

GLOSSARY

- Action:** The heart of any firearm. It consists of the receiver, bolt or breech block, feed and firing and unloading mechanisms.
- Bearing Surface:** That part of the outside surface of a bullet which comes in contact with the rifling as it passes through the barrel.
- Bolt Face:** That portion of a rifle's bolt which engages the cartridge case head and from which the firing pin protrudes when the rifle is fired.
- Bore:** The interior of the barrel of a firearm.
- Breech Face:** In revolvers, the area of the frame which supports the cartridge case head and through which the firing pin protrudes when the revolver is fired.
- Breech Face Impressions:** When a cartridge is fired, the burning gases exert pressures that force the base of the cartridge back against the bolt or breech face. When this occurs, the tool marks that are present on the bolt or breech face are imprinted on the flat areas of the contacting surfaces of the primer and cartridge case base.
- Bullet:** That part of a cartridge intended to be fired from the barrel of a firearm. It is usually composed of lead, plated lead or lead encased in a metal jacket.
- Cannelure:** A knurled or plain ring around the bearing surface of a bullet, used to hold surface lubricant, retain the bullet in the cartridge case or identify the type or weight of bullet. Cannelures may also be found on cartridge cases.
- Cartridge:** A complete assembly of a round of ammunition consisting of the case, primer, propellant powder, and bullet.
- Cartridge Case:** That part of a cartridge which holds the bullet, primer, and propellant powder together.
- Cartridge Clip:** A device for holding a number of cartridges to permit their easy insertion into a magazine. The Mannlicher-Carcano clip remains in the magazine until after the last cartridge is fed into the chamber, at which time it is designed to fall through the bottom opening of the magazine.
- Chamber:** In a rifle, the rear portion of the barrel, designed to hold and support a cartridge. In a revolver, it is also the recess cut into the cylinder to hold each cartridge.
- Chambering:** The manual or mechanical process of feeding a cartridge into the chamber of a firearm.
- Comparison Microscope:** A scientific instrument designed to allow the similarity, or dissimilarity, of individual identifying characteristics of two bullets or two cartridge cases to be observed at the same time.
- Cylinder:** A rotating cartridge container in a revolver.
- Double Action:** The mode of firing a revolver in which the hammer of the firearm is cocked and released by a single pull of the trigger.
- Eject:** The act of throwing the expended cartridge case clear of the action during the firing process.
- Emission Spectrography:** Allows the metallic composition of samples to be compared so that the possibility of common origin can be determined. This is done by subjecting the material to intense heat and comparing the color of gases emitted.
- Extract:** The process of withdrawing an expended cartridge case or unfired cartridge from the chamber of a firearm, either by mechanical or manual means.
- Firearms Identification:** A study of firearms, bullets, cartridge cases and other ammunition components with the purpose of identifying those ammunition components as having been fired from, or in, a particular firearm to the exclusion of all other firearms.
- Firing Pin:** That part of a firing mechanism which strikes the primer.
- Firing Pin Impression:** The indentation caused by the firing pin striking the primer of the cartridge case.
- Gas Erosion:** The wear caused by the action of the hot propellant powder gases on the bearing surface of a bullet.

- Grooves*: The depressed areas between the lands of a rifled barrel.
- Horizontal Cotton Recovery Box*: A box, filled with cotton material, designed to recover fired bullets in an undamaged condition.
- Horizontal Water Recovery Tank*: A metal, water-filled tank designed to recover fired bullets in an undamaged condition.
- Individual Identifying Characteristics*: Unique reproducible microscopic marks which can be used to identify a fired bullet or expended cartridge case with a particular firearm.
- Lands*: The raised areas between the grooves of a rifled barrel.
- Loading Ramp*: A device that aids in guiding a cartridge into the chamber of a firearm.
- Magazine*: A device, either separate or integral to the firearm, in which cartridges are held in position to be fed into the chamber of the firearm.
- Magazine Follower*: (In footnotes).
- Microscopic Examination*: An examination of evidence which is enhanced by the use of scientific instruments.
- Muzzle*: The forward end of the barrel where the bullet exits.
- Neutron Activation Analysis*: A method of nuclear elemental analysis in which samples are irradiated to make their various elements detectable by radioactive measurement. The elemental composition of the activated samples is then compared to determine the probability of common origin.
- Photomicrograph*: Photograph taken through a microscope.
- Primer*: The ignition part of a cartridge.
- Rechambering*: The process of altering the dimensions of a chamber to accommodate other cartridges.
- Recrowning*: The process of restoring the rounded contour to the muzzle after the barrel has been shortened.
- Reset*: (See footnotes).
- Rifling*: The spiral lands and grooves in a barrel which impart spin or rotation to the bullet stabilizing it in flight.
- Rifling Class Characteristics*: The number, width and direction of twist of the lands and grooves in a barrel.
- Sear Mechanism*: The part or device designed to hold the firing mechanism in a cocked position until released by pressure on the trigger.
- Secondary Missiles*: Objects put in motion due to the impact of a bullet.
- Single Action*: The mode of firing a revolver that requires that the hammer be manually cocked before it can be fired.
- Spectrographic Analysis*: See "Emission Spectrography".
- Striations*: Minute grooves, ridges or scratches normally running parallel with each other that are caused by an abrasive action.
- Tool Mark*: Characteristics of a surface imparted to a softer surface when they come in contact under pressure and motion. Tool marks may be impressed or engraved.
- Trigger Pull*: The amount of force, expressed in pounds, required to release the firing mechanism.
- Twist*: The spiral direction of lands and grooves in a rifled bore, expressed as right or left.
- Visual Examination*: Examination of evidence without the assistance of a scientific instrument; also referred to as macroscopic examination.
- Wiping*: The removal of some of the fine microscopic scratches on a bullet, particularly the lead variety, as it enters and passes through fabric, heavy tissue and muscle.