

## **APPENDIX A**

### **GLOSSARY OF INVESTIGATIVE AND LEGAL TERMINOLOGY**

**Absorption** - act of soaking up and retaining a gas in liquid or in a solid; also retention of radiant energy.

**Accelerant** - material ( usually a flammable liquid) used to initiate or increase the spread of a fire.

**Accessory** - a person who, even though not actually present, is involved in the perpetration of a crime; one who aids or assists the principal agent in the commission of a crime. In California, an accessory can be charged along with the principal.

**Accusation** - a charge of crime or misconduct.

**Acquit** - to completely clear a criminal defendant of a charge by finding him or her not guilty.

**Actuator** (explosive) - a self-contained power transmitting device designed to convert chemical energy into mechanical force, usually in terms of actuating another device. Removers (retractors), thrusters, dimple motors, etc. Are in this category.

**Admission** - oral or written statement tending too link its maker to involvement in a particular crime.

**Affidavit** - a statement of declaration in writing and affirmed before an official with authority to administer an oath; a statement of declaration alleging fact to support the issuance of a search or arrest warrant

**Air blast** - the violent effect produced in the vicinity of an explosion that consists of a wave of increased atmospheric pressure followed by a wave of decreased atmospheric pressure.

**Alibi** - a criminal defense that places a defendant in a different place at the relevant time concerning an alleged crime, thereby rendering it impossible for him or her to be the guilty party.

**Alligatoring** - char patterns formed on paint or burned wood remains, usually in the shape of blisters.

**Amnesic** - having partial or total loss of memory (adjective of amnesia).

**Anarchist** - one who professes, advocates or believes the doctrines of anarchy, which reject the authority and control of the state in favor of the absolute absence of government and law.

**Anfo** - an abbreviation for a highly explosive mixture of "ammonium nitrate and fuel oil.

**Anti-disturbance** - a device placed into an explosive unit designed to detonate the mechanism by any attempt to jar, tilt or move it.

**Anti-personnel** - an explosive device designed for use against persons rather than property.

**Anti-social** - lacking ethical or moral development

**Anti-withdrawl** - a part of an explosive device designed to cause detonation when removal of any part is attempted.

**Area of origin** - general localized area where a fire originated.

**Armed** - the condition of a device ready to function with all necessary components ready to work.

**Arming delay** - an electrical, chemical or mechanical function or action which provides a timed delay allowing an escape margin when setting or leaving an incendiary device in place.

**Arraignment** - the initial formal act of calling a defendant into court in a criminal case and reading the indictment, charges, information, or complaint against him or her.

**Arrest** - apprehension and detention of a person in order that he or she may be forthcoming to answer for an alleged or suspected crime.

**Arson** - at common law, the malicious and willful burning of another's dwelling, outhouse or parcel; by most modern statutes, the malicious and willful burning of specific types of property, another's or one's own.

**Arson hotline** - telephone line an operation set up for the purpose of receiving information on arson crimes, usually given anonymously.

**Arsonist** - one who commits arson.

**Arson task force** - group of individuals convened to analyze, investigate and solve arson problems in a particular region.

**Assumption** - acceptance of information as true without proof or demonstration.

**False assumption** - acceptance of information as true without proof or demonstration, when it is in fact false.

**Atf** - abbreviation for the u.s. department of the treasury's department of alcohol, tobacco and firearms.

**Attorney** - a legal advisor or counselor trained in the law and licensed by the state to practice it (see lawyer)

**Autism** - self-absorption in subjective mental activity, often marked by abnormal withdrawal into fantasy.

**Automatic aid** - initial response areas of a fire department

**Bailiff** - court officer responsible for maintaining security and order inside the courtroom, as well as privacy in the jury room.

**Ballistics** - the science of the study of projectiles and firearms.

**Interior ballistics** - study within the bore of a weapon.

**Exterior ballistics** - study of projectiles in flight.

**Beyond a reasonable doubt** - highest standard of proof which must be met in order to determine liability. The state must prove guilt beyond a reasonable doubt to a moral certainty in a criminal case.

**Black powder** - a low explosive consisting of a mixture of potassium nitrate or sodium nitrate, sulfur and charcoal, in various proportions.

**Blast effect** - shock wave emitted from point of detonation, creating vacuum and pressure damage.

**Blasting** - use of explosives for destruction.

**Blasting agent** - material or mixture containing a fuel oxidizer, intended for blasting, but not otherwise classified as an explosive, and whose other ingredients are not classified as explosive. Example: anfo.

**Blasting gelatin** - a type of dynamite containing some nitrocellulose or nitro cotton, in addition to nitroglycerin.

**Blasting machine** - a device used by blasters capable of generating enough electricity to detonate specific types and numbers of blasting caps. Also referred to as a "hell box."

**Blast seat** - actual point of detonation of an explosive device. Also called seat of explosion of blast hole.

**Brain syndrome** - typical brain disorder.

**Brisance** - shattering effect of an explosion.

**Building** - any relatively permanent walled and roofed structure standing alone and separate from other structures.

**Burn** - (1) to be on fire; (2) to consume fuel during rapid combustion; (3) a geographical area over which a fire has passed; (4) a fire in progress or under investigation; (5) an injury caused by a fire or its heat in contact with skin.

**Burning** - decomposition of material by the application of heat and oxidation; also applied to propellants and other pyrotechnic mixtures, though the proper term there is "reacting." also often an element of the crime of arson.

**Burning rate** - rate at which a propellant and other combustibles bum.

**Burn pattern** - apparent and obvious design of burned material and the burning path from the area of origin.

**BTU (British Thermal Unit)** - a unit of heat 252 calories; quantity of heat required to raise temperature of water from 62f to 63f.

**Carbonaceous material** - material containing carbon.

**Case** - criminal action or civil lawsuit filed in court.

**Prima facie case** - minimal amount of proof necessary for party bringing action to get case to a jury.

**Catalyst** - promoting agent for a chemical reaction which is not itself consumed or chemically changed in the process.

**Cerebral dysrhythmia** - disturbance in the brain's normal rhythmic pattern.

**Chain of custody** - continuous changes in possession of physical evidence to be used at trial, from the time collected to the time presented in court, which must be established for legal admission into evidence.

**Challenge for cause** - attorney's right to excuse a prospective juror for a legally authorized reason, such as demonstrable prejudice, hardship or disability; usually unlimited in number.

**Peremptory challenge** - attorney's right to excuse a prospective juror without reason or explanation; usually limited in number.

**Char** - carbonaceous material formed by incomplete combustion of an organic material, most commonly wood; remains of burned materials.

**Chronic** - long-enduring.

**Clandestine** - secret; most often used in terms of espionage or sabotage, for an illegal purpose.

**Cognitive** - mental processes of comprehension, judgment, memory and reason, developing into knowledge.

**Combustion** - an exothermic chemical reaction which liberates heat and produces high temperatures and light; the burning process.

**Compound question** - multi-part query requiring more than one answer.

**Compulsion** - an irrational impulse to perform an act, usually against a person's will.

**Conative** - mental or behavioral processes directed toward action or change, expressing endeavor or effort.

## **Conclusion**

**Admissible** - an inference drawn by a witness from observation of certain behavior or action, such as an expert opinion from a qualified expert.

**Inadmissible** - something assumed to have occurred, based on mere belief or speculation of events by a non-expert witness.

**Confession** - an oral or written admission of involvement in a crime.

**Constitutional right** - privilege guaranteed to a person under the u.s. constitution or a state constitution.

**Corpus delicti** - the substance or foundation of a crime, including all of the actions and intention which must be present for example, the corpus delicti of arson is the (1) willful (2) malicious (3) burning of (4) property.

**Court** - place where judge and jury hear and decide cases.

**Court clerk** - court officer responsible of administering witness oaths and keeping accurate records of courtroom proceedings.

**Courthouse** - building in which trials and other hearings are held.

**Court recess** - formally declared break between sessions of courtroom proceedings.

**Court reporter** - court officer responsible for recording and preparing verbatim transcripts of all courtroom proceedings.

**Courtroom** - room in which trials and hearings take place.

**Crazing** - fine cracking of glass, usually from heat of fire.

**Crime** - a positive or negative act in violation of penal law punishable by the state.

**Crime charging** - process by which a prosecutor for the state reviews reports to decide what criminal offenses, if any, to charge in a criminal complaint

**Criminal complaint** - first legal document issued by a prosecutor for the state which accuses a person (s) of having committed a crime (s).

**Criminal conviction** - determination by judge or jury that the accused is guilty of crime beyond a reasonable doubt, followed by a formal sentencing of punishment

**Criminal count** - one specific crime alleged as part of a criminal complaint, information or indictment

**Criminalist** - an expert who scientifically analyzes and interprets physical evidence in a laboratory, and explain~ these discoveries in court

**Criminalistics** - application of scientific procedure to the interpretation of physical events, in order to reconstruct past events, such as those that occur at fire scenes.

**Defendant** - in a criminal case, a person accused in a criminal complaint, information or indictment.

**Defense** – defendant's presentation of evidence and argument to disprove the charges against him or her.

**Alibi defense** - see alibi.

**Defense mechanism** - individual reaction designed to maintain one's feelings of adequacy and self-worth, to avoid stress.

**Deflagration** - (1) chemical decomposition by burning material in which the reaction is less than sonic velocity, for example. Low explosives. (2) a burning with great heat and intense light

**Delay** - an act of causing something to be later than expected or desired, which may be mechanical, chemical or electronic.

**Deliberate in seclusion** - to meet in private, as a jury, isolated from others, to fairly consider and discuss possible verdicts after the presentation of all trial evidence.

**Delusion** - strong belief or concept opposed to reality.

**Demeanor** - appearance and behavior, as for a witness in court.

**Demolition** - act of demolishing or destroying, as with explosive.

**Deny** [an attorney's motion] - judicial decision to refuse a request.

**Depression** - dejected emotional state, characterized by sadness, loss of initiative and diminished self confidence.

**Desensitizer** - any compound or solvent used to reduce the sensitivity of an explosive or incendiary device.

**Detonating cord** - flexible tube containing a core of high explosives. Also called a primer cord.

**Detonation** - an extreme rapid decomposition of a material in which the reaction is more than a sonic velocity, for example, high explosives.

**Detonator** - an explosive train component capable of initiating high order detonation in a subsequent high explosive component.

**Diathesis** - congenital bodily disposition toward a particular disease or abnormality; often hereditary.

**Diminished capacity** - psychological condition characterized by limited ability or lack of ability to form particular intentions or mental states; often raised as a legal defense to crimes requiring a form of specific intent.

**Disarming** - the act or process where armed explosives or incendiary devices are made safe and unable to detonate.

**Discharge** - to release a defendant from involvement in a criminal case

**Discovery** - process by which parties to a case must disclose all relevant information in their possession prior to trial. (see evidence - hidden).

**Dismiss** - to toss out or drop a case filed in court.

**Dismissal** - the discarding of charges and termination of a case filed in court.

**DSM** - abbreviation for diagnostic and statistical manual of mental disorders.

**Dysfunction** - malfunction; abnormal or impaired action of a body part.

**EEG** - abbreviation for electroencephalogram.

**Ego** - one's self, personality.

**Egodystonic** - disharmonious idea, unacceptable to ego.

**Egosystonic** - disharmonious idea, acceptable to ego.

**Electroencephalogram** - recording of brain waves emitted by the cerebral cortex.

**Engine company** - fire company equipped with a pumper.

**Enuresis** - involuntary urination, often characterized by bed-wetting.

## Error

**Harmless** - mistake at a hearing or trial that is not considered to have substantially altered the outcome.

**Prejudicial** - critical mistake at a hearing or trial that is expected to improperly and substantially affect the outcome; often a basis for overturning convictions.

**Etiology** - study of the causes and origins of disease.

## Evidence

**Circumstantial** - testimony or information not based on actual personal knowledge or observation, but dependent on inference of other facts or experience. For example, testimony that defendant's cigarette lighter was found in ashes of a fire.

**Direct** - information that proves existence of a fact by itself. For example, eyewitness testimony.

**Hidden** - items of proof never disclosed by one party prior to trial. See discovery.

**Material** - important information admitted at a hearing or trial that weighs heavily in determining an issue of consequence to the outcome.

**Supporting** - item of proof used to back up expert opinion.

**Examination** - interrogation of a witness at trial

**Broken record examination** - persistent examination of a witness asked to reply to variations of the same question.

**Cross examination** - questioning of a witness in court by the attorney of the party opposed to the one which produced them.

**Direct examination** - questioning of a witness in court by the attorney who produced them.

**Recross examination** - re-questioning of a witness in court following redirect examination, by the attorney of the party opposed to the one who produced them.

**Redirect examination** - re-questioning of a witness in court following cross examination, by the attorney who produced them.

**Exclusionary rule** - judicially established evidentiary guideline which excludes from admission at trial any evidence seized in a manner considered unreasonable under the fourth amendment to the U.S. Constitution.

## **Excused**

**For cause** - to be discharged as a potential juror because of some legal reason. See challenge for cause.

**Peremptorily** - to be discharge as a potential juror because of any reason. See challenge - peremptory .

**Exhibit** - a physical object admitted into evidence in a court proceeding.

**Expert witness** - person who possesses special knowledge or skill in a particular field or area of study.

**Exothermic** (reaction) - marked by or causing the release of heat; of compounds having been formed from the elements with release of heat; heat producing.

**Eyewitness** - person who sees evidence of criminal activity, . Actual commission of a crime or a criminal fleeing a crime scene.

**Fact** - something known to have happened through actual experience or personal observation.

**Felony** - a serious crime generally punishable by at least one or more years in prison.

**Final argument** - stage of a trial where attorneys summarize relative merits of the evidence, and urge judge or jury to find in favor of their client

**Fire** - rapid oxidation, usually with the evolution of heat and light; heat fuel, oxygen and interaction of the three.

**Fire alarm** - call, bell or other device announcing a fire to summon a response.

**Fire bomb** - an incendiary device, usually hand-thrown, designed to break, spill flammable contents, then ignite.

**Fire buff** - one who is a fire enthusiast; one attracted to fires.

**Fire bug** - arsonist, especially a repetitive firesetter.

**Fire building** - building where fire originated or is in progress.

**Fire cause** - agency or circumstance which started a fire or set the stage for its occurrence; source of a fire's ignition.

**Fire chief** - individual of managerial rank in a fire department directly responsible to the department DFS executive officer or governing board.

**Fire company** - basic operational unit of a fire department, including personnel and equipment

**Fire engine** - motor vehicle which carries personnel or equipment to a fire or other emergency.

**Firefighter** - member of a fire department who participates in fighting fires and other emergency operations; entry level rank.

**Firefighting** - activities undertaken and employed to combat and extinguish a fire.

**Firefighting strategy** - technique of locating, confining and extinguishing a fire.

**Firefighting tactics** - art of utilizing personnel and equipment to effectively achieve a fireground objective.

**Fireground** - operational area on which firefighters combat a fire.

**Fire inspector** - fire prevention specialist and/or arson investigator.

**Firesetter** - person who starts a fire, usually deliberately and maliciously.

**Firesetting** - starting a fire, usually deliberately and maliciously.

**Fire suppression** - firefighting acts to control and reduce a fire.

**Fire truck** - see fire engine.

**First alarm assignment** - amount of men and equipment leaving fire department on the first report of a fire.

**First-in** - firefighters initially attacking a fire, usually the first to arrive at the fire scene.

**Fixation** - unreasonable or exaggerated attachment to an earlier point in emotional development

**Flame** - light given off by burning gases during the combustion process.

**Flammable** - easily ignitable and capable of burning and producing flames.

**Flammable liquid** - a liquid generally with a flash point below 140f (soc) and a vapor pressure that does not exceed 40 psi at 100f (37.8c).

**Flash point** - lowest temperature at which the vapor of a combustible liquid can be made to ignite in air.

**Forcible entry** - entering a structure or vehicle illegally by means or physical force, often characterized by prying doors and breaking windows.

**Forensic scientist** - one who practices forensic science; often also referred to as a criminalist.

**Former jeopardy** - a plea by defendant to a criminal charge whereby he or she claims to have already tried for the same offense, thereby making him or her constitutionally protected from a second trial. Also called double jeopardy.

**Foundation** - preliminary groundwork needed to get certain evidence admitted in court

## **Fragmentation**

**Primary** - actual parts or pieces of an exploded bomb or device.

**Secondary** - parts or pieces of material other than the bomb or device itself which are thrown or projected by the blast.

**Fraud** - taking money or property from another by means of trickery, deception or misrepresentation.

**Fuel** - flammable substances available for a fire to consume.

**Gas chromatogram** - chart from a gas chromatograph tracing the results of analysis of volatile compounds by display in recorded peaks.

**Gas chromatograph** - device used to detect and separate small quantities of volatile liquids or gases through instrument analysis.

**Gas chromatography** - characterizing volatilities and chemical properties of compounds which evaporate enough at low temperatures (about 50°C) to provide detectable quantities in the air.

**GC** - abbreviation for gas chromatography.

**Grand jury** - jury, often 16 to 23 in number, designated to investigate suspected crimes and official corruption, with the power to initiate criminal trial proceedings through an indictment

**Grant** (an attorney's motion) - judicial decision to give relief requested.

**Guilty** - to be judged legally responsible for committing a crime..

**Hallucination** - false or distorted sensory perception without existence outside the mind of the perceiver.

**Hearing** - a proceeding held by a judge or magistrate to resolve legal issues or disputes.

**Preliminary hearing** - court proceeding to determine whether or not enough evidence exists for an ordinary person to reasonably believe that a felony offense was committed by the accused defendant in order to justify a trial.

**Probable cause hearing** - court proceeding to determine whether enough evidence exists to justify the issuance of a complaint or the formation of a grand jury investigation into whether a felony offense was committed by an alleged defendant

**Heat** - temperatures higher than that of the normal atmosphere, produced by the process of burning or oxidation.

**Held to answer** - ordered to stand trial as a criminal defendant following a probable cause hearing.

**High order** - a successful and complete detonation of an explosive with the entire consumption or detonation at its maximum rate of the explosive being detonated.

**Hose man** - firefighter assigned to an engine company.

**Hose stream** - stream of water emitted from a nozzle attached to a fire hose to extinguish a fire.

**Hotline** - telephone line and operation set up for the purpose of receiving information, often given anonymously.

**Hygroscopic** - the ability to readily absorb and retain moisture.

**Hypergolic** - a fuel and oxidizer system which will spontaneously ignite upon contact; also any two compounds which will ignite on contact.

**Hypothetical explosive** - an explosive which is made up offhand from available materials, rather than one which is commercially available.

**Igniter** - a pyrotechnic device specifically designed to initiate burning of a fuel mixture or propellant.

**Impaneled** - jurors sworn to serve in a particular trial.

**Implosion** - an inward burst, opposite of explosion.

**Improvised explosive** - an explosive which is made up offhand from available materials, rather than one which is commercially available.

**Impulsive** - acting without thinking, actuated by emotional or involuntary sources.

**Incendiарism** - the destruction of property by fire deliberately set

**Incendiary** - a burning compound or metal used to produce intense heat or flame, like a bomb.

**Incendiary device** - contrivance designed and used to start a fire.

**Inch and a half** – fire hose one and one-half inches in diameter.

**Indicator** - visual remains at a fire scene revealing the fire's progress and action.

**Indictment** - an official charge made before a court, accusing a person of a crime.

**Information** - legal document which accuses a person of having committed a felony, files by a prosecutor on behalf of the state. Often synonymous with complaint.

**Initial response area** - general or specific jurisdictional boundaries for a fire departments first response to an alarm; automatic aid.

**Insanity** - serious mental disorder or derangement impairing one's ability to foresee or appreciate consequences of certain actions or be responsible for one's actions.

**Investigating officer** - investigator selected by the prosecutor in a criminal case to assist with the prosecution during the course of a trial both in and out of the courtroom.

**Jell** - to become gelatinized, as a jelly.

**Joist** - any of the parallel wooden, steel or concrete beam placed to support a floor or ceiling in a structure.

**Judge** - an elected or appointed public official charged with presiding over hearings and trials, handling down judgments, orders and sentences.

**Judgment** - the final legal decision of a court, including sentencing of a defendant in a criminal case.

**Jury** - a group of citizens, usually 12 in number, selected to hear evidence and decide guilt or innocence of an accused defendant in a criminal case.

**Jury foreperson** - juror selected by other jurors to lead deliberations of the jury and sign or present verdicts in the courtroom.

**Jury panelist** - a citizen called to be considered for jury service in a particular trial.

**Lawyer** - a legal advisor and spokesperson trained in the law and licensed to practice it see attorney.

**Legally impermissible remark** - a comment in the courtroom that is legally prohibited during a trial. See error.

**Line** - one or more lengths of connected fire hose.

**Litigant** - a party to a court case.

**Low explosive** - explosive which deflagrate (burn).

**Magistrate** - a public official, usually a judge, charged with presiding over hearings and handling down decisions.

**Malicious** - state of mind consisting of an intent to injure, vex or annoy another, or to knowingly commit an unlawful act. Maliciousness is often an element of arson.

**Mental illness** - generally a disorder that involves brain pathology or severe personality disorganization.

**Misdemeanor** - a less serious crime usually punishable by no more than a year in prison.

**Mistrial** - the termination of a trial prior to its normal conclusion because of irreparable prejudicial error, jury deadlock or some other extraordinary event

**M.O.** - abbreviation for modus operandi.

**Modus operandi** - mode or method of operating or doing things: term used by investigators to describe pattern of behavior exhibited by a perpetrator during the commission of a crime.

**Molotov cocktail** - a breakable container type of flammable device, usually employing a wick, tossed as a fire bomb.

**Morbidity** - associated with disease or death. Also the proportion of disease in a given location.  
**Motion** - a formal request of judge by an attorney for a particular ruling or relief.

**Motion** - a formal request of judge by an attorney for a particular ruling or relief.

**Motion to dismiss** - a formal request of a judge by an attorney to discard and terminate the case against defendant

**Multiple points or origin** - two or more separate points of fire origins at a fire scene; strong indication of arson.

**Munroe effect** - the jetting effect of a shaped charge.

**Mutual aid** - assistance in firefighting or investigation by fire agencies, without regard for jurisdictional boundaries.

**Napalm** - an incendiary mixture with a jelling agent used in flame-throwers and bombs.

**Negative corpus** - establishing the corpus delicti of arson by eliminating all possible accidental, natural and other fire causes.

**Neurotic** - exhibiting an emotional disorder characterized by anxiety or phobia.

**NFPA**. - abbreviation for national fire protection association, a private, non-profit organization in Boston, MA, dedicated to reducing fire hazards and improving fire service.

**Nightmare** - unpleasant dream, fright reaction during sleep, accompanied by a sense of dread.

**Night terror** - acute state of panic during sleep, often extending into consciousness.

**Ninhydrin** - a chemical which reacts to the amino acids in perspiration and is frequently used to develop latent prints on porous surfaces like cardboard and paper.

**Nonflammable** - material unlikely to bum when exposed to flame under most conditions.

**Nozzle** - metallic tubular attachment couple to a hose to increase fluid velocity and create a jet

**Oath** - a formally announced promise to tell the truth.

**Objection** - an attorney's stated opposition to some matter or proceeding in the course of trial, including questions, evidence and motions by the other party.

**Obsession** - compulsive preoccupation with fixed idea or emotion, often excessive in degree.

**Occupant** - a person who lives in, uses, occupies or otherwise possesses an apartment, house or dwelling.

**Opening statement** - outline or summary of nature of case and anticipated proof presented by counsel at the start of trial.

**Overhaul**- fire department procedure of inspecting premises after extinguishment of fire, to insure that fire is completely out and unable to rekindle before returning control to owner or occupants.

**Overrule** (an attorney's motion) - judicial decision to reject a formal request on the basis that it is without merit.

**Oxidation** - process during which oxygen combines with another substance.

**Oxidizer** - the portion of a chemical mixture or compound which furnishes oxygen for burning a fuel or propellant, creating an oxide.

**Paranoid** - relating to, typical of or afflicted with paranoia, a psychosis characterized by the operation of a delusional system of persecution or grandeur in the afflicted individual.

**Partial truth** - a statement of fact which is truth, but is also false in at least one respect.

**Party** - a person, group, organization or body named in a criminal action or civil lawsuit.

**Pathological** - pertaining to a disease.

**Perjury** - the criminal act of making a false statement about a material matter while testifying in court as a sworn witness.

**Petit jury** - ordinary jury of 12 or less persons impaneled to decide facts at issue during a trial.

**Phobia** - an irrational or exaggerated fear.

**Plaintiff** - in a criminal case, the complaining party in a complaint, information or indictment, usually the state.

**Plea** - a defendant's legal response to a criminal charge.

**Plea bargaining** - discussions between the prosecutor and defense counselor defendant to work out a mutually satisfactory disposition of the case, subject to court approval, most often allowing defendant to plead guilty to a lesser charge in exchange for a lighter sentence or fewer charges.

**Plastic explosive** - a pliable, putty-like explosive which can be molded into various shapes. In the military, they are referred to as composition explosives, like c-3, c-4.

**Point of origin** - exact location where a fire started.

**Point of detonation** - actual location where an explosive was detonated.

**Preliminary examination** - hearing concluded by a magistrate to determine whether enough evidence exists for an ordinary person to believe that a felony was committed and that the accused defendant committed it.

**Preview of evidence** - a glimpse of the expected contents of a trial to follow, usually revealed during opening statements.

**Primer** - a cap or tube holding a small amount of explosive for detonating the main explosive charge; a primary initiating device to produce an explosion.

**Primer-detonator** - a combination of a primer and a detonator.

**Probable cause** - the existence of sufficient evidence for an ordinary person to reasonably believe a felony offense was committed by an accused defendant.

**Probation** - a sentence of formal supervision ordered by a court instead of a prison term, where defendant must follow directions of a probation officer.

**Proof of loss** - written, sometimes oral, documentation submitted by an insured to support an insurance claim.

**Propellant** - an explosive substance or mixture of substances which when burned produces gases to provide energy.

**Prosecution** - legal proceedings designed to accuse and try a defendant with having committed a crime; also the party accusing a defendant in a criminal action, usually the state.

**Prosecutor** - a public officer representing the state charging a defendant with a crime.

**Prosocial** - inclined to act within society's ethical and moral standards.

**PSIA** - abbreviation for pounds per square inch absolute.

**Paramedic** - advanced emergency medical staff member, usually in the fire department.

**Psychomotor epilepsy** - state of disturbed consciousness in which actions may be performed, followed by amnesia as to those events.

**Psychopathic** - characterized by mental illness or personality disorder commonly reflecting concern and pursuit of immediate self-gratification, often expressed in aggressive anti-social behavior.

**Psychosis** - sever personality disorder characterized by loss of contact with reality, delusions and hallucinations.

**Public defender** - an attorney appointed by the court to represent a criminal defendant who is financially unable to hire his or her own attorney.

**Pumper** - piece of firefighting equipment used for water discharge.

**Pyro** - abbreviated, slightly derogatory term for a pyromaniac.

**Pyromania** - a psychiatric disorder marked by the uncontrollable urge to set fires.

**Pyrotechnic** - mixture of chemicals designed to produce heat, light, gas, smoke or noise.

**Qualification sheet** - written resume of an expert witness used to show that expert's sufficient special expertise in the field.

**Rebuttal** - at trial, one party's effort to present opposing evidence or arguments after adverse party's presentation.

**Recidivistic** - tending to relapse into previous behavioral patterns, usually criminal in-nature.

**Rest** - to finish the presentation of evidence for a party at a hearing or trial.

**Retrial** - a new trial of a case after an earlier mistrial or overturned conviction.

**Rico** - acronym for the racketeer influenced and corrupt organizations statute.

**Rights waiver** - the voluntary relinquishment of one or more known legal rights.

**Run card**- card listing equipment scheduled to respond to a particular fire, used by fire department dispatchers.

**Salvage company** - fire company equipped to carry out salvage operations protecting property.

**Schizophrenia** - psychosis characterized by a breakdown of an integrated personality and withdrawal from reality.

**Search warrant** - a written order in the name of the state, signed by a magistrate, commanding a peace officer to search for and seize any property that constitutes evidence of the commission of a particular crime.

**Self-immolation** - killing oneself as a sacrificial victim of fire.

**Sensorium** - part of the brain that receives and correlates impressions transmitted to the various sensory areas; the sensory system.

**Sentence** - punishment for a crime, ordered by a judge.

**Shock wave** - the leading edge of an expanding air mass.

**Smoke** - small particles of carbon, tarry and water vapor resulting from the incomplete combustion of carbonaceous materials such as wood, coal or oil.

**Sociopathic** - characterized by inability to adopt prevailing norms of society or to take society into account before acting; persistent asocial or anti-social behavior.

**Spalling** - explosive pitting or chipping destruction of a surface, like concrete, caused by intense heat buildup after the activation of an accelerant.

**Splash pattern** - characterized pattern left on a wall by an accelerant splashed there, usually in the shape of an inverted "v."

**Spontaneous combustion** - combustion of a thermally isolated material initiated by an internal chemical or biological reaction producing enough heat to cause ignition.

**Squad company** - small unit on a pickup truck-like chassis, usually for emergency paramedic and additional manpower and equipment response demand.

**Squibb** - used as a general term to mean any of various small size pyrotechnic or explosive cartridges.

**Statute** - an act of the state or federal legislature declaring, commanding or prohibiting something to be added to existing law.

**Stenographic record of court proceedings** - mechanically imprinted paper with a verbatim account of court proceedings, which is later transferred into typewritten form.

**Structure** - a constructed object, usually a free-standing building above ground.

**Subpoena** - the legal document that orders a person to appear in court as a witness.

**Subpoena duces-tecum** - orders person to bring certain records and/or documents to court.

**Suicidal** - prone to intentionally take one's own life; tending towards suicide.

**Surrebuttal** - at trial, one party's reply to the adverse party's rebuttal.

**Sustain** (an attorney's motion) - judicial decision to support an objection and give it effect.

**Systemic disease** - illness affecting the body as a whole.

**Target hazard** - facilities in which there is great likelihood of loss of life or property.

**Task force** - group of individuals convened to analyze, investigate and solve a particular problem.

**Temperature coefficient** - the relative change of some measurable quantity with change of Temperature, like burning time per unit length, mostly expressed as mean change per degree in percentage of mean temperature within a certain range.

**Temporal lobe syndrome** - typical disorder of the temporal lobe portion of the cerebrum.

**Testify** - to give testimony as a sworn witness in court

**Testimony** - words spoken under oath by a witness on the stand at a hearing or in court.

**Thennite** - an incendiary filler consisting of three parts iron oxide and two parts aluminum powder which produces a very high temperature.

**Thennate** - an incendiary filler consisting of thermite and other additives, often including magnesium, which creates an even higher temperature than thermite alone.

**Torch** - to set fire to property deliberately and maliciously. Also used as a noun to describe a professional firesetter-for-hire.

**Trailer** - combustible material, such as rolled rag, blankets and newspapers, or flammable liquid, used to spread fire from one area to others; usually used in conjunction with an incendiary device.

**Transcript** - a written, verbatim account of all oral proceedings in court.

## **Trial**

**Court trial** - hearing held by a judge to determine guilt or innocence of an accused defendant.

**Criminal trial** - court proceeding in which an accused defendant's guilt or innocence is determined by a judge or a jury.

**Jury trial** - a hearing held before a jury to determine guilt or innocence of an accused defendant.

**Civil trial** - a hearing conducted by a district court.

**Truck company** - motorized piece of firefighting equipment with a full complement of ladders and personnel.

**Truckman** - firefighter assigned to a truck company.

**Try the cause** - to determine the outcome of a court case through the formal presentation of evidence by opposing parties at trial.

**Unconsciousness** - psychological state characterized by lack of awareness and loss of capacity for sensory perception.

**USFA** - abbreviation for united states fire administration, a public agency in Washington, DC, dedicated to reducing fire hazards and improving fire service.

**Vegetation fire** - a fire in grass, brush, trees, grain or other plant life; wildfire.

**Vent** - the release of enclosed smoke and heat from a structure by creating openings in it, as by hacking a hole in the roof, to allow free passage of air.

**Venue** - geographical area where a court has jurisdiction over judicial proceedings.

**Verdict** - a judge or jury's legal findings and formal decision after a trial.

**Properly delivered verdict** - a correctly signed and dated verdict form listing the jury's finding, given to the bailiff by the jury foreperson at judge's direction.

**Viscosity** - thickness of a liquid, the degree to which it resists flow.

**Voir dire** - preliminary examinations of prospective jurors in the jury selection phase of a trial, in order for each party's attorney to try to determine each person's potential suitability as an actual juror at trial.

**Volatile** - readily changeable into vapor at low temperatures.

**"v" pattern** - characteristics fire cone-shaped pattern left by a fire on a wall, at or near its point of origin.

**Wildfire** - a fire in grass, brush or timberland burning out of control.

**Wildland fire** - see wildfire.

**Willful** - voluntary, intentional exercise of will, often characterizes an action done deliberately in order to bring about a desired consequence. Also usually an element of arson.

**witness** - a person who testifies in court after taking an oath.

**Expert witness** - person qualified to testify to matters requiring special expertise and skill.

**Lay witness** - person who testifies about matters requiring no special expertise.

**Material witness** - person whose testimony has significant impact on a final decision in the case, like an eyewitness.

**Witness chair** - the seat on the witness stand where witnesses sit while testifying.

**Witness stand** - the place occupied by witnesses while testifying in a courtroom.