

Fire Department Terminology

$\underline{\mathbf{A}}$

- **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).
- 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.
- **Apparatus**: A term usually used by firefighters describing a department vehicle (i.e. fire engine).

- **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.
- **Bus:** Common term (firefighter slang) usually referring to an Ambulance

C

- 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.
- **Chauffeur**: Driver of a particular emergency apparatus. A paid position within the fire department and a promotable position.
- Class A fire: A fire involving combustibles such as wood, paper, and other natural materials.
- Class B fire: A fire involving hydrocarbons.
- Class C fire: An electrical fire.
- Class D fire: A fire involving metals, such as sodium, titanium, magnesium, potasium, uranium, lithium, plutonium and calcium.
- **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.
- **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 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: A confined space is any space: 1) that has limited or restricted means of entry or exit; 2) is large enough for a person to enter to perform tasks; 3) and is not designed or configured for continuous occupancy
- **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.
- **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.
- **Dispatch:** Refers to person or place designated for handling a call for help by alerting the specific resources necessary.

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).
- **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. (Also see Chauffer)
- **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.
- **Engine pressure:** The pressure in a fire hose measured at the outlet of the pump.
- 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.
- **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 drown. 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 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 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 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 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.
- **Fire marshal**: Administrative and investigative office for fire prevention and arson investigation. Has legal authority to enforce state and local fire laws.
- **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.
- **Fit test:** Periodic test of how well the facepiece of an SCBA fits a particular firefighter.

- **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.
- **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*.
- **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.

<u>H</u>

- **HAZMAT**: Hazardous materials, including solids, liquids, or gases that may cause injury, death, or damage if released or triggered.
- **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*.
- **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.

- **IDLH**: Any situation deemed **I**mmediately **D**angerous to **L**ife and **H**ealth (IDLH).
- **Incident Commander:** 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.
- **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.
- **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.
- **Irons:** The flathead axe mated with the halligan bar. Firefighters often refer to these as the Crossed Irons, or Married Irons, because the Halligan Bar can fit to the Axe head.

$\underline{\mathbf{J}}$

• **Jaws of Life:** Hydraulic spreader used in extrication procedures. Most commonly used, but not limited to, during motor vehicle accidents.

L

• Ladder Company: A group of fire fighters, officers and engineers that staff a Truck that's primary duty is to supply ladders to a fire scene. In most Fire Departments the Ladder Truck Company is responsible for ventillation of a structure on fire.

• 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.

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 fire 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. Each department will vary on the number of apparatus and personnel on each additional alarm.
- **Mutual aid:** An agreement between nearby fire companies to assist each other during emergencies by responding with available manpower and apparatus.
- **MVA:** Motor Vehicle Accident.

N

- **NFPA**: The National Fire Protection Association, a research group which sets a number of standards and best 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 to reference any "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.
- Offensive attack: Method of firefighting in which water or other extinguisher is taken directly to the seat of the fire, as opposed to being pumped in that general direction from a safe distance.
- **OSHA:** Occupational Safety and Health Administration, U.S. government agency concerned with regulating employee safety, particularly in hazardous occupations such as firefighting.
- 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

- **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 fireground. Often the reply will be something like, "Engine 4, PAR." or "Engine 4 has PAR."
- **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.
- **Plug:** Slang term for a fire hydrant. This survives from the days when water mains actually had holes in the tops that were plugged. Many firefighters would like to keep this word while many others think it should be replaced with the accurate term, "hydrant".
- **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 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.

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.
- **Reflash**, **re-kindle**: A situation in which a fire, thought to be extinguished, resumes burning.
- **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:** The amount of pressure in a hydrant system when a hydrant is fully open, such as during a fire; should be engineered to provide domestic supply of water to homes and businesses during a large fire in the district.

- **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.

S

- Salvage, salvage cover: Heavy-duty tarpaulins folded or rolled for quick deployment to cover personal property subjected to possible water or other damage during firefighting.
- **Scene safety:** Steps taken at or near an emergency scene to reduce hazards and prevent further injuries to workers, victims or bystanders.
- SCBA Self Contained Breathing Apparatus which you have your oxygen tank and mask, keeps you from breathing in smoke or hazardous gases. Part of your personal protective equipment (PPE).
- **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."
- **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 in *personnel accountability* program.
- 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.
- **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.
- **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).

• **Sworn Personnel:** Firefighters take a sworn oath to protect and serve the community in which they work.

T

- **Tailboard:** Portion at rear of fire engine where firefighters could stand and ride (now considered overly dangerousand against Department Policy in Carmel), or step up to access hoses in the *hose bed*.
- **Tanker**: An aircraft equipped to carry water or fire retardant for use in wildland fire suppression. Archaic: see "Tender", below.
- **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 OSHA 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, "noncombustible" 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.
- 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.
- **Utility Truck** Usually manned by an engine company and responds to utility calls like water main breaks. Some small departments use them to respond to medical calls to save gas money.

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., on the roof). 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.
- **Venturi effect:** Creating a partial vacuum using a constricted fluid flow, used in fire equipment for mixing chemicals into water streams, or for measuring flow velocity.
- **Vertical ventilation:** Ventilation technique making use of the principle of convection in which heated gases naturally rise.
- **Voids** (**building**): Enclosed portions of a building where fire can spread undetected.

W

- 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.
- Wet down ceremony: A traditional ceremony for the placing of new apparatus in service. There are several versions of this but it usually includes: pushing the old apparatus out, wetting down the new vehicle and pushing it back into the station. It may also include the moving of the bell to the new apparatus, photos, etc.

Z

• **Zone:** Section of structure indicated on *fire alarm control panel* where sensor was activated.