

Haines Index	<p>S: G: [Eigenname] F:</p> <p>An atmospheric index used to indicate the potential for wildfire growth by measuring the stability and dryness of the air over a fire</p>
hand crew	<p>S: CUADRILIA, BRIGADA CON HERRAMIENTAS MANUALES G: Löschmannschaft, mit Handgeräten ausgestattet F: EQUIPE A OUTILLAGE MANUEL</p> <p>A fire crew, trained and equipped to fight fire with hand tools (cf. Ground Crew)</p>
hand line	<p>S: LINEA DE DEFENSA (FUEGO) ABIERTA CON HERRAMIENTAS MANUALES G: Bekämpfungslinie, von Hand gezogen F: LIGNE DE DEFENSE ETABLIE MANUELLEMENT</p> <p>A fire line constructed with hand tools by a hand crew</p>
hand tools	<p>S: G: Handwerkzeuge F:</p> <p>The principal hand tools used in fire suppression are:</p> <p>(1) Pulaski - A combination chopping and trenching tool, which combines a single-bitted axe- blade with a narrow adze-like trenching blade fitted to a straight handler Useful for grubbing or trenching in duff and matted roots. Well balanced for chopping.</p> <p>(2) Fire Rake (Rich Type) - A long-handled combination rake and cutting tool, the blade of which is made up of a single row of mowing-machine cutter teeth. Useful for trenching, scraping, and cutting, particularly in leaves, pine needles, and light duff (syn. Rich Tool).</p> <p>(3) Fire Shovel - A type of shovel specifically designed for use in constructing a fire line, having a tapered blade with both edges sharpened. Used for scraping, digging, grubbing, and cutting.</p> <p>(4) Fire Swatter / Flapper / Beater - A fire tool that consists of a thick, flat piece of rubber on a long handle used to drag over or smother out flames of grass fires.</p>

	(5) Drip Torch: A hand-held apparatus for igniting prescribed fires and backfires by dripping flaming fuel on the materials to be burned. The device consists of a fuel fount, burner arm, and igniter. Fuel used is generally a mixture of 65-80% diesel and 20-35% gasoline.
hangover fire	See: Holdover Fire
hard suction hose	See: Suction Hose
hazard	See: Fire Hazard
hazard reduction	S: G: Reduzierung des Gefahrenpotentials F: Treatment of living and dead forest fuels to reduce the likelihood of a fire starting, and to lessen its damage potential and resistance to control (cf. Fuel Treatment)
hazardous areas	S: G: Gefahrenbereich F: Those wildland areas where the combination of vegetation, topography, weather, and the threat of fire to life and property create difficult and dangerous problems
hazardous materials (HAZMAT)	S: G: Gefahrgut F: Any waste material that, when improperly handled, can cause substantial harm to human health and safety or to the environment. HAZMAT can take the form of solids, liquids, sludges, or contained gases, and they are generated primarily by chemical production, manufacturing, and other industrial activities. They may cause damage during inadequate storage, transportation, treatment, or disposal operations.
haze	S: NEBLINA, BRUMA

	<p>G: Dunst F: BRUME</p> <p>Suspension aggregation of very fine, widely dispersed, solid or liquid particles in the atmosphere giving the air an opalescent appearance</p>
head	See under Forest Fire
head fire	<p>S: FUEGO A FAVOR DEL VIENTO G: (1) Mitwindfeuer, Lauffeuer. (2) Hangaufwärts laufendes Feuer F: FEU AU VENT</p> <p>(1) Fire front spreading with the wind. (2) Fire front spreading uphill with no wind or against the wind would also be termed a head fire if the angle of the flames, with respect to the unburned fuels, was less than 90 degrees (cf. Flank Fire).</p>
head fire ignition	See under Ignition Pattern
heading fire	See: Headfire
headlamp	<p>S: LAMPARA FRONTAL, LINTERNA DE CASSO G: Helmlampe F: LAMPE FRONTALE</p> <p>A flashlight, ordinarily worn by firefighters on the front of the helmet</p>
heat	<p>S: G: Hitze, Wärme F:</p> <p>Energy that is transferred from one body to another as the result of a difference in temperature</p>
heat low	<p>S: G: F:</p>

	<p>An area of low pressure caused by intense heating of the earth's surface. High surface temperature causes air to expand and rise, resulting in low atmospheric pressure and induces a weak inflow of air at the surface. Air which rises in a heat low is very dry so clouds seldom form. Rising air above a heat low produces a warm upper level high and results in a net outflow of air aloft. Heat lows remain practically stationary over areas which produce them.</p>
heat of combustion	<p>S: CALOR DE COMBUSTION G: Verbrennungswärme F: CHALEUR DE COMBUSTION</p> <p>The heat energy resulting from the complete combustion of a fuel, expressed as the quantity of heat per unit weight of fuel. The high heat of combustion is the potential available, and the low heat of combustion is the high heat of combustion minus several losses that occur in an open system (primarily heat of vaporisation of moisture in the fuel).</p>
heat per unit area	<p>S: G: Freigesetzte Wärme pro Flächeneinheit F:</p> <p>Total amount of heat released per unit area as the flaming front of the fire passes</p>
heat probe	<p>S: DETECTOR DE CALOR G: Wärmedetektor F: DETECTEUR DE CHALEUR</p> <p>An apparatus used to detect heat, e.g., on mopup of fires to determine areas needing further control work</p>
heat release rate	<p>S: VELOCIDAD (TASA) DE DESPRENDIMIENTO DE CALOR G: Freisetzungsrage von Wärme F: CHALEUR SPECIFIQUE, INTENSITE D'EMISSION DE CHALEUR</p> <p>(1) The total amount of heat produced per unit mass of fuel consumed per unit of time. (2) The amount of heat released to the atmosphere from the advancing front combustion stage of a fire per unit of time.</p>

heat transfer	<p>S: TRANSMISION DEL CALOR G: Wärmeübertragung F: TRANSFERT DE CHALEUR</p> <p>The process by which heat is imparted from one body or object to another. In forest fires, heat energy is transmitted from burning to unburned fuels by: (1) Convection - Transfer of heat by the movement of masses of hot air; the natural direction is upwards in the absence of any appreciable wind speed and/or slope. (2) Radiation - Transfer of heat in straight lines from warm surfaces to cooler surroundings. (3) Conduction - Transfer of heat through solid matter. Note: In forest fires, the transmission of heat may also take place by solid mass or ember transport. This is the transfer of heat resulting from firebrands being transported ahead of a fire by the wind, by gravity (e.g. rolling downhill), or being carried aloft in the convection column or by a fire whirl (i.e., spotting)</p>
heat value	<p>S: PODER CALORIFICO, PODER CALORICO G: Brennwert F: ENERGIE DEGAGEE</p> <p>The total heat energy released during combustion, usually published as units of heat energy produced per unit mass of oven-dry fuel consumed</p>
heavy fuel	<p>S: COMBUSTIBLES PESADOS G: Brennmaterial ab Derbholzstärke F: COMBUSTIBLES LOURDS</p> <p>Large diameter woody or deep organic material that is difficult to ignite and burns more slowly than fine or medium fuels (cf. Medium Fuel, Fine Fuel)</p>
heel (of a fire)	<p>See: Rear of a Fire</p>
Heinselmann Classification Scheme	<p>S: G: Feuerregime-Klassifizierung nach Heinselmann F:</p> <p>A system of six classes for organizing fire regimes according to fire frequency and fire intensity</p>

held line	<p>S: G: ["Gehaltene" Feuerfront] F:</p> <p>A fireline that still contains the fire when mopup is completed (excludes lost lines, natural barriers not suppression fired, and unused secondary lines)</p>
helibase	<p>S: HELIPUERTO, BASE DE HELICOPTEROS G: Hubschrauberstützpunkt F: HELI PORT</p> <p>The main location for parking, fuelling, maintenance, and loading of helicopters during a fire incident</p>
helibucket	<p>S: DEPOSITO COLGANTE PARA HELICOPTERO, HELIBALDE G: Aussenlastbehälter für Löschwasser F: CITERNE HELI-PORTABLE</p> <p>Specially designed bucket carried by a helicopter like a sling load and used for aerial delivery of fire suppressants or retardants (syn. Bucket, cf. Water Bucket)</p>
helijump	<p>S: SALTO DESDE HELICOPTERO G: [Freier Absprung aus dem Hubschrauber ohne Fallschirm] F: SAUT A PARTIR D'HELICOPTERE</p> <p>A technique for deploying firefighters from helicopters in locations where helicopters cannot land. The method involves freefall in a protective suit from very low altitude above the ground.</p>
helijumper	See: Helijump
helipond	<p>S: [ESTANQUE PARA CARGAR HELICOPTEROS (HELIBALDES)] G: Wasserentnahmestelle für Hubschrauber F: RESERVE D'EAU POUR HELIORTAGE</p> <p>A body of water smaller than a lake, sometimes artificially formed, as by damming a stream suitable for hover</p>

	filling a helibucket
heliport	<p>S: HELIPUERTO G: Hubschrauberlandeplatz F: HELI PORT</p> <p>A permanent or semi-permanent landing spot for one or more helicopters, accessible by road, where fuel, service, and supply can be made available</p>
helipump	<p>S: [BOMBA PORTATIL PARA HELICOPTERO], MOTOGOMBA HELITRANSPORTADA G: Feuerlöschpumpe für Hubschraubertransport F: POMPE LEGERE HELIPORTABLE</p> <p>A lightweight portable pump unit developed for transport by helicopter</p>
helispot	<p>S: PISTA EVENTUAL PARA HELICOPTERO, HELIPISTA G: Aussenlandeplatz für Hubschrauber F: HELIPORT TEMPORAIRE</p> <p>A simple, natural or improved takeoff and landing area intended for temporary or occasional helicopter use close to a fireline for better access for crews and supplies</p>
helitack	<p>S: UTILIZACION DE HELICOPTEROS, COMBATE CON HELICOPTEROS G: Löschangriff mit Hubschrauber F: ATTAQUE PAR HELICOPTERE</p> <p>Initial attack on wildfires by helicopters and firefighter crews, deployed as a complete unit</p>
helitack crew	<p>S: CUADRILLA HELITRANSPORTADA G: Hubschrauberlöschtrupp F: EQUIPE HELIPORTEE</p> <p>A crew of firefighters specially trained in the tactical and logistical use of helicopters for fire suppression</p>

helitank	<p>S: DEPOSITO DE HELICOPTERO G: Hubschrauberlöschbehälter F: RESERVOIR HELIPORTE</p> <p>Specially designed container, generally fabric or metal, fitted closely to the bottom of a helicopter and used for transporting and dropping suppressants or fire retardants</p>
helitanker	<p>S: HELICOPTERO CON DEPOSITO, HELICOPTERO CISTERNA G: Feuerlöschhubschrauber F: HELICOPTERE AVEC RESERVOIR-CITERNE</p> <p>(1) A helicopter equipped with a helitank; (2) A helicopter-equipped with a fixed container or a suspended bucket-type container that is used for aerial delivery of water or retardants (cf. Airtanker)</p>
helitorch	<p>S: DEPOSITIVO HELITRANSPORTADO PARA PROVOCAR QUEMAS G: Hubschraubergestütztes Entzündungssystem F: TORCHE HELIPORTEE</p> <p>(1) An aerial ignition device hung from or mounted on a helicopter to disperse ignited gelled gasoline. Used for prescribed burning, including backfires and burnouts (cf. Aerial Ignition, Aerial Torch, Aerial Ignition Device, Delayed Aerial Ignition Device, Ping-Pong Ball System)</p>
help line	<p>S: LINEA DE CONTROL G: Bekämpfungslinie (gehaltene) F: LIGNE D'EXTINCTION ACTIVE</p> <p>All the prepared control line that contains the fire until mopping up is completed; excludes lost line, natural barriers not counterfired, and unused secondary lines.</p>
herbaceous fuels	<p>S: G: Brennmaterialien Krautschicht F:</p> <p>Plants, including grasses, or part of plants which contain woody tissue</p>

<p>high drop</p>	<p>S: DESCARGA ALTA, LANZAMIENTO DE ALTITUD G: Hoher Abwurf F: LARGAGE HAUT</p> <p>An air tanker drop made from a higher than normal altitude above the vegetative canopy, ordered for tactical or safety reasons</p>
<p>high pressure fog</p>	<p>S: NIEBLA A ALTA PRESION G: Hochdrucknebel F: BROUILLARD HAUTE PRESSION</p> <p>Small capacity spray jet produced at very high pressures and discharged through a small hose with a gun-type nozzle</p>
<p>high temperature event (HTE)</p>	<p>S: G: Hochtemperaturereignis F: Technical term used in satellite remote sensing to describe active vegetation fires and other hot events at the surface of Earth, such as active volcanoes, coal fires, gas flares, etc. (cf. Hotspot)</p>
<p>High-Resolution Picture Transmission (HRPT)</p>	<p>S: G: High-Resolution Picture Transmission F: Digital images at 1.1 kilometre resolution provided by NOAAs polar-orbiting environmental satellites, containing all five spectral channels and telemetry data transmitted as high-speed digital transmissions. The Advanced Very High Resolution Radiometer (AVHRR) provides the primary imaging system for HRPT</p>
<p>holding forces</p>	<p>S: FUERZAS DE EXTINCION, PERSONAL DE CONTENCIÓN G: Löschkräfte F: FORCES DE RESERVE</p> <p>Resources assigned to do all required fire suppression work following fireline construction but generally not including extensive mopup</p>

holdover fire	<p>S: G: Latent brennendes Feuer; "schlafendes" Feuer F:</p> <p>A fire that remains dormant and undetected for a considerable time after it starts, particularly lightning-caused fires (syn. Hangover Fire, Sleeper Fire, Overwintering Fire)</p>
hose clamp	<p>S: ESTRANGULADOR DE MANGUERA G: Schlauchklemme F:</p> <p>A crimping device for stopping the flow of water in a hose</p>
hose friction	<p>S: G: Druckverlust im Schlauch F:</p> <p>Reduction in efficiency of a fire hose (the amount of water pressure lost) due to the resistance between the inside wall of the hose and the water flowing through the hose. The factors affecting friction loss are the velocity of the water through the hose, the roughness of the inner lining of the hose, and the diameter of the hose.</p>
hose lay	<p>S: TENDIDO DE MANGUERA G: Schlauchleitung F: ETABLISSEMENT A TERRE</p> <p>Arrangement of connected lengths of fire hose and accessories on the ground, beginning at the first pumping unit and ending at the point of water delivery</p>
hose reel	<p>S: G: Schlauchtrommel für Schnellangriffsvorrichtung F:</p> <p>A rotating drum used for winding booster hose (normally) for storing and dispensing</p>

hoseline tee	<p>S: BIFURCACION EN T G: Verteiler F: RACCORD EN T</p> <p>A fitting that may be installed between lengths of hose to provide an independently controlled outlet for a branch line</p>
hot spotting	<p>S: ATAQUE A LOS FOCOS MAS FUERTES, ATAQUE A FOCO CRITICO G: [Proritärer Löschangriff an kritischen Bereichen des Feuers] F: ATTAQUE DE POINTS MENACANTS</p> <p>See under Fire Suppression</p>
hotshot crew	<p>S: CUADRILLA, BRIGADA DE SELECCION G: Waldbrand-Spezialeinheit F: EQUIPE D'ATTAQUE</p> <p>An intensively trained firefighting crew used primarily in hand line construction and for initial attack (cf. Initial Attack)</p>
hotspot	<p>S: (INCENDIO), FOCO MUY FUERTE, FOCO CRITICO G: [(1) Kritischer (besonders intensiver) Bereich eines Feuers; (2) glühender bzw. schwelender Brandherd, der Nachlöschen erforderlich macht; (3) umgangssprachliche Bezeichnung für ein Hochtemperaturereignis]; (4) Krisenregion F: POINT MENACANT</p> <p>(1) A particularly active part of a fire; (2) A small area of smouldering or glowing combustion located on or within the fire perimeter; a term commonly used during the mop-up stage of a fire; (3) Popular term for a High-Temperature Event (HTE) depicted by satellite remote sensingcf. High-Temperature Event); (4) Area or region characterized by critical or dangerous developments, e.g. a region with a high occurrence of destructive fires</p>
hover	<p>S: VUELO ESTACIONARIO G: Schwebeflug (Hubschrauber)</p>

	<p>F: VOL STATIONNAIRE</p> <p>A stationary in-flight condition for helicopters when no directional flight is achieved</p>
hoverfill	<p>S: [LLENADO DE DEPOSITO DE UN HELICOPTERO EN VUELO]</p> <p>G: Wasseraufnahme durch Hubschrauber. (2) Wasserentnahmestelle für Hubschrauber</p> <p>F: REEMPLISSAGE EN VOL STATIONNAIRE, SOURCE POUR REEMPLISSAGE EN VOL STATIONNAIRE</p> <p>(1) The process by which a helicopter fills a helibucket while hovering above the water source. (2) The water source itself</p>
hoverfill tank	<p>S:</p> <p>G: Wasservorratsbehälter für Wasseraufnahme durch Hubschrauber</p> <p>F:</p> <p>Large, portable tank from which helitankers can hoverfill</p>
human-caused fire	<p>S: INCENDIO CAUSADO POR EL HOMBRE</p> <p>G: Waldbrandursache: Mensch</p> <p>F: INCENDIE ANTHROPIQUE</p> <p>Any wildland fire (usually in the context of wildfire causes) caused by human carelessness or malicious use of fire (syn. People-Caused Fire, Person-caused Fire; outdated term: Man-Caused Fire)</p>
human-caused risk	<p>S: FACTOR DE RIESGO DE ORIGEN HUMANO</p> <p>G: Risiko der Waldbrandentstehung durch Menschen</p> <p>F: RISQUE ANTHROPIQUE</p> <p>In the US National Fire Danger Rating System (NFDRS): A number related to the expected number of firebrands originating from human activities which a protection unit will be exposed to during the rating day (cf. National Fire Danger Rating System; Man-Caused Risk, Risk Index)</p>
humidity	<p>S:</p> <p>G: Feuchtigkeit, Luftfeuchtigkeit</p>

	<p>F:</p> <p>The condition of the atmosphere with regard to its water-vapour content</p>
humidity sensor	<p>S:</p> <p>G: Feuchtigkeitsmesser, -sensor</p> <p>F:</p> <p>A device used to measure relative humidity in electronic weather stations (cf. Psychrometer)</p>
humus	<p>S:</p> <p>G: Humus</p> <p>F:</p> <p>Layer (H-Layer) of decomposed organic matter on the forest floor beneath the fermentation layer (F-Layer) and directly above the soil (cf. H-Layer, Litter)</p>
humus-layer (h-layer)	<p>See: Humus</p>
hydrocarbons	<p>S:</p> <p>G: Kohlenwasserstoffe</p> <p>F:</p> <p>Any chemical class of compounds containing only hydrogen and carbon; formed also by combustion of vegetative matter</p>
hydrogen	<p>S:</p> <p>G: Wasserstoff</p> <p>F:</p> <p>Colourless, odourless, inflammable gas, which combines chemically with oxygen to form water; formed also by combustion of vegetative matter</p>
hydrophobicity	<p>S:</p>

	<p>G: Hydrophobie F:</p> <p>Resistance to wetting exhibited by some soils, also called water repellency. The phenomenon may occur naturally or may be fire-induced.</p>
hygrograph	<p>S: G: Hygrograph F:</p> <p>A continuous-recording hygrometer (cf. Hygrometer, Psychrometer)</p>
hygrometer	<p>S: G: Feuchtigkeitsmesser, Hygrometer F:</p> <p>An instrument for measuring the water vapour content of the air (cf. Hygrograph, Psychrometer)</p>
hygrothermograph	<p>S: TERMOHIGROGRAFO, HIGROTERMOGRAFO G: Thermohygrograph F: HYGROTHERMOGRAPHE</p> <p>A recording instrument combining, on one record, the variation of atmospheric temperature and humidity content as a function of time (cf. Thermograph).</p>