



Glossary of Terms

Aerial firefighting is the use of aircraft and other aerial resources to combat wildfires.

Airtanker: is a fixed-wing aircraft that can carry fire retardant or water and drop it on or in front of a fire to help slow the fire down.

Air Attack or Air Tactical Aircraft: is an airplane that flies over an incident, providing tactical coordination with the incident commander on the ground, and directing airtankers and helicopters to critical areas of a fire for retardant and water drops.

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: Also known as a "controlled burn," it's a tactic mostly 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. This technique has been used in rapidly spreading urban fires, especially in San Francisco following the 1906 earthquake.

Buggy: A term usually used for the chief's vehicle

Burnover: In wildland firefighting, burnovers are usually referred to when emergency shelters are deployed by firefighters when they are in a situation where they cannot escape the fire. Surviving a burnover is possible, but chances of death are still very high.

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.

Company: A group of firefighters organized as a team, led by a fire officer, and equipped to perform certain operational functions.

Company Officer : A fire officer, typically a lieutenant or captain, who leads a team of two or more firefighters in a tactical company.

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.

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 drown."

Direct Attack: A fire attack in which hoses are advanced inside a structure and hose streams are directed onto burning materials.

Dispatch: a group of "dispatchers" assigned 911 call-taking and/or responsible for the assignment and movement of fire, EMS, and police resources to an emergency. These services are primarily accomplished through two-way radio communications.

Dozer line - Also called a catline: A fireline constructed with the front blade of a bulldozer or any tracked vehicle with a front-mounted blade used for exposing mineral soil.

Egress: Escape route.

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.

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.

Extended Attack: means that the fire has burned beyond the area of origin, and beyond the initial attack phase, and additional resources are called. If the fire cannot be confined in the area of origin even with a substantial addition of resources, and a long-term resource commitment and logistical support will be required, then it is considered a major attack or a major fire.

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.

ETOH: the chemical abbreviation for ethanol, or ethyl alcohol, also used to describe someone believed to be intoxicated.

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

Fire Attack: offensive fire plan which involves moving towards and extinguishing the seat of a fire.

Firebreak: 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.

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.

Firehouse: Another term for fire station.

Fire Line: a strip of dirt that is dug around a wildland fire to stop its spread.

Fire Marshal: Administrative and investigative office for fire prevention and arson investigation.

Fire Officer - A person tasked with organizing and directing firefighters. See also company officer and chief officer.

Fire Shelter: A portable aluminized tent offering protection by means of reflecting radiant heat and providing a volume of breathable air in a fire entrapment situation. Carried as a safety tool, fire shelters are only used in life-threatening situations as a last resort, as severe burns and asphyxiation often result.

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.

First Due: Refers to either the first apparatus arriving on the scene of a fire or the area in which a company is expected to be the first to arrive on a fire scene.

First Due Engine is responsible for initial fire attack. Second Due engine lays a line for water supply to the first engine. First due captain is Incident Commander by default.

Flashover: simultaneous ignition of combustible materials in a closed space, as when materials simultaneously reach their fire point; may also result in rollover.

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).

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

Helitack: a crew of aerial firefighters carried to a fire by helicopter. The crew, on the ground, combats the fire with various hand tools and works in tandem with the helicopter that is delivering water or retardant via a bucket or a tank. The crew is trained to use helicopters for initial attack and to support large fires through water drops and the movement of personnel, equipment and supplies.

Helitanker: is a rotor-wing aircraft that can carry fire retardant or water and drop it on or in front of a fire to help slow the fire down.

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.

IAFF: Acronym, "International Association of Fire Fighters".

IAP: Acronym, "Incident Action Plan" A plan consisting of the strategic goals, tactical objectives, and support requirements for the incident. All incidents require an action plan. For simple incidents, the action plan is not usually in written form, while large/complex incidents require the action plan to be documented in writing. When complete, the IAP will have a number of attachments.

IDLH: Any situation deemed Immediately Dangerous to Life and Health.

IFSTA: Acronym, "International Fire Service Training Association". A major publisher of firefighter training materials.

Incident Base: temporary facilities which primary support activities are conducted for emergencies like a wildland fire and is established to house all equipment and personnel support operations.

Incident Commander (or IC): The officer in charge of all activities at an incident. See Incident Command System.

Incident Command System (ICS): A fire operations management system first developed to provide a command structure to manage large wildfires in the United States and now widely used by many emergency management agencies.

Incident Safety Officer: The officer in charge of scene safety at an incident.

Initial Attack: means the first attack on the fire. The number of resources sent on the first dispatch to a wildfire depends upon the location of the fire, the fuels in the area (vegetation, timber, homes, etc.) and current weather conditions. Municipal fire departments would call this the first alarm. Most fires are caught within the first burn period (the first two hours).

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.

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

LACES: A firefighter safety mnemonic for **L**ookouts, **A**wareness or **A**nchor point, **C**ommunications, **E**scape routes, **S**afety zones.

Ladder company: A group of firefighters, officers and engineers that staff a ladder truck.

LODD (line of duty death) The death of a firefighter while on-duty.

Mass casualty incident (MCI): Any incident that produces a large number of injured persons requiring emergency medical treatment and transportation to a medical facility.

Master Stream: (also monitor, deluge gun) A large nozzle, either portable or fixed to a pumper, capable of throwing large amounts of water relatively long distances.

Mayday: Firefighter who has signaled for help or becomes injured, disoriented, or lost during a structural fire. Some firefighters may be equipped with a PASS device which emits a loud tone to aid in locating them in an emergency.

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.

MDC: Mobile data computer.

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.

NIOSH: National Institute for Occupational Safety and Health. A U.S. agency responsible for investigation of workplace deaths, including firefighters.

Nomex: A brand of approved, synthetic, fire-retardant aramid cloth and thread widely used in personal protective equipment for wildland firefighting and jumpsuits.

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, a.k.a. "surround and drown."

OSHA: U.S. government agency concerned with regulating employee safety, particularly in hazardous occupations such as firefighting.

Other sources of water: drafting, shuttling, and using portable tanks.

Overhauling: Late stage in fire-suppression process during which the burned area is carefully examined for remaining sources of heat that may re-ignite 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.

Personal Protective Equipment (PPE): Broad category for all protective equipment e.g., SCBA, turnouts, gloves, helmet.

Personnel Accountability Report ("PAR"): End-result of personnel accountability system.

Probie: (also rookie) new firefighter on employment probation (a period of time during which his or her skills are improved, honed, tested, and evaluated).

Prescribed burn – (Also called a controlled burn, even if it becomes uncontrollable): A fire that is deliberately ignited for the purpose of forest or prairie management, often to remove heavy fuel buildup or simulate natural cycles of fire in an ecosystem.

Primary Search and Secondary Search: Primary search is rapid but thorough and occurs before fire is fully under control. Secondary search occurs after the fire is under control or extinguished and is slower and more thorough.

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.

Recovery: Search for victim remains, usually declared when chances for rescue are no longer viable or probable.

Red-flag day: A type of warning used to alert people that weather conditions are favorable for creating a critical fire hazard and that closures of susceptible areas to non-emergency activities may be required in order to minimize the risk of accidental wildland fires.

RIC (*rapid intervention crew; sometimes "RIT," rapid intervention team*) – team of firefighters posted outside a structural/commercial fire to aid in immediate rescue during a mayday.

Rollover: The ignition of ceiling-level fire gases. Contrast Flashover, above.

Safety zone: An area cleared of flammable material used for escape in the event the line is outflanked or in case a spot fire causes fuels outside the control line to render the line unsafe. Safety zones may also be constructed as integral parts of fuel breaks; they are greatly enlarged areas which can be used with relative safety by firefighters and their equipment in the event of blowup in the vicinity.

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.

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.

Self-Contained Breathing Apparatus (SCBA): Airpack used during firefighting operations.

Shelter deployment: occurs when firefighters need to use their fire shelters for safety from an on-coming fire, as a last resort.

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."

Smokejumper: an aerial firefighter who parachutes into the site of a forest fire.

Standpipe: Water supply typically found in commercial buildings (such as those seen in hotel stairwells). Standpipes can be wet (contain pressured water) or dry (must supply water to the pipe system, usually on the outside of the building).

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).

Surround and Drown – defensive firefighting which focuses on protecting exposures, use of large water discharge nozzles (solid streams) to minimize destruction.

Tanker: In use for a long time to refer to a truck designed solely to transport a large quantity of water.

Ten Standard Firefighting Orders: A set of orders designed to be systematically implemented by wildland firefighters to prevent their being trapped by a wildfire.

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.

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.

Truckie: Person who works on a ladder truck.

U.S.A.R: Urban search and rescue.

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.

Vollie: A volunteer firefighter.

Watch out situations: A list of 18 situations for firefighters to be aware of, which signal potential hazards on the fire line; originated from analysis of generations of similar incidents.

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.

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.

Wildland Urban Interface (WUI): The interface zone where human-made structures intermingle with wildlands, creating the risk of structural involvement in a wildland fire incident and wildland fire involvement in structure fires, each of which requires different equipment, training, strategy and tactics.

Things to Know

Know the Ranks – Chief, captain, lieutenant, engineer (“driver”), firefighter. Within this, know the expectations of paramilitary command structures.

Know the Functions of Companies and Apparatuses

- Engine (a.k.a., “pumper”) – deploys hoseline and engages fire
- Truck (a.k.a, “ladder”) – forcible entry, roof ventilation, search and rescue
- Quint – combination of a pumper and ladder
- Rescue (a.k.a., “squad”) – search and rescue
- Hazmat – responds to situations involving hazardous materials
- Ambulance – medical transport and first aid
- Technical Rescue – specialized rescue situations such as mine shafts, sewers, elevators, water and ice, industrial situations, etc.
- Brush Company – wildland fire control, particularly wildland/urban space interfaces

Know the Work Schedule and Its Impact on Families

- Transitions
- Mandates
- Pressure to accrue overtime for better pay
- Abrupt and unexpected calls to respond to work
- Missing important family milestones or events (e.g., a child’s ballet performance)

Know How Fire Service Interfaces with Other Professionals, Agencies, and the Public

- EMS
- Dispatch
- Law enforcement
- Fire safety, education, and prevention
- Unions
- Volunteer firefighters
- Utility companies
- The media