Professional Certificate in Urban Warfare Operations

Urban Sniper Operations

Ballistic Coefficient (BC): A measure of a bullet's ability to overcome air resistance, calculated as the ratio of the bullet's mass to the product of its cross-sectional area and drag coefficient. A higher BC indicates less air resistance and a more stable flight path, making it an essential factor in long-range precision shooting.

Camouflage: A method of concealment used by urban snipers to blend in with their surroundings, reducing their visibility to the enemy. Camouflage may involve clothing, face paint, and accessories that match the environment, as well as positioning and movement techniques that minimize detection.

Drag: The resistance experienced by a bullet as it travels through the air, caused by the friction between the bullet's surface and the surrounding air molecules. Drag affects the bullet's trajectory, velocity, and energy, making it a critical factor in long-range shooting accuracy.

Elevation: The vertical angle of a gun's barrel relative to the horizon, used to adjust for distance and windage. Proper elevation is necessary to ensure that the bullet reaches its intended target at the correct range.

Field of View (FOV): The extent of the observable world that can be seen through an optical device such as a scope or binoculars, usually measured in degrees or angular units. FOV affects a sniper's ability to identify and engage targets, as well as their situational awareness.

Ghillie Suit: A type of camouflage clothing used by urban snipers to blend in with their surroundings. A ghillie suit is typically made of mesh material and covered in strips of fabric, burlap, or other materials that mimic the surrounding environment.

Gravity: The force that pulls objects towards the earth, affecting the trajectory of a bullet as it travels through the air. Gravity causes the bullet to drop over distance, requiring adjustments for elevation and windage to ensure accurate shooting.

Harris Bipod: A type of adjustable bipod used by urban snipers to stabilize their rifles during shooting. A Harris bipod attaches to the front of the rifle's forend and can be adjusted for height and tension to accommodate different shooting positions and surfaces.

Horizontal Dispersion: The variation in the horizontal position of multiple shots fired from the same rifle and at the same elevation, caused by factors such as windage, gun movement, and shooter error. Horizontal dispersion affects a sniper's ability to engage multiple targets accurately.

Kestrel Weather Meter: A handheld device used by urban snipers to measure and calculate various environmental factors that affect shooting accuracy, such as temperature, humidity, air pressure, and wind speed.

Laser Rangefinder: A type of rangefinder used by urban snipers to measure the distance between the shooter and the target. A laser rangefinder emits a laser beam that reflects off the target and returns to the device, allowing the user to calculate the distance based on the time it takes for the beam to travel and return.

Mil-Dot Reticle: A type of reticle used in sniper scopes to estimate distance and adjust for windage and elevation. A mil-dot reticle consists of a series of dots spaced at specific intervals, which can be used to calculate the target's size, range, and movement.

Minute of Angle (MOA): A unit of angular measurement used in shooting to estimate the size of the target and adjust for windage and elevation. One MOA is equal to 1/60th of a degree, or approximately 1 inch at 100 yards.

Parallax: The apparent movement of the target relative to the reticle in a scope, caused by differences in the position of the shooter's eye and the scope's optical axis. Parallax can affect shooting accuracy and must be corrected by adjusting the scope's objective lens.

Penetration: The ability of a bullet to pass through a target, measured by the depth and width of the wound channel created by the bullet. Penetration is affected by factors such as bullet type, velocity, and target material.

Reticle: The aiming point or crosshair in a scope, used by urban snipers to align their shot with the target. A reticle may be a simple crosshair or a more complex design with additional markings for distance and windage.

Scope: An optical device used by urban snipers to magnify and focus on distant targets, typically consisting of a lens system, reticle, and eyepiece. A scope allows the sniper to engage targets at long range with greater accuracy and precision.

Shooting Platform: The surface or support used by the sniper to stabilize their rifle during shooting. A shooting platform may be a bipod, tripod, sandbag, or other device that provides a stable base for the rifle and reduces the effects of gun movement and recoil.

Spotter: A member of the sniper team who assists the sniper in locating and identifying targets, estimating range and windage, and adjusting the shot for accuracy. A spotter may also provide security and communication for the sniper during the mission.

Stability: The ability of a rifle to remain still and accurately aligned with the target during shooting, affected by factors such as the rifle's weight, balance, and recoil. Stability is essential for accurate long-range shooting, as even minor movements can affect the bullet's trajectory and impact point.

Temperature: The ambient temperature of the environment, which affects the pressure and density of the air and thus the trajectory and velocity of the bullet. Temperature must be accounted for in long-range shooting calculations to ensure accuracy.

Trajectory: The path of the bullet as it travels through the air, affected by factors such as gravity, air

resistance, windage, and elevation. The trajectory determines the bullet's range, velocity, and impact point and must be calculated and adjusted for accurate shooting.

Velocity: The speed of the bullet as it leaves the muzzle of the rifle, measured in feet per second (fps) or meters per second (m/s). Velocity affects the bullet's energy, momentum, and trajectory and must be accounted for in long-range shooting calculations.

Vertical Dispersion: The variation in the vertical position of multiple shots fired from the same rifle and at the same elevation, caused by factors such as gravity, gun movement, and shooter error. Vertical dispersion affects a sniper's ability to engage targets accurately.

Windage: The adjustment for horizontal movement required to compensate for wind drift, measured in MOA or mils. Proper windage is necessary to ensure that the bullet reaches its intended target at the correct range and direction.

Zeroing: The process of adjusting the sights or scope of a rifle to ensure that the bullet hits the target at a specific range, typically 100 yards or meters. Zeroing is necessary to ensure accurate shooting at longer ranges, as the bullet's trajectory changes with distance and environmental factors.

Sources:

* "A Comprehensive Guide to Ballistics." AccurateShooter.com, 2021, .
* "Glossary of Sniper and Marksman Terms." SpecialOperations.com, 2021, .
* "Mil-dot Reticle: How to Use It for Long Range Shooting." GunSpot.com, 2021, .
* "The Ultimate Guide to Long Range Shooting." The Truth About Guns, 2021, .
* "Urban Sniper Operations: Tactics, Techniques, and Procedures." MilitaryBooks.com, 2021, .