, Berth, and Berthing Area.*

MSEL - Master Scenario Events List

MT – Prefix to the name of a tank vessel powered by diesel machinery.

Muster List – List of crew members/passengers and their duty/emergency stations on a vessel.

MV – Prefix to the name of a vessel powered by diesel machinery.

N

Nation State - A form of political organization under which a relatively homogeneous people inhabits a sovereign state; especially a state containing one as opposed to several nationalities.

Naval Architecture – Branch of knowledge concerned with the design and construction of things that float (vessels, submarines, docks, yachts, etc.)

Navigable – Term for any body of water suitable for navigation by any particular vessel (not necessarily all vessels).

NCTC - National Counterterrorism Center - The NCTC serves as the primary Federal organization for analyzing and integrating all intelligence possessed or acquired by the U.S. Government pertaining to terrorism and counterterrorism, excepting purely domestic counterterrorism information. The NCTC may, consistent with applicable law, receive, retain, and disseminate information from any Federal, State, or local government or other source necessary to fulfill its responsibilities.

NDMS - National Disaster Medical System - A nation-wide mutual aid network consisting of federal agencies, businesses, and other organizations that coordinates disaster medical response, patient evacuation, and definitive medical care. At the federal level, it is a partnership between Department of Health and Human Services, the Department of Defense, the Department of Veterans Affairs, and FEMA. Non-federal students include major pharmaceutical companies and hospital suppliers, the national Foundation for Mortuary Care, and certain international disaster response and health organizations.

Nevada Test Site - US Department of Energy reservation located in Nye County, Nevada, about 65 miles northwest of Las Vegas. Formerly known as the Nevada

Proving Ground, the site was established in 1951 for the testing of nuclear weapons.

Nerve Agent - A chemical agent that interferes with the central nervous system. Exposure is primarily through skin and eye contact with the liquid and secondarily through inhalation of the vapor. Three distinct symptoms associated with nerve agents are pinpointed pupils, extreme headache, and severe tightness in the chest.

NERRTC - National Emergency Response and Rescue Training Center - (pronounced "nertsy").

NFPA - National Fire Protection Association - Established in 1896, NFPA serves as the world's leading advocate of fire prevention and is an authoritative source on public safety. NFPA's 300 codes and standards influence every building, process, service, design, and installation in the United States, as well as many of those used in other countries.

NICC - National Infrastructure Coordinating Center - Managed by the DHS Information Analysis and Infrastructure Protection Directorate, the NICC monitors the Nation's critical infrastructure and key resources on an ongoing basis. In the event of an incident, the NICC provides a coordinating vehicle to share information with critical infrastructure and key resources information-sharing entities.

NIPP - National infrastructure protection plan.

NIMS - National Incident Management System - Establishes standardized incident management processes, protocols, and procedures that all responders – Federal, state, tribal, and local – use to coordinate and conduct response actions / exercises.

NJTTF - National Joint Terrorism Task Force -The NJTTF is housed in the FBI Strategic Information and Operations Center (SIOC). The mission of the NJTTF is to enhance communications, coordination, and cooperation among Federal, State, local, and tribal agencies representing the intelligence, law enforcement, defense, diplomatic, public safety, and homeland security communities by providing a point of fusion for terrorism intelligence and by supporting Joint Terrorism Task Forces (JTTFs) throughout the United States.

NRCC - National Response Coordination Center -. The NRCC is a multi-agency center that provides overall Federal response coordination for Incidents of National Significance and emergency management program implementation. The NRCC monitors potential or developing Incidents of National Significance and supports the efforts of regional and field components. The NRCC resolves Federal resource support conflicts and other implementation issues.

NRP - National Response Plan - Describes how Federal agencies will work in disaster response. NRP provides the structure and mechanisms to coordinate and integrate incident management activities and emergency support functions across Federal, State, local and Tribal government entities, the private sector and non-governmental organizations.

http://www.dhs.gov/dhspublic/interapp/editorial/editorial_0566.xml

Night Order Book – Written instructions, special orders, or reminders from the Captain or Master for each officer taking night watch; placed in the chart room before the captain or Master retires for the night.

Non-persistent – Non-persistent means that the agent is rapidly dispersed after being released and only poses immediate, short-duration hazards (e.g., hours).

Nuclear - A nuclear incident is a more complex case than a conventional blast. The explosion of a nuclear device is caused by an unrestrained fission reaction (not chemical reactions) and can be millions of times more powerful than the largest conventional explosives.

O

OBO – Abbreviation for oil-bulk-ore.

OBO Carrier – Vessel capable of carrying ore, bulk cargo, or oil.

ODP - Office of Domestic Preparedness.

One-Compartment Subdivision – Watertight subdivision of a vessel by bulkheads that will result in a vessel remaining afloat with any one compartment flooded under certain conditions. *Also see* Compartmentation.

Organophosphates - Most organophosphates are insecticides. Organophosphates were developed during the early 19th century, but their effects on insects, which are similar to their effects on humans, were discovered in 1932. Some are very poisonous (they were used in World War II as nerve agents). However, they usually are not persistent in the environment. Organophosphates affect the nervous system by reducing the ability of cholinesterase, an enzyme, to function properly in regulating a neurotransmitter called acetylcholine. Acetylcholine helps transfer nerve impulses from a nerve cell to a muscle cell or another nerve cell. If acetylcholine is not properly controlled by cholinesterase, the nerve impulses or neurons remain active longer than they should, over stimulating the nerves and muscles and causing symptoms such as weakness or paralysis of the muscles.

<http://www.epa.gov/pesticides/op/primer.htm>

OSC- On Scene Commander - A term used to designate the FBI person who provides leadership and direction to the federal crisis management response. The FBI OSC may or may not be the regional Special Agent in Charge (SAC).

Outboard – Anything that is on the seaside of a vessel; anything mounted outside the hull.

Overall Length – See Length Overall. *Also see* Length on the Waterline.

Overhead – Underside of a deck; ceiling of a vessel's compartment; also known as deckhead.

P

Passageway – Any interior walkway, corridor, or hallway in a vessel.

Pathogen - Any living organism (e.g., bacteria, fungi, and virus) capable of producing serious disease or death. A pathogenic agent is a biological agent capable of causing serious disease or death.

PFO - Principal Federal Official - The Federal official designated by the Secretary of Homeland Security to act as his/her representative locally to oversee, coordinate, and execute the Secretary's incident management responsibilities under HSPD-5 for Incidents of National Significance.

Physical Security - That part of security concerned with physical measures designed to safeguard personnel; to prevent unauthorized access to equipment, installations, material and documents; and to safeguard them against espionage, sabotage, damage, and theft.

Physiologic - Refers to the normal functioning of the body.

Pier – Platform (usually wood or masonry) extending outward from the shore into the water for use as a landing place for vessels; supported on pilings and open underneath allowing the berthing of vessels alongside. *Also see* Wharf.

Pilot – Person knowledgeable of the local waters who meets vessels and steers them safely into and out of port.

Pilot Ladder – Ladder similar in construction to a Jacob's ladder but having horizontal bars that extend outward beyond the width of the ladder to reduce the motion of the ladder; easier and safer to climb than a Jacob's ladder.

Platform – (1) Horizontal surface extending partway through a vessel; usually in the cargo space. (2) Any flat-topped vessel capable of providing a working area for personnel or vehicles.

Plimsoll Mark – Symbol placed on the sides of a vessel's hull at amidships, indicating the maximum allowable draft of the vessel. Also called *Plimsoll line*. Also see Load Line.

POETE- Planning, organization, equipment, training, exercise

Poop Deck – Partial deck above the main deck at stern. Also see Deck.

Port – General area of a shore establishment having facilities for the landing, loading/unloading, and maintenance of vessels; harbor with piers. Also see Port Slide.

Portable Pump – Small gasoline-driven pump used in emergencies to deliver water to a fire independent of a vessel's fire main system.

Port Authority – People entrusted with the duty or power of construction, improving, managing, or maintaining a harbor or port. Also called *harbor authority, harbor board, port trust, or port commission*.

Porthole – Opening for a circular window in the side of a vessel. Also see Deadlight and Portlight.

Portlight – Round, glass window that may be opened in the side of a vessel. Also see Dead light and Port hole.

Port of Registry – Port at which a vessel is registered. Also called *home port*.

Port Side – Left hand side of a vessel as a person faces forward.

Port State – Nation in which a port is located.

Port State Authority – Government agency having authority over vessel inspections.

Power Source - The majority of IEDs contain an electric initiator and requires an electric power source. Batteries are available in many shapes and sizes and, in some cases, can be cut and shaped to make detection more difficult. Mechanical action, such as a spring under pressure, can store sufficient energy to cause the functioning of a non-electric initiator device.

PPE - Personal Protective Equipment - Level A Protection - The level of personal protective equipment required in situations where the material is considered acutely vapor-toxic to the skin and hazards are unknown. Full encapsulation, airtight chemical suit with a self-contained breathing apparatus (SCBA) or supplied air breathing apparatus (SABA). Level B – Protection. The level of PPE

required in situations where the environment is not considered acutely vapor-toxic to the skin but may cause respiratory effects. Chemical splash suit or full-coverage non-airtight chemical suit with SCBA or SABA. Level C Protection - The level of PPE required to prevent respiratory exposure but not to exclude possible skin contact. Chemical splash suit with air purifying respirator (cartridge respirator). Level D Protection - The level of PPE required when the atmosphere contains no known hazard, when splashes, immersions, inhalation, or contact with hazardous levels of any chemical is precluded. Work uniform such as coveralls, boots, leather gloves, and hard-hat.

Precursor - A chemical substance required for the manufacture of a chemical agent.

Proliferation - To multiply rapidly; to increase profusely.

Protect in Place - A term used to indicate the need to shelter yourself in your home or building of current occupancy in the event of a chemical release or other emergency situation. In some instances, evacuation is not the most feasible alternative, the following types of buildings should be considered for protection in-place (if the Incident Commander determines that protection in place is the most plausible alternative): hospitals, nursing homes, schools, daycare centers, large population areas, jail and correctional facilities. Steps to be taken to “protect in place” include: close all doors and windows, seal any obvious gaps with tape, plastic, or wet towels. Turn off all HVAC and air conditioning systems. Close all fireplace dampers. Close as many internal doors as possible. Turn off and cover all exhaust fans and vents. Go to an interior room and seal yourself in, seal any obvious gaps with tape, plastic, or wet towels. Monitor local radio stations and/or local television stations for further information. Do not go outside until an “all clear” order has been given by local emergency personnel.

Pump Room – Compartment in tank vessels where the pumping plant for handling cargo is installed. Pumps are placed as low as possible in order to facilitate draining.

Q

R

Radiological - Events that disperse ionizing radiation – often called radioactive fallout – into the atmosphere. The most common consequences of radiological incidents are mass casualties and long-term poisoning of the environment.

RAIN - Acronym for Recognition, Avoidance, Isolation, and Notification used by individuals to quickly gather and process information and to synthesize the information in order to facilitate life safety actions in a WMD incident.

RCC - Regional Coordination Center.

RDD- Radiological Dispersal Devices - A conventional explosive device incorporating radioactive material(s); sometimes referred to as a “dirty” bomb.

Refrigerated Containers – Cargo containers having their own refrigeration units. *Also see* containers and Container Terminal.

Refrigerated Vessel – Vessel specially designed and equipped for the transportation of food products (meat, fruit, fish, butter, and eggs) under cold storage; cargo space is insulated for this purpose.

Refrigerating Plant – Installation of machinery for the purposes of cooling and designated spaces on board a vessel and for manufacturing ice.

Righting Arm – Moment that tends to return a vessel to the upright position after any small rotational displacement. Also called *righting moment* or *restoring moment*. *Also see* Stability and Static (initial) Stability.

Righting Moment – Force applied to an object that causes rotation of the object; expressed as the product of the magnitude of the force and the distance the force is applied from the object’s center of gravity (e.g., foot-pounds or kilogram-meters)

Riser – Pipe leading from the fire main to the fire station (hydrant) on upper deck levels of a vessel.

RLO - Regional Liaison Officer

Ro/Ro - Roll on/Roll off – Form of cargo handling using a vessel designed to carry vehicles that are loaded and unloaded by driving them onto/off the vessel by means of ramps. A vehicle ferry is a ro/ro vessel.

RUC - Regional Unified Command – The RUC is a structure that brings together the "Incident Commanders" of all major organizations involved in the incident in order to coordinate an effective response while at the same time carrying out their own jurisdictional responsibilities. The RUC links the organizations responding to the incident and provides a forum for these entities to make consensus decisions. Under the RUC, the various jurisdictions and/or agencies and non-government responders may blend together throughout the operation to create an integrated response team. The RUC is responsible for overall management of the incident. The RUC directs incident activities, including development and implementation of overall objectives and strategies, and approves ordering and releasing of resources. Members of the RUC work together to develop a common set of incident objectives and strategies, share

information, maximize the use of available resources, and enhance the efficiency of the individual response organizations.

RRCC- Regional Response Coordination Center - The RRCC is a standing facility operated by FEMA that is activated to coordinate regional response efforts, establish Federal priorities, and implement local Federal program support. The RRCC establishes communications with the affected State emergency management agency and the National Response Coordination Center (NRCC), coordinates deployment of the Emergency Response Team-Advance Element (ERT-A) to field locations, assesses damage information, develops situation reports, and issues initial mission assignments.

S

SAA - State administrative agency

SAC - Special Agent-in-Charge. Local FBI Agent who, during a terrorist incident, normally serves as the Senior Federal Law Enforcement Official (SFLEO).

SHGP – state homeland security grant program

Sag – To curve downward in the middle as a result of improper loading. *Also see* Sagging, Hog, and Hogging.

Sagging – Straining of a vessel that tends to make the middle portion lower than the bow and stern. *Also see* Sag, Hog, and Hogging.

Sail Area – Area of a vessel (viewed from the side) that is above the waterline and is subject to the force of the wind.

Sarin - A nerve agent, also known as GB, made in Germany in 1938, used in the subway attacks in Tokyo in 1995.

Scantlings – Dimensions of the structural components (frames, girders, plating, etc.) of a vessel.

SCBA - Self-Contained Breathing Apparatus - A respiratory device used in hazardous material incidents; required PPE for Level A and B protection.

SCO - State Coordinating Officer - The SCO serves as the State counterpart to the FCO and manages the State's incident management programs and activities.

Scupper – Opening in the side of a vessel to allow water falling on deck to drain overboard.

Sea Chest – (1) Enclosure attached to the inside of a vessel's underwater shell

open to the sea and fitted with a portable strainer plate; passes seawater into the vessel for cooling, fire fighting, or sanitary purposes. (2) Storage chest for mariner's personal property.

Seaworthy – In fit condition to go safely to sea.

Secondary Device - A WMD device, placed at the scene of an incident, which is designed to injure/harm emergency responders.

Secure – (1) To make fast such as secure a line to a cleat. (2) Close in a manner to avoid accidental opening or operation.

Security Personnel - For purposes of this course, those individuals assigned to protect the facility and its assets, where the ever-present threats of terrorists and criminals, the dangers of disasters (natural and man-made), and the risk of illness, accidental injury or other emergency may arise. Security personnel are on site and respond and are able to initiate necessary action, including summoning medical or law enforcement assistance, in a matter of seconds after the threat or incident.

Self-Closing Door – installation in which watertight doors are remotely operated by a hydraulic pressure system, allowing them to be closed simultaneously from the bridge or separately at the doors from either side of the bulkhead.

Semidiurnal – Tide pattern that has two high tides and two low tides in a 24-hour period.

SFLEO- Senior Federal Law Enforcement Official -. The SFLEO is the senior law enforcement official from the agency with primary jurisdictional responsibility as directed by statute, Presidential directive, existing Federal policies, and/or the Attorney General. The SFLEO directs intelligence/investigative law enforcement operations related to the incident and supports the law enforcement component of the Unified Command on-scene. In the event of a terrorist incident, this official will normally be the FBI Special Agent-in-Charge (SAC).

SFO - Senior Federal Official - An individual representing a Federal department or agency with primary statutory responsibility for incident management. SFOs utilize existing authorities, expertise, and capabilities to aid in management of the incident working in coordination with other members of the JFO Coordination Group.

Shaft Alley – Narrow, watertight compartment between the engine room and the stern of a vessel that houses the propeller shaft; also called *shaft tunnel*.

Shaftway – Tunnel or alleyway through which the drive shaft or rudder shaft

passes.

Shelter in Place - A shelter in place order given by either local or State government means that citizens within the affected area should take the following protective measures. Go indoors, close all windows and doors. Turn off all sources of outside air (air conditioners, ventilation fans/ducts). Remain indoors until notified that it is safe to move outdoors. Stay tuned to a local radio/television station to receive official notices. Limit telephone usage for emergency calls only. If you must be outdoors, protect your breathing by covering your mouth and nose with a cloth or handkerchief.

Shoring (Shoring Timbers) – Heavy timbers used to support bulkheads damaged by collision; also used to secure cargo; also prop or support placed against or beneath anything to prevent sinking or sagging.

Shrapnel Effect - Differs from fragmentation in that shrapnel does not derive from working parts of the device. It can include nails, marbles, ball bearings, or other materials placed in and around a device.

Sick Bay – Compartment, cabin, or area in a vessel reserved for the treatment of sick or injured crew members.

SIOC - Strategic Information and Operations Center - The FBI SIOC is the focal point and operational control center for all Federal intelligence, law enforcement, and investigative law enforcement activities related to domestic terrorist incidents or credible threats, including leading attribution investigations.

Slack Water – Period of no horizontal movement of water during the rise and fall of the tide; occurs at both maximum tide rise or fall when the tide is about to turn. Also called *slack tide*.

SLUDGEM - First responder acronym for remembering the effects of a nerve agent attack. Salivation, Lacrimation (profuse tearing), Urination, Defecation, Gastrointestinal distress, Emesis (nausea, vomiting), Miosis (pupil contraction)

SNIGs - Special Needs Individuals/Groups – (Division of Emergency Management Definition) - Includes the elderly, medically fragile, mentally and/or physically challenged or handicapped, individuals with mental illness, and the developmentally delayed. These groups may need specially trained health care providers to care for them, special facilities equipped to meet their needs, and require specialized vehicles and equipment for transport. This population requires specialized assistance in meeting daily needs and may need special assistance during emergency situations.

SNS - Strategic National Stockpile - CDC's SNS has large quantities of medicine and medical supplies to protect the American public if there is a public health

emergency (terrorist attack, flu outbreak, earthquake) severe enough to cause local supplies to run out. Once Federal and local authorities agree that the SNS is needed, medicines will be delivered to any state in the U.S. within 12 hours. Each state has plans to receive and distribute SNS medicine and medical supplies to local communities as quickly as possible.

Soffit - The area on the underside of what is commonly referred to as the overhang.

Soft Target - A military term for describing a generally unprotected target; within the context of this course, a soft target refers to hotels/casinos, shopping malls, large audience venues, amusement parks, and other mass gathering venues that have minimal security forces.

SOLAS - The **International Convention for the Safety of Life at Sea (SOLAS)** is the most important treaty protecting the safety of merchant ships. The first version of the treaty was passed in 1914 in response to the sinking of the RMS *Titanic*. It prescribed numbers of lifeboats and other emergency equipment along with safety procedures, including continuous radio watches.

Newer versions were adopted in 1929, 1948, 1960 and 1974. The 1960 Convention - which was activated in 1965 - was the first major achievement for International Maritime Organization (IMO) after its creation and represented a massive advance in updating commercial shipping regulations and in staying up-to-date with new technology and procedures in the industry. The 1974 version simplified the process for amending the treaty. A number of amendments have been adopted since. In particular, amendments in 1988 based on amendments of International Radio Regulations in 1987 replaced Morse code with the Global Maritime Distress Safety System (GMDSS) and came into force beginning 1 February 1992.

The intention had been to keep the convention up to date by periodic amendments, but the procedure to incorporate the amendments proved to be very slow: it could take several years for the amendments to be put into action since countries had to give notice of acceptance to IMO and there was a minimum threshold of countries and tonnage. The latest Convention in 1974 therefore included the "tacit acceptance" procedure whereby amendments enter into force by default unless nations file objections that meet a certain number or tonnage.

SOP - Standard Operating Procedures; also known as Standard Operating Guides / Guidelines (SOG).

Sounding – (1) Name of the measurement of the depth of water in which a vessel is floating. (2) Depth of water at a particular point shown on a navigational chart. (3) Depth of liquid in a tank, see "Sound, To".

Sound, To – Operation of measuring the depth of water in which a vessel is floating or depth of liquid in a tank. *Also see Sounding (1 and 3).*

SRA - Safe Refuge Area - An area within the Contamination Reduction Zone for the assemblage of individuals who are witnesses to the hazardous substance/material incident or were on-site at the time of the release. This assemblage will provide for the separation of contaminated persons from non-contaminated persons. A safe refuge area may also be delineated for hazardous materials technicians or others who are working in the hot zone of an incident.

SS – Prefix to the name of a vessel with a steam propulsion plant.

Stability – Tendency of a floating vessel to return to an upright position when inclined from the vertical by an external force (winds, waves, etc.). When a vessel returns to or remains at rest after being acted upon, it is either in stable or *neutral equilibrium*. If it continues to move unchecked in reaction to the external force, it is in *unstable equilibrium*. If an unstable vessel does not find a point of stable or neutral stability, it continues to incline until it capsizes. *Also see Free Surface Effect, Righting Arm, Static (Initial), and Longitudinal Stability.*

Stack – Ducting through which exhaust gases and often supply gas are routed; chimney.

Staging Area - That location where incident personnel and equipment are assigned awaiting tactical assignment.

Standoff Distance - A unit of measure used to calculate blast effects. Standoff distance and explosive charge size can be used to calculate the blast effect. Standoff distance measures how close to the building a bomb could explode and is therefore a function of the physical characteristics of the surrounding site. Potential threats and examples of corresponding standoff distances include: moving vehicle bomb – vehicle barriers; stationary vehicle bomb – parking and roadways; placed bomb – unobstructed space; standoff weapon – building separation.

Sulphur Mustard - Best known of the blister agents. In its pure state it is colorless and almost odorless; when odor is present it smells like garlic, rotten onions or mustard.

Starboard Side – Right-hand side of a vessel as a person faces forward.

Static (Initial) Stability – Ability of a vessel to initially resist heeling from the upright position. Initial stability characteristics hold true for only relatively small angles of inclination. At large angles (over 10 degrees), the ability of a vessel to resist inclining moments is determined by its righting arm characteristics. *Also*

see Righting Arm, Stability, and Longitudinal Stability.

Station Bill – List of all crew members showing where they should be for the various operations involved in operating a vessel; shows the duty stations and duties of the crew by rank.

Steam Smothering – Installed fire suppression system found on old vessels used to protect spaces where fire is likely to occur (ex: engine room, cargo spaces, and paint locker)

Steering Gear – All the apparatus by which a vessel is steered; includes wheel, rudder, and ropes or chains connected to it.

Stern – Back end or rear of a vessel.

Stevedore – One who works at or is responsible for the loading and unloading of cargo of a vessel in port; sometimes called *longshoreman*.

Supercargo – Individual who monitors the business aspects of shipping cargo.

Superstructure – Entire vessel structure from the main deck and above.

Supply/Exhaust Ventilation – Combined supply and exhaust system of mechanical ventilation that is generally used in the ventilation of passenger quarters. *Also see* Ventilation.

Support Zone - In a hazardous substance response, the clean area outside of the Contamination Control Line. Equipment and personnel are not expected to become contaminated in this area. Special protective clothing is not required. This is the area where resources are assembled to support the hazardous substances/materials release operation.

SV – Prefix to the name of a vessel propelled by sail.

Swash Plates – Metal plates in the lower part of tanks that prevent the surging of liquids with the motion of a vessel.

Switches - Switches can be incorporated into a device as either an arming switch or a fuse. They can be simple or complex in nature. More than one switch can be used to create redundancy in the system. Switches are almost unlimited in design and constructed so any action by its intended target or a responder will result in detonation.

T

TTX- Tabletop Exercise - A tabletop exercise is an activity in which elected or appointed officials and key staff with crisis and consequence management responsibilities are gathered together informally to discuss various simulated threats or acts of terrorism, review responsibilities and/or discuss homeland security preparedness. The intent of a tabletop exercise is to allow the students to evaluate plans and procedures and resolve issues of coordination, assignment of responsibilities interaction between agencies, etc., in a non-threatening environment under a minimum of stress. A tabletop exercise may last from 2-4 hours or longer depending on the issues to be discussed.

Tabun - The first nerve agent made for military use. It was made in Germany in 1936.

Tanker – Tank vessel specially designed for the bulk transport of petroleum products and chemicals by sea. *Also see* Tankerman.

Tankerman – Person qualified and certified to perform all duties included in the handling of bulk liquid cargoes (petroleum products). *Also see* Tanker.

Tank Top – Lowest deck; top plate of the bottom tanks. *Also see* Deck and Double Bottom.

TCL- Target Capabilities List - A central objective of Capabilities-Based Planning is the identification of target levels of capabilities that Federal, State, local, and tribal entities must achieve to perform critical tasks for homeland security missions. Capabilities are combinations of resources that provide the means to achieve a measurable outcome resulting from performance of one or more critical tasks, under specified conditions and performance standards.

TDS - Protection from the effects of radiation is based on the principle of time, distance, and shielding.

Terminal – See Break Bulk Terminal, Bulk Terminal, Dry Bulk Terminal, Car Terminal, and Container Terminal.

Terrorism - Terrorism is defined in the US Code of Federal Regulations (CFR) as "... the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives." [US 28 CFR Section 0.85 (l)].

Threat Advisory System - Homeland Security Advisory System designed to target our protective measures when specific information to a specific sector or geographic region is received. It combines threat information with vulnerability assessments and provides communications to public safety officials and the public. The advisory system provides measures to remain vigilant, prepared, and

ready to deter terrorist attacks. The following Threat Conditions each represent an increasing risk of terrorist attacks. Beneath each Threat Condition are suggested protective measures, recognizing that the heads of Federal departments and agencies are responsible for developing and implementing appropriate agency-specific protective measures:

- **Low Condition (Green).** This condition is declared when there is a low risk of terrorist attacks. Federal departments and agencies should consider the following general measures in addition to the agency-specific Protective Measures they develop and implement: refining and exercising as appropriate preplanned Protective Measures; ensuring personnel receive proper training on the Homeland Security Advisory System and specific preplanned department or agency Protective Measures; and institutionalizing a process to assure that all facilities and regulated sectors are regularly assessed for vulnerabilities to terrorist attacks, and all reasonable measures are taken to mitigate these vulnerabilities.

- **Guarded Condition (Blue).** This condition is declared when there is a general risk of terrorist attacks. In addition to the Protective Measures taken in the previous Threat Condition, Federal departments and agencies should consider the following general measures in addition to the agency-specific Protective Measures that they will develop and implement: checking communications with designated emergency response or command locations; reviewing and updating emergency response procedures; and providing the public with any information that would strengthen its ability to act appropriately.

- **Elevated Condition (Yellow).** An Elevated Condition is declared when there is a significant risk of terrorist attacks. In addition to the Protective Measures taken in the previous Threat Conditions, Federal departments and agencies should consider the following general measures in addition to the Protective Measures that they will develop and implement: increasing surveillance of critical locations; coordinating emergency plans as appropriate with nearby jurisdictions; assessing whether the precise characteristics of the threat require the further refinement of preplanned Protective Measures; and implementing, as appropriate, contingency and emergency response plans.

- **High Condition (Orange).** A High Condition is declared when there is a high risk of terrorist attacks. In addition to the Protective Measures taken in the previous Threat Conditions, Federal departments and agencies should consider the following general measures in addition to the agency-specific Protective Measures that they will develop and implement: coordinating necessary security efforts with Federal, State, and local law enforcement agencies or any National Guard or other appropriate armed forces organizations; taking additional precautions at public events and possibly considering alternative venues or even cancellation; preparing to execute contingency procedures, such as moving to an

alternate site or dispersing their workforce; and restricting threatened facility access to essential personnel only.

• **Severe Condition (Red).** A Severe Condition reflects a severe risk of terrorist attacks. Under most circumstances, the Protective Measures for a Severe Condition are not intended to be sustained for substantial periods of time. In addition to the Protective Measures in the previous Threat Conditions, Federal departments and agencies also should consider the following general measures in addition to the agency-specific Protective Measures that they will develop and implement: increasing or redirecting personnel to address critical emergency needs; assigning emergency response personnel and pre-positioning and mobilizing specially trained teams or resources; monitoring, redirecting, or constraining transportation systems; and closing public and government facilities.

Tide – Periodic vertical rise and fall of the water surface level of the oceans, bays, gulfs, inlets, and tidal regions of rivers caused by the gravitational attraction of the sun and moon.

Tonnage – Amount of internal volume or carrying capacity of a vessel in units of 100 cubic feet (2.8 m³); used for determining port and canal charges.

Topside – General term referring to the weather decks as opposed to the below deck.

Towboat – Powerful, small vessel designed for pushing large vessels such as barges on inland waterways. *Also see* Tugboat.

Transverse – Athwartship (side to side) dimensions of a vessel.

TRACEM - Responder's first concern must be for self-protection. A single event can present a variety of hazards with exposure being fatal. Fatal effects, commonly listed as TRACEM include:

- Thermal
- Radiological
- Asphyxiate
- Chemical
- Etiological
- Mechanical

Thermal - Thermal harm is the result of exposure to the extremes of heat and cold.

Radiological - Radiation, as used in this module, refers to nuclear radiation, not radiation as a type of heat transfer. There are three types of nuclear radiation: alpha, beta, and gamma.

Alpha and beta radiation are found as particles while gamma radiation is found in the form of rays.

Alpha is the least penetrating of the three and is not considered dangerous unless alpha-contaminated particles enter the body. Once inside the body, alpha radiation will damage internal organs.

Beta radiation is more penetrating than alpha radiation. Beta-contaminated particles can damage skin tissue and can harm internal organs if they enter the body. The use of personal protective equipment (PPE) including SCBA will greatly enhance the emergency responder's safety when dealing with alpha or beta radiation.

Gamma radiation has great penetrating power. Gamma rays are a high-energy, ionizing radiation that travels at the speed of light. They can cause skin burns, severely injure internal organs, and have long-term, physiological effects.

Asphyxiation - Asphyxiates interfere with oxygen flow during normal breathing. There are two types of asphyxiates:

Simple
Chemical

Simple asphyxiates generally are inert gases that displace the oxygen necessary for breathing and dilute the oxygen concentration below the level that is useful to the human body. Chemical asphyxiates are far more serious. Referred to as blood poisons, they are compounds that interrupt the flow of oxygen in the blood or to the tissues. The asphyxiates prevent proper oxygen distribution and starve the body's cells of oxygen. In all cases, the cells of the body are starved for oxygen. The asphyxiates prevent proper oxygen distribution. Examples of chemical asphyxiates include hydrogen cyanide (AC), cyanogens chloride (CR), phosgene, carbon monoxide (CO), aniline, and hydrogen sulfide.

Chemical - There are two broad types of chemicals used that can cause harm; both can exist as solids, liquids, or gases:

Toxic Corrosive materials

Toxic materials produce harmful effects depending on the concentration of the materials and the length of exposure to them. An individual can have chronic or acute exposures to toxic materials. Nerve agents are examples of toxic materials.

Corrosive materials are liquids or solids causing visible destruction or irreversible alterations in human skin tissue at the site of contact. They may be liquids that have a severe corrosion rate on steel or aluminum. Sulfuric acid is an example of a corrosive material. Blister agents also behave like corrosives. Of all the hazards that fall under the umbrella of hazardous materials, chemical hazards are probably the ones most frequently dealt with because they are so common.

Etiological - This type of harm involves exposure to a living microorganism, or its toxin, which causes, or may cause, human disease. Biological agents are the most obvious examples of etiological agents.

Mechanical - This most common type of harm causing trauma from mechanical or physical hazards would be shrapnel, nails or over-pressure.

Trim – Longitudinal angle of a vessel; relation of a vessel's floating attitude to the water considered from front to back; difference between forward and aft draft readings; to cause a vessel to assume a desirable position in the water by arrangement of ballast, cargo, or passengers. *Also see Trim and Ballast Tank.*

Trimming Tank – Tank located near the ends of a vessel used for changing the trim of a vessel by admitting or discharging water ballast. *Also see Trim and Ballast Tank.*

Tugboat – Strongly built, powerful boat used for towing and pushing in harbors and inland waterways. *Also see Towboat.*

TV – Prefix to the name of a tank vessel.

Tween Deck – Intermediate deck between the main deck and the bottom of a cargo hold; designed to support cargo so that the cargo at the bottom of the hold is not crushed by the weight of the cargo above it. *Also see Deck.*

Twist Lock – Fitting located in each corner of an intermodal container that locks the container in a secure position for shipment.

U

UASI - Urban areas security initiative.

UC - Unified Command - An organizational adaptation of the Incident Command System (ICS) in which command of the incident is a collaborative effort involving all departments and agencies responsible for key aspects of the response efforts. The unified command team, under the leadership of the Incident Commander, develops an agreed upon set of incident response objectives and strategies without abdicating individual department or agency responsibility, authority, or accountability.

Ullage – Amount that a partially filled tank lacks being full; measure of the empty part of a tank. *Also see Ullage Hole.*

Ullage Hole – Opening, usually located in the hatch cover, leading to a liquid cargo tank that allows measuring of liquid cargo. *Also see Ullage.*

USCG - United States Coast Guard – Federal marine law enforcement and rescue agency in the United States; responsible for the safety, order, and operation of maritime traffic.

UTL - Universal Task List - describes what tasks need to be performed in major events that could occur across town or across the Nation.
http://www.ojp.usdoj.gov/odp/docs/TCL1_1.pdf

Upper Deck – Topmost continuous deck running the whole length and width of a vessel. *Also see Deck.*

V

Vapor tight Fixture – Fixture sealed to prevent an explosive atmosphere from entering the device's electrical contacts where an ignition spark could be generated.

VBIED - Vehicle-borne improvised explosive device - Any vehicle used to transport an explosive device with the intent of using the vehicle as the container. The explosive device is placed in the vehicle, driven to a target and detonated. It can be set off by command wire, electrical or mechanical timer, radio control, mobile phone, or a suicide bomber. The vehicle can be a car, truck, ship, airplane, or any other type of vehicle.

Vector - A carrier, especially an insect or animal, which transfers an infective agent from one host to another.

Ventilation – Process of replacing foul air in any of a vessel's compartments with pure air. *Also see Supply/Exhaust Ventilation.*

Vertical Zone – Area of a vessel between adjacent transverse bulkheads.

Vessel – General term for all craft capable of floating on water and larger than a rowboat.

Virulent - Violent and rapid in its course; able to overcome the natural defenses of the host; highly infectious.

Viruses - A microscopic parasite that infects cells in biological organisms. Smaller than bacteria and use the reproductive mechanism of host cells to create more viruses.

VOAD - Voluntary Organizations Active in Disaster.

Vulnerability Assessment - The Vulnerability Assessment as required by the MTSA provides a measure to indicate the relative likelihood that a particular facility or incident within the jurisdiction may become the target of a terrorist attack. The factors considered include measures of attractiveness and impact.

VX - A nerve agent produced in England in the early 1950's. The most deadly of the nerve agents.

VTS – Vessel Traffic System

W

Warm Zone - A hazardous material response term referring to a buffer area between the hot and cold zones. Personnel in this area are removed from immediate threat but are not considered completely safe from harm. In HazMat incidents, this zone is also the contamination reduction zone where initial personal and equipment decontamination activities occur. This zone requires the use of proper PPE once contaminated people or equipment enter it.

Watch – (1) Division of a day that constitutes a period of duty for a crew member on a vessel; a crew member's assigned duty period. (2) One who watches; lookout assigned to patrol. *Also see Watch Officer.*

Watch Officer – Officer in charge of a watch; has the responsibility of the safe and proper navigation of the vessel during this time period. *Also see Watch.*

Waterline – Level at which a vessel floats; line to which water raises on hull.

Waterline Length – *See Length on the Waterline. Also see Length Overall.*

Watertight Bulkhead – Bulkhead (wall) strengthened and sealed to form a barrier against flooding. *Also see Bulkhead (1) and Watertight Transverse Bulkhead.*

Watertight Door – Door designed to keep out water; fitted to ensure integrity of the bulkheads (walls).

Watertight Transverse Bulkhead – Bulkhead (wall) that has no openings through it and extends from tank top to the main deck; built to control flooding. *Also see Bulkhead (1) and Watertight Bulkhead.*

Weather Deck – All parts of main deck and decks above that are exposed to the weather. *Also see Deck.*

Wharf – Place for berthing ships along or at an angle from shore; constructed by extending bulkheads out from shore and back-filling the enclosed area to create a flat surface for loading and unloading vessels. *Also see Pier.*

Winch – Stationary, motor-drive hoisting machine having a vertical drum around which a rope or chain winds as a load is lifted. A special form of winch using a horizontal drum is a *windlass*.

Wing Tank – Tank located well outboard next to the side shell plating of a vessel; often a continuation of the double bottom up the sides to a deck.

WMD - Weapon of Mass Destruction - The term "weapon of mass destruction" means (A) any destructive device as defined in section 921 of this title (see below); (B) any weapon that is designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals, or their precursors; (C) any weapon involving a biological agent, toxin, or vector; or (D) any weapon that is designed to release radiation or radioactivity at a level dangerous to human life. (U.S.C. Title 18: Section 2332a) The term destructive device means (A) any explosive, incendiary, or poison gas (i) bomb, (ii) grenade, (iii) rocket having a propellant charge of more than four ounces, (iv) missile having an explosive or incendiary charge of more than one-quarter ounce, (v) mine, or (vi) device similar to any of the devices described in the preceding clauses; (B) any type of weapon (other than a shotgun or a shotgun shell which the Attorney General finds is generally recognized as particularly suitable for sporting purposes) by whatever name known which will, or which may be readily converted to, expel a projectile by the action of an explosive or other propellant, and which has any barrel with a bore of more than one-half inch in diameter; and (C) any combination of parts either designed or intended for use in converting any device into any destructive device described in subparagraph (A) or (B) and from which a destructive device may be readily assembled. (U.S.C. Title 18: Section 921).