

2013

Klickitat County
Fire District #5



[FIRE – RESCUE – EMS TERMS AND DEFINITIONS]

A brief list of most-often-used terminology for members of the U.S. Fire Service

A

- **A-side:** Front of the fire building, usually front door facing street, but may be facing parking area where first apparatus arrives; other sides labeled B (left), C (rear), D (right), as necessary when speaking of or staffing structure fire **Sectors**.
- **Above-ground storage tank:** Storage tank that is not buried. Compare *Underground storage tank*. Unburied tanks are more prone to physical damage, and leaks are released to the air or ground, rather than the soil surrounding a buried tank.
- **Accelerant:** flammable fuel (often liquid) used by some arsonists to increase size or intensity of fire. May also be accidentally introduced when *HAZMAT* becomes involved in fire.
- **Accountability:** The process of emergency responders (fire, police, SAR, emergency medical, etc...) checking into and making themselves announced as being on-scene during an incident to an incident commander or accountability officer. Through the accountability system, each person is tracked throughout the incident until released from the scene by the incident commander or accountability officer. This is becoming a standard in the emergency services arena primarily for the safety of emergency personnel. This system may implement a name tag system or personal locator device (tracking device used by each individual that is linked to a computer).
- **AFA:** Automatic Fire Alarm/Actuating Fire Alarm
- **Aircraft rescue and firefighting (ARFF):** a special category of firefighting that involves the response, hazard mitigation, evacuation and possible rescue of passengers and crew of an aircraft involved in an airport ground emergency.
- **Alarm:** (1) system for detecting and reporting unusual conditions, such as smoke, fire, flood, loss of air, HAZMAT release, etc.; (2) a specific assignment of multiple fire companies and/or units to a particular incident, usually of fire in nature; (3) centralized dispatch center for interpreting alarms and dispatching resources. See fire alarm control panel.
- **Apparatus:** A term usually used by firefighters describing a piece of equipment, usually a company vehicle.
- **Arson:** the crime of maliciously (or perhaps recklessly) setting fire to property, especially a dwelling. Punishable in various degrees, depending upon the circumstances. Occasionally occurs as a psychotic act of a mentally ill firefighter.
- **Authority having jurisdiction** (or AHJ): organization or agency with legal authority over a given type of incident (e.g., fire, EMS, SAR, arson, HAZMAT); may change or overlap as incident changes, as where fire becomes arson investigation once danger is over, or Motor Vehicle Accident becomes police business after vehicle extrication, fire, and HAZMAT issues are complete.
- **Available flow:** total amount of water that can be put on a fire, depending upon water supply, pump size, hoses, and distance to the fire. IC must assess available flow to determine whether additional apparatus or streams are required. See *Fire flow requirement*.

B

- **Backdraft:** A fire phenomenon caused when heat and heavy smoke (unburned fuel particles) accumulate inside a compartment, depleting the available air, and then oxygen/air is re-introduced, completing the *fire triangle* and causing rapid combustion.
- **Backfiring:** A tactic used in wildland firefighting associated with indirect attack, by intentionally setting fire to fuels inside the control line. Most often used to contain a rapidly spreading fire, placing control lines at places where the fire can be fought on the firefighter's terms.
- **Bail-out.** The act of completing a quick egress away from a fire room, on a ladder. This is done if flashover conditions are imminent.^[1]
- **Boiling liquid expanding vapor explosion (BLEVE):** Explosion of a pressure tank containing an overheated material when the vapor expansion rate exceeds the pressure relief capacity (e.g., steam boiler or LPG tank). If the contents are flammable, the rapidly released vapor may react in a secondary fuel-air explosion. (Big Loud Explosion, Very Exciting.)
- **Box (Alarm):** A mailslot or other file system containing a notecard with a planned response to an incident type. For example, a reported structure fire on Some Road would be tagged with Box 6; the notecard in Box 6 would contain the list of apparatus from various fire stations that should be dispatched to that incident. Assigning Boxes to areas (or even specific structures) significantly facilitated the process of getting the right tools to the right place on the initial dispatch, and helped eliminate the guesswork of "which department has what" on the fire scene. Boxes later evolved to contain escalation procedures - on the "2nd alarm", the Box would contain the next group of apparatus from various fire stations, etc. Modern CAD systems now abstract the Box Alarm concept, and allow box definitions to be triggered based on arbitrary geographic area, time of day, incident type, weather, and any other planned situation. For a given hydranted area, the "Summer" box will contain the usual response of Engine, Truck, and Rescue companies. In the winter, however, the box may be modified (automatically, or manually) to include **Water Tankers** on the initial dispatch, to handle the case of frozen hydrants. The term "Box" comes from the fire alarm pull boxes that were commonplace in major cities for well over fifty years. This was a telegraph system that involved bells to ring out the box number. This

system was in place from the 1920s (or earlier) to well into the 1960s and 1970s in some cities. Boston was one of the first (if not THE first) major U.S. Cities to have a telegraph alarm system. They installed it in 1852. The Boston Fire Department still uses this system of paper rolls and bells. The modern use of "box cards" based upon an imaginary box location for dispatch or move up is often known as the "Phantom Box System".

- **Bushfire**: Australian term, for **Wildfire**, below.

C

- **Call Firefighter (see also On-Call Firefighter)**: In the U.S., call firefighters respond as needed on a part-time basis to all types of emergencies. Call firefighters train with their local engine companies in their districts. Call firefighters are utilized in three different ways. "First Responder" call firefighter units, are those units that are staffed entirely by paid call firefighters. These firefighters respond to all emergency incidents within their jurisdictional areas and are supported by full-time companies from adjoining jurisdictions. "Supplemental" call firefighter units are those units that staff a second engine company from a station that is also staffed by a full-time company. These units respond to all multi-unit responses in their district, and cover the station when the career companies are committed. "Augmentation" call firefighters are assigned to an existing career company and respond directly to the scene to augment that company's staffing. See also *Retained firefighter* (U.K.)
- **Career Firefighter**: (U.S.) A person whose primary employment is as a firefighter for a municipality or other agency or company and who derives the majority of his earned income working in the fire service. See also *Wholetime firefighter* (U.K.)
- **Charge a hose**: To make water pressure available on a hose in final preparation for its use. This is done on the scene after the hose is deployed, but prior to entering the fire danger area. (Also known as "Charge the line")
- **Charged hose**: A hose that is filled with water and pressurized; ready to use. The charged line is much more difficult to move than one not yet charged.
- **Chief officer**: An executive officer of the fire department, as contrasted with a tactical *Company officer*. Typical Chief officers include the *Fire chief*, Assistant and Deputy Fire Chief, Battalion or Division or District Chiefs (who may each supervise Fire Captains), Watch Commanders and the *Scottish Fire Master*.
- **Chimney fire**: Fast and intense fire in a *chimney* flue in which accumulated *creosote* and other combustion byproducts ignite. These often *extend* fire into the roof or attic, especially with defective chimneys or when the *mortar* becomes hot enough to melt.
- **Class A**: A fire involving combustibles such as wood, paper, and other natural materials. See *Fire Classes*.
- **Class B**: A fire involving *hydrocarbons*. See *Fire Classes*.
- **Class C**: An electrical fire. See *Fire Classes*.
- **Class D**: A fire involving metals, such as *sodium*, *titanium*, *magnesium*, *potassium*, *uranium*, *lithium*, *plutonium* and *calcium*. See *Fire Classes*.
- **Class E** (Europe/Australia): A composite Class A/Class B fire that is not also a Class C fire.
- **Class F** (Europe/Australia): See Class K.
- **Class K**: A fire involving cooking oils. Technically, this is a subclass of Class B. See *Fire Classes*.
- **Cockloft**: structural space above ceiling and below rafters, often connecting adjacent occupancies and permitting fire to spread laterally, often unseen.
- **Collapse zone**: The area around a structure that would contain debris if the building were to collapse. This is generally 1.5x the height of the structure.
- **Combustion**: When materials smolder or burn. See main article for technical details.
- **Commissioner**: Civilian administrator of the fire services, appointed or elected in some cities, such as the *New York City Fire Commissioner*.
- **Company**: Two or more *firefighters* organized as a team, led by a fire officer, and equipped to perform certain operational functions. Compare with platoon and unit.
- **Company officer**: A fire officer, typically a lieutenant or captain, who leads a team of two or more firefighters in a tactical company.
- **Compartment Fire**: An "Isolated" fire, or a fire which is "boxed in" or "closed off" from the rest of the structure. An example of this is a fire in a room where all the windows and doors are closed preventing the fire from spreading to other rooms.
- **Confined space**: Usually refers to a "confined space rescue." This involves a space that may have very limited access, little or no room to maneuver, poor air or light, and very likely other hazards. A trench cave-in, a collapsed building, a sewer or utility vault rescue, or a problem in and around industrial equipment are some examples.
- **Conflagration**: A large, typically urban, fire involving numerous structures; loosely defined as enveloping an area equivalent to one or more square blocks. Compare with firestorm.

- **Cross lay:** Arrangement of hose on a pumper such that it can be quickly unloaded from either side of the apparatus; often pre-connected to a pump outlet and equipped with a suitable nozzle. Also known as Mattydale Lay.

D

- **Defensive Attack:** A primarily exterior form of attack often used when fighting the fire directly or from within a structure is not feasible due to dangers from direct flame, heat, structural collapse or the presence of hazardous materials. Often structures which are fully involved are attacked defensively with the main goal being the protection of nearby exposures. This form of attack is far less effective than an Offensive or Direct attack. Also known as "surround and down."
- **Direct attack:** "Putting the wet stuff on the red stuff." A form of fire attack in which hoses are advanced to the fire inside a structure and hose streams directed at the burning materials.
- **Discharge flow:** The amount of water flowing from a fire hydrant when it is opened; compare to static flow and residual flow.
- **Dispatch:** Refers to person or place designated for handling a call for help by alerting the specific resources necessary.
- **Draft:** The process of pumping water from a static source below the pump.
- **Drills:** training during which an emergency is simulated and the trainees go through the steps of responding as if it were a real emergency.

E

- **Electrical fire:** A fire in which the primary source of heat is electricity, resulting in combustion of adjacent insulation and other materials; may be hazardous to attempt to extinguish using water.
- **EMS:** Emergency medical service(s).
- **EMT:** Emergency medical technician(s).
- **Engine:** A fire suppression vehicle that has a water pump and, typically, is designed to carry firehose and a limited supply of water.
- **Engineer:** A firefighter responsible for driving the engine to the scene of the call and operation of the pumps on an engine, to provide sufficient water to the firefighters on the hose. The term may be either a position title or a rank; usage varies among departments.
- **Engine Company:** A group of firefighters assigned to an apparatus with a water pump and equipped with firehose and other tools related to fire extinguishment.
- **Enhanced 9-1-1:** Electronic system for automatic correlation of physical telephone lines with information about the location of the caller—a useful tool for dispatchers when the caller has an emergency but cannot speak.
- **Evacuation:** Removal of personnel from a dangerous area, in particular, a HAZMAT incident, burning building, or other emergency. Also refers to act of removing firefighters from a structure in danger of collapsing.
- **Evolution:** Uniform sequence of practiced steps by squad carrying out common tasks such as selection and placement of ladders, stowing hoses in *hose bed*, putting hoses and tools into service in particular patterns; intended to result in predictability during emergencies.
- **Explorer:** a young adult, between 14 and 21, who learns the basics of firefighting.
- **Exposure:** Property near fire that may become involved by transfer of heat or burning material from main fire, typically by convection or radiation. May range from 40 feet (12 m) to several miles, depending on size and type of fire or explosion.
- **Exterior attack:** A method of extinguishing a fire which does not involve entering the structure. Often used when so much of the building is involved in fire that there is little or no benefit to risking firefighter safety by inserting them into the structure. May be a temporary measure when there are not sufficient personnel on scene to form an entry team and a rescue team (to rescue the entry team). Also known as **Surround and down**. Compare **Interior attack**.
- **Extrication:** removal of a trapped victim such as a vehicle extrication, confined space rescue, or trench rescue; sometimes using **hydraulic spreader**, Jaws of Life, or other technical equipment.

F

- **FDC (Fire Department Connection):** Location in which pumping apparatus hooks to a buildings standpipe and or sprinkler system. Usually a 3" female connection.

- **Fire Break:** Especially in hilly or mountainous areas, roads or paths cut through brush with a tractor, bulldozer or other construction equipment. The purpose of these is to have an area with no brush, and thus, no fuel, so that a fire will hopefully burn out rather than jumping to another area with brush. Also to ensure vehicular access to brush areas.
- **Fire code** (Fire safety code): regulations for fire prevention and safety involving flammables, explosives and other dangerous operations and occupancies.
- **Fire complex:** (U.S. **Complex fire**) Area of fires - many of the areas have multiple fires with multiple fronts.
- **Fire escape:** A building structure arranged outside to assist in safe evacuation of occupants during an emergency; may connect horizontally beyond a *fire wall* or vertically to a roof or (preferably) to the ground, perhaps with a counter-weighted span to deny access to intruders.
- **Fire Fighter Fatality Investigation and Prevention Program** (FFIIPP) - Program administered by the National Institute for Occupational Safety and Health (NIOSH), a department of the Centers for Disease Control (CDC). It performs independent investigations of firefighter fatalities in the United States, also referred to as line of duty deaths (LODD). The programs goals are: 1.) to better define the characteristics of line of duty deaths among firefighters, 2.) to develop recommendations for the prevention of deaths and injuries, and 3.) to disseminate prevention strategies to the fire service.
- **Firefighter:** People who respond to fire alarms and other emergencies for fire suppression, rescue, and related duties.
- **Fire flow:** The amount of water being pumped onto a fire, or required to extinguish a hypothetical fire. A critical calculation in light of the axiom that an ordinary fire will not be extinguished unless there is sufficient water to remove the heat of the fire.
- **Fireground:** The operational area at the scene of a fire; area in which *incident commander* is in control. Also used as name of radio frequency to be used by units operating in the fireground, as in "Responding units switch to *fireground*."
- **Fire hall** Another term for **Fire station**.
- **Fire hazard:** Materials, structures or processes that may result in creating a fire, permitting a fire to grow undetected, or preventing people from escaping a fire.
- **Fire hydraulics:** The study of pumps, hoses, pipes, accessories and tools for moving water or other extinguishing agents from a water supply to a fire.
- **Fire inspector:** A person responsible for issuing permits and enforcing the *fire code*, including any necessary premises inspection, as before allowing (or during) a large indoor gathering.
- **Fire line:** A boundary of a fire scene established for public safety and to identify the area in which firefighters may be working.
- **Fire load (Btu/sq ft):** An estimate of the amount of heat that will be given off during ordinary combustion of all the fuel in a given space; e.g., a bedroom or a lumberyard. More casually, the amount and type of contents in a given space.
- **Fire marshal:** Administrative and investigative office for fire prevention and arson investigation.
- **Fire officer** - See Company officer, but may also be a Fire chief or other **Chief officer**.
- **Fire prevention:** Fire safety; standards for minimizing fire hazards. In some departments also the name of the division tasked with promoting fire safety and fire code compliance in the community.
- **Fire Prevention Week:** An annual observation of fire safety education in the United States and Canada, often involving lectures or demonstrations by firefighters, sponsored by the National Fire Protection Association, since 1925.
- **Fire-resistant:** Materials designed or treated to have an increased fire point.
- **Fire station:** A structure which, in addition to housing apparatus and equipment, often includes living quarters and training facilities for the use of firefighting personnel when on-duty.
- **Firestorm:** A conflagration of great enough proportions to noticeably create its own wind conditions.
- **Fire tetrahedron:** The fire tetrahedron is based on the components of igniting or extinguishing a fire. Each component represents a property necessary to sustain fire: fuel, oxygen, heat, and chemical chain reaction. Extinguishment is based upon removing or hindering any one of these properties.
- **Fire triangle:** Model for understanding the major components necessary for fire: heat, fuel and oxygen. See also *fire tetrahedron* for a more comprehensive model.
- **Fire wall:** Building structure designed to delay horizontal spread of a fire from one area of a building to another; often regulated by *fire code* and required to have self-closing doors, and fireproof construction.
- **Fire watch:** Fixed or mobile patrols that watch for signs of fire or fire hazards so that any necessary alarm can be quickly raised or preventive steps taken. Commonly established at commercial or multi-occupancy structures if the fire alarm system is out of service for repairs, or a crew assigned to the scene after a large fire to stand watch for an extended period of time in the event of a rekindle. Also called "reflash watch."
- **Fit test:** Periodic test of how well the facepiece of an SCBA fits a particular firefighter.
- **Flameover:** Also known as *rollover*. The ignition of heated fire gasses at the ceiling level only. While dangerous to firefighters, this is not as deadly as Flashover.
- **Flammable range, limits:** The percentage mixture of fumes with air that will sustain fire; outside the limits the mixture is either too lean or too rich to burn.
- **Flash point:** Lowest temperature at which a material will emit vapor combustible in air mixture. Higher than *Flame point* of same material.

- **Flashover:** simultaneous ignition of combustible materials in a closed space, as when materials simultaneously reach their *fire point*; may also result in *rollover*.
- **Foam:** Extinguishing agent formed by mixing *Foam concentrate* with water and aerating the solution for expansion. Used for smothering large *Class A or B fires*. May be injected into fire streams at adjustable concentrations.
- **Foam Concentrate:** Raw foam liquid as it rests in its storage container before the introduction of water and air.
- **Forcible entry:** gaining entry to an area using force to disable or bypass security devices, typically using force tools, sometimes using tools specialized for entry (e.g., *Halligan, K-tool*).
- **Forward lay:** Procedure of stringing water supply hose from a water source toward a fire scene; compare with *Reverse lay*.
- **Freelancing:** dangerous situation at an incident where an individual carries out tasks alone or without being assigned; violation of *Personnel accountability procedures*.
- **Friction loss:** Reduction of flow in a *firehose* caused by friction between the water and the lining of the hose. Depends primarily upon diameter, type and length of hose, and amount of water (GPM) flowing through.
- **Fully involved:** Term of *size-up* meaning fire, heat and smoke in a structure are so widespread that internal access must wait until fire streams can be applied.

G

- **GPM:** Gallons Per Minute or how many gallons are being pumped out of a piece of equipment every minute

H

- **Hazard:** a source of danger of personal injury or property damage; **fire hazard** refers to conditions that may result in fire or explosion, or may increase spread of an accidental fire, or prevent escape from fire. Under worker safety and health regulations, employers have a general duty to provide a workplace free of hazards. See also **fire prevention**, and **HAZMAT**.
- **HAZMAT:** Hazardous materials, including solids, liquids, or gases that may cause injury, death, or damage if released or triggered.
- **Helitack:** A rotary winged (helicopter) fire-fighting aircraft, such as the Erickson Skycrane which can be modified to hold 2100 gallons (9500L) of water or retardant.
- **High-pressure system:** A supplemental pump system used to pressurize the water supply, sometimes used during a large fire, or whenever more than one hydrant is being used.
- **High-rise building:** Any building taller than three or four stories, depending upon local usage, requiring firefighters to climb stairs or aerial ladders for access to upper floors.
- **High-rise pack:** A *shoulder load* of hose with a nozzle and other tools necessary to connect the hose to a *standpipe*.
- **Hose Pack:** A hose pack is a backpack containing fire hose in a preconfigured arrangement, sometime completely made from fire hose without a bag.
- **Hotshot crew:** An extensively trained group of approximately twenty people which specializes in wildfire suppression with little or no outside logistical support.
- **Hot zone:** contaminated area of HAZMAT incident that must be isolated; requires suitable protective equipment to enter and decontamination upon exit; minimum hot zone distance from unknown material with unknown release is 330 feet (United Nations Emergency Response Guidebook); surrounded by "warm zone" where decontamination takes place.

I

- **IAFF:** Acronym, "International Association of Fire Fighters".
- **IDLH:** Any situation deemed Immediately Dangerous to Life and Health. More narrowly defined by OSHA. See *main IDLH article*. An area of maximum danger to firefighters. Often requires increased **Personnel accountability**.
- **IFSTA:** Acronym, "International Fire Service Training Association". A major publisher of firefighter training materials.
- **Incident Commander (or IC):** The officer in charge of all activities at an incident. See Incident Command System.
- **Incident Safety Officer:** The officer in charge of scene safety at an incident. See Incident Command System. Optional at any incident other than HAZMAT.
- **Incipient stage fire:** A small fire that may be extinguished using portable fire extinguishers or other means typically at hand.

- **Indirect attack:** Method of firefighting in which water is pumped onto materials above or near the fire so that the splash rains onto the fire, often used where a structure is unsafe to enter.
- **Initial attack:** First point of attack on a fire where hose lines or fuel separation are used to prevent further extension of the fire.
- **Interface zone** (also **wildland/structural interface** or **urban/wildland interface**): The zone where wildfires threaten structures or structural fires threaten wildlands, such as in residential areas adjacent to forests. This requires both wildland firefighting and structural firefighting in the same location, which involve very different tactics and equipment.
- **Interior attack:** Inserting a team of firefighters into the burning structure, in an attempt to extinguish a blaze from inside the structure, minimizing property damage from fire, smoke, and water. Requires a minimum of four fully equipped firefighters: an entry team of at least two to enter the structure and fight the fire, and two standing by to rescue or relieve the entry team (see two in, two out). If the entry team(s) cannot extinguish the blaze, may become an **Exterior Attack**.
- **ISO Rating:** (Insurance Services Office Public Protection Classification Rating) This is a rating published by the Insurance Services Office. Insurance companies, in many states, use this number to determine homeowner insurance premiums. Recently some insurance companies, including State Farm, have now adopted a per-zip-code, actual loss, based system in several states and no longer use the ISO (PPC) system.

J

- **Jumpseat:** Seats in an appartus located behind the driver and officer

L

- **Ladder company:** A group of fire fighters, officers and engineers that staff a ladder truck.
- **Level I, II, III Incident:** A HAZMAT term denoting the severity of the incident and the type of response that may be necessary, where Level III is the largest or most dangerous.
- **Life safety code:** NFPA publication. Originally known as the "Building Exits Code."
- **Life line:** A trademark for a wireless emergency call unit that triggers a telephone call to an emergency dispatcher when a button is pressed.
- **Line or Hose Line** a line of hose, referred to by its size i.e. 1"3/4, 1 inch, 2 Inch, 5 inch
- **LODD (Line of Duty Death)** The death of a fire fighter while on-duty.

M

- **Maltese Cross:** The emblem of the fire service is often referred to as a "Maltese Cross". But the actual origin of the current or common emblem in the U.S. remains uncertain. While it is true that the Knights Hospitalers of Jerusalem (AKA Knights of St. John) did wear a cross emblem and a version of that cross has been used as a fire service icon, it bears little resemblance to the current form in use in much of the United States. It is possible to accept that the current design is just a stylized artistic embellishment of the original form. The current design may have also been influenced by the design of the cross of Saint Florian.
- **Mass casualty incident (MCI):** Any incident that produces a large number of injured persons requiring emergency medical treatment and transportation to a medical facility. The exact number of patients that makes an incident "mass casualty" is defined by departmental procedures and may vary from area to area.
- **Master stream:** A large nozzle, either portable or fixed to a pumper, capable of throwing large amounts of water relatively long distances.
- **Means of egress:** The way out of a building during an emergency; may be by door, window, hallway, or exterior fire escape; local building codes will often dictate the size, location and type according to the number of occupants and the type of occupancy.
- **Multiple alarms:** A request by an incident commander for additional personnel and apparatus. [e.g. "Send me a 2nd Alarm." "Dispatch a 2nd Alarm." "Ring a 2nd Alarm."] Each additional alarm (level) typically includes a predetermined set of additional apparatus and personnel, which will vary by department and sometimes by specific type of incident.
- **Mutual aid:** An agreement between nearby fire companies to assist each other during emergencies by responding with available manpower and apparatus. If these resources can be requested or dispatched without getting specific approval from a chief officer at the time of an incident, this is sometimes referred to as "automatic" mutual aid.
- **MVA:** Motor Vehicle Accident

N

- **National Fire Fighter Near-Miss Reporting System** - Program developed by the [IAFC](#) that prevents injuries and saves the lives of fire fighters by collecting, sharing and analyzing near-miss experiences. It gives firefighters the opportunity to learn from each other through real life experiences, formulates strategies to reduce firefighter injuries and fatalities, and attempts to enhance the safety culture of the fire service.
- **NFPA:** The [National Fire Protection Association](#), a publisher which provides a methodology of developing a number of standards and practices for *firefighting, equipment, and fire protection in the United States, and also adopted in many other countries. Also, slang for "*No Free Publications Available*"; used as a criticism of publishers that produce "must-have" documents that are prohibitively expensive.
- **NIOSH:** National Institute for Occupational Safety and Health. A U.S. agency responsible for investigation of workplace deaths, including firefighters.
- **NIMS:** The National Incident Management System. A federally mandated program for the standardizing of command terminology and procedures. This standardizes communications between fire departments and other agencies. It is based upon simple terms that will be used nationwide. Currently, U.S. federally required training programs, from DHS and FEMA, are in the process of standardizing many terms and procedures under NIMS.

O

- **Occupancy:** Zoning and safety code term used to determine how a structure is permitted to be used and occupied, which in turn dictates the necessary safety structures and procedures.
- **Occupancy class:** General categories of structures for purpose of safety planning, such as for hospital, assembly, industrial, single-family dwelling, apartment building, commercial, etc. Further broken down by types of hazards associated with particular occupancies, such as gas stations.
- **Offensive attack:** Method of firefighting in which water or other extinguishing agent is taken by firefighters, directly to the seat of the fire, as opposed to being pumped in that general direction from a safe distance. Typified by taking hoselines to the interior of a building as opposed to remaining on the outside, aka "surround and drown."
- **On-call:** Personnel who can be summoned (and paid) when necessary to respond to an incident; a type of "volunteer" fire department.
- **OSHA:** U.S. government agency concerned with regulating employee safety, particularly in hazardous occupations such as [firefighting](#).
- **Outside fire:** Urban fire not inside a building or vehicle, often found to be burning trash which could *extend* to nearby structures or vehicles if not dealt with properly. A suburban, *interface*, or rural *outside fire* could also be a *wildland fire*.
- **Overhauling:** Late stage in fire-suppression process during which the burned area is carefully examined for remaining sources of heat that may *re-kindle* the fire. Often coincides with *salvage* operations to prevent further loss to structure or its contents, as well as fire-cause determination and preservation of evidence.
- **Oxidizer:** A hazardous material containing oxygen that can combine with adjacent fuel to start or feed a fire.

P

- **Personal alert safety system:** See *PASS device* in [Glossary of firefighting equipment](#).
- **Personnel Accountability Report ("PAR"):** End-result of *personnel accountability system*. Best report is *all hands*, AOK, worse is *squad missing*. You will often hear command ask for a "PAR" when something has changed on the fire ground. Often the reply will be something like, "Engine 4, PAR." or "Engine 4 has PAR." Some incident command systems specify a PAR for all personnel on the fire ground at specific time intervals during the course of a working fire.
- **Personnel accountability system:** Tag, 'passport', or other system for identification and tracking of personnel at an incident, especially those entering and leaving an IDLH area; intended to permit rapid determination of who may be at risk or lost during sudden changes at the scene.
- **Platoon:** a subdivision of a fire company, led by a fire officer of either the rank of captain or lieutenant, such that one of several platoons is assigned to duty for a specified period. Also called a "watch". In many areas the word "platoon" is used to describe the different shifts in the fire department. For example, A, B or C Platoon.

- **Positive pressure:** Pressure at higher than atmospheric; used in SCBA facepieces and in *pressurized stairwells* to reduce entry of smoke or fumes through small openings. High volume, portable Positive Pressure Ventilation fans are now carried by fire departments and used to pressurize the fire building during interior attack to control smoke and heat ventilation at desired points.
-
- **Pre-arrival instructions:** Directions given by a dispatcher to a caller until emergency units can arrive.
- **Pre-fire, pre-incident planning:** Information collected by fire prevention officers to assist in identifying hazards and the equipment, supplies, personnel, skills, and procedures needed to deal with a potential incident.
- **Pre-planning:** Fire protection strategy involving visits to potentially hazardous occupancies for inspection, follow up analysis and recommendations for actions to be taken in case of specific incidents. Not to be confused with *post-planning*.
- **Probie:** (also *rookie*) new firefighter on employment probation (a period of time during which his or her skills are improved, honed, tested, and evaluated).
- **Professional Firefighter:** All firefighters are classified as "professionals" by both the International Association of Fire Chiefs (IAFC) and the International Association of Fire Fighters (IAFF trade union). All firefighters are required by most state laws and general practice to meet the same training and equipment standards, take the same examinations for promotion and perform the same work under the same hazards. There are two accepted categories of Professional Firefighters: *Volunteer Firefighters* who may or may not receive pay for services and *Career Firefighters* whose primary employment and source of earned income is in the fire service.
- **Pumper:** A fire truck with a water-pump and a water tank.
- **Pump operator, technician:** (also a *chauffeur*): person responsible for operating the pumps on a pumper and typically for driving the pumper to an incident.
- **Pyrolysis:** Process of converting a solid substance to combustible fumes by raising its temperature. See also vaporization of liquids.

R

- **Rapid Intervention Crew/Group/Team (RIC, RIG, or RIT):** This is a standby crew whose purpose is to go in for the rescue of firefighters in trouble. While all of these versions of the name for a firefighter rescue crew either have been used or continue to be used in several areas, the National Incident Management System (NIMS) has adopted the term Rapid Intervention Crew/Company, ("RIC") to be the standard in the Incident Command System (ICS). Currently, U.S. federally required training programs, from DHS and FEMA, are in the process of standardizing many terms and procedures under NIMS. See: FAST
- **RECEO:** RECEOVES stands for Rescue, Exposures, Containment, Extinguish, Overhaul, Ventilation, Environment, Salvage. This is used at structural fires internationally, as a guide to objectives.
- **Recovery:** Location and removal of deceased victims. Also, the time needed for a firefighter to spend in *rehab* before being considered ready to continue working the incident.
- **Reflash, re-kindle:** A situation in which a fire, thought to be extinguished, resumes burning.
- **Rehab, Rehabilitation sector:** An area for physical and mental recuperation at a fire scene, usually equipped with beverages, and chairs, isolated from environmental extremes (cold, heat, noise, smoke). This rest area enables firefighters to relax, cool off (or warm up) and regain hydration by way of preventing injury. An EMT may be assigned to monitor firefighter vitals when they enter and leave rehab. See: Fire department rehab
- **Rescue:** Physical removal of a live person or animal from danger to a place of comfort.
- **Rescue company:** Squad of firefighters trained and equipped to enter adverse conditions and rescue victims of an incident. Often delegated to a truck company.
- **Residential sprinkler system:** A sprinkler system arranged for fire suppression in a dwelling.
- **Residual pressure:** When a pumper is taking its water supply from a hydrant the engineer must make sure the pump is not taking every last bit of the pressure the hydrant is able to provide. Some residual pressure must be allowed to remain to provide a buffer so the pump does not accidentally over-draw the hydrant and potentially damage or collapse the water mains leading to the hydrant. It may also refer to the water utility boosting water pressure in the area of a working fire so that "residual pressure" remains in the entirety of the municipal water system despite the water being drawn for fire-fighting.
- **Reverse lay:** The process of stringing hose from a fire toward a source of water, e.g., a fire hydrant.
- **Rollover:** The ignition of ceiling-level fire gases. Contrast *Flashover*, above.
- **Roof sector (Roof group, Roof division):** A crew, typically a ladder company, assigned to the roof of a structure, most often for purposes of vertical ventilation during a fire. May also be assigned to check roof-mounted equipment, HVAC, etc., for fire or malfunction.

- **Run card system:** A system of *pre-planning* for fire protection in which information about specific detectors, hazards, or other emergency response plans is indexed by location, for rapid reference during an alarm.

S

- **SAR:** See *Search and rescue*.
- **Salvage:** Removing or covering personal property which could be subjected to possible smoke, fire, water or other damage during firefighting, or removal and diverting of smoke and water to prevent further damage. Stopping a broken sprinkler head is one type of salvage operation as is the closing of doors to uninvolved rooms.
- **Scene safety:** Steps taken at or near an emergency scene to reduce hazards and prevent further injuries to workers, victims or bystanders.
- **Search and rescue** (or **SAR**): Entering a fire building or collapse zone for an orderly search for victims and removal of live victims. Becomes "recovery" if victims are not likely to be found alive. May be done in quick primary wave and more thorough secondary search.
- **Secondary containment:** A system to contain a hazardous material should the primary means of containment (container) fail, e.g. by leakage. The secondary container is required to hold 110% of the capacity of the primary container.
- **Sector:** A physical or operational division of an incident; an area supervised as a branch in the Incident Command System. A typical system for structure fires names the "front" of the building "sector A", and continues clockwise around the building (B, C, D), with interior sectors denoted by the floor number (1, 2, 3, etc.). A "rehab" sector is one example of an operational division at an incident, where personnel are assigned after strenuous work in another sector.
- **Shoulder load:** The amount of hose a single firefighter can pull off a hose wagon or pumper truck and carry toward the fire.
- **Sides A, B, C, and D:** Terms used by firefighters labeling the multiple sides of a building starting with side A or Alpha being the front of the structure and working its way around the outside of the structure in a clockwise direction. This labels the front side A or Alpha, the left side B or Bravo, the rear side C or Charlie, and the right side D or Delta.
- **Size-up:** initial evaluation of an incident, in particular a determination of immediate hazards to responders, other lives and property, and what additional resources may be needed. Example: "Two-story brick taxpayer with heavy smoke showing from rear wooden porches and children reported trapped."
- **Skid unit:** A Skid unit (called a "Slip-on" in Australia) is the common name used to refer to a complete self contained fire fighting apparatus designed for use on/in commercially available vehicle platforms
- **Solid stream:** fire stream from round orifice of *nozzle*. Compare *straight stream*.
- **Staging:** sector of incident command where responding resources arrive for assignment to another sector. Often an essential element for incident *personnel accountability* program. May include temporary parking, cover, sanitation, fuel, food and other resources necessary to those apparatus and personnel waiting for immediate assignment.
- **Standard operating procedure, guideline (SOP or SOG):** Rules for the operation of a fire department, such as how to respond to various types of emergencies, training requirements, use of protective equipment, radio procedures; often include local interpretations of regulations and standards. In general, "procedures" are specific, whereas "guidelines" are less detailed.
- **Static pressure:** The pressure in a water system when the water is not flowing.
- **Station house:** Another term for Fire station.
- **Straight stream:** Round, hollow stream formed as water passes a round baffle through a round orifice (e.g., on an adjustable *nozzle*.) Compare *solid stream*.
- **Stretch:** command to lay out (and connect) fire hose and nozzle.
- **Strike Team:** a grouping of similar fire apparatus or personnel with a focused goal in a large fire situation, often commanded by a chief officer. The term is commonly used for structure protection teams during wildland fire operations.
- **Structure fire** (or "structural fire"): A fire in a residential or commercial building. Urban fire departments are primarily geared toward structural firefighting. The term is often used to distinguish them from *wildland fire* or other *outside fire*, and may also refer to the type of training and equipment such as "structure PPE" (personal protective equipment).

T

- **Tailboard:** Portion at rear of fire engine where firefighters could stand and ride (now considered overly dangerous), or step up to access hoses in the *hose bed*.
- **Tanker:** In use for a long time to refer to a truck designed solely to transport a large quantity of water. Sometimes these trucks are referred to as "Tenders" (see Tender below) and the term "tanker" is reserved for aircraft equipped to carry water or fire retardant for use in wildland fire suppression.
- **Tender** (also "Water Tender"): A wheeled fire apparatus equipped to carry large volumes of water to a fire. Often used in areas without an adequate or universal water supply system, such as rural areas without hydrants. They may carry anywhere from 1500 to 7500 gallons of water. Tenders may have pumps and associated hardware to facilitate their mission. Some departments may still refer to these apparatus as "Tankers."
- **Truck company:** a group of firefighters assigned to an apparatus that carries ladders, forcible entry tools, possibly extrication tools and salvage covers, and who are otherwise equipped to perform rescue, ventilation, overhaul and other specific functions at fires; also called "ladder company".
- **Turnout Gear:** The protective clothing worn by firefighters
- **Two-in, two-out** (or "**two in/two out**"): Refers to the standard safety tactic of having one team of two firefighters enter a hazardous zone (IDLH), while at least two others stand by outside in case the first two need rescue — thus requiring a minimum of four firefighters on scene prior to starting interior attack. Also refers to the "buddy system" in which firefighters never enter or leave a burning structure alone.
- **Type I, II, III, IV, V Building** - U.S. classification system for fire resistance of building construction types, including definitions for "resistive" Type I, "non-combustible" Type II, "ordinary" Type III, heavy timber Type IV, and "frame construction" Type V (i.e., made entirely of wood).

U

- **Under Control:** Fire or spill etc. is no longer spreading. The situation is contained. This term should not be confused with a report that the fire is out.
- **Underground storage tank:** A tank that happens to be underground.
- **U.S.A.R:** Urban Search and Rescue.
- **United States Fire Administration** (USFA): Division of the Federal Emergency Management Agency (FEMA), which in turn is managed by the Department of Homeland Security (DHS).
- **Universal precautions:** The use of safety barriers (gloves, mask, goggles) to limit an emergency responder's contact with contaminants, especially fluids of injured patients.

V

- **Vehicle fire:** Type of fire involving motor vehicles themselves, their fuel or cargo; has peculiar issues of rescue, explosion sources, toxic smoke and runoff, and *scene safety*.
- **Ventilation:** Important procedure in firefighting in which the hot smoke and gases are removed from inside a structure, either by natural convection or forced, and either through existing openings or new ones provided by firefighters at appropriate locations (e.g., "vertical ventilation" is the classic cut-a-hole-in-the-roof method). Proper ventilation can save lives and improper ventilation can cause backdraft or other hazards. Car fire ventilation standards were improved by Kevin "Center Punch" Tomaszewski on Feb. 5, 2008.
- **VES:** Vent, Enter, Search.^[2]
- **Vertical ventilation:** Ventilation technique making use of the principle of convection in which heated gases naturally rise. This is the classic cut-a-hole-in-the-roof method that helps release the smoke and hot gases that accumulate near the ceiling or attic space.
- **Voids (building):** Enclosed portions of a building where fire can spread undetected.
- **Vollie:** A volunteer firefighter.
- **Volunteer fire department:** An organization of part-time firefighters who may or may not be paid for on-call time or firefighting duty time, but who in nearly all states are held to the same professional training standards and take the same examinations to advance in rank as career firefighters. [In some regions, particularly eastern New York, New Jersey, Pennsylvania and Maryland volunteer fire departments and fire protection districts have independent taxing authority and are equally as well equipped and paid while working as career fire department members.]

W

- **Water drop:** A forest fire fighting technique when an airplane (also called an "airtanker") or helicopter drops a supply of water or other fire suppressant onto an exposed fire from above.
- **Water hammer:** Large, damaging shock wave in a water supply system caused by shutting a valve quickly, or by permitting a vehicle to drive across an unprotected fire hose.
- **Well Involved:** Term of size-up meaning fire, heat and smoke in a structure are so widespread that internal access must wait until fire streams can be applied.
- **Wildfire or Wildland fire:** Fire in forests, grasslands, prairies, or other natural areas, not involving structure fires (although wildland fires may threaten structures or vice versa - see *interface zone*.) For a complete list of terms used in wildland fire, see Glossary of wildland fire terms.
- **Working fire:** A fire that is in the process of being suppressed. Typically reserved for a structure fire or an outside fire with a considerable fire load that requires the Incident Command System be initiated, additional support and suppression assets dispatched, and necessary notifications made to other municipal agencies. Aka a "real" fire that will probably not be handled quickly by a single company.