Training the Human Weapons’ Platform: The Squat
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The most important weapon in our nation’s arsenal is the human weapon. Viewing the tactical athlete as a weapons platform requires the need to strengthening this platform and will help keep the weapons system functioning effectively and sustain its capabilities for an extended period of time. The tactical athlete needs to strengthen both stationary and dynamically during movement. The weapons platform needs to maintain both strength and mobility. One method used to achieve this goal is by introducing the squat into the tactical athlete’s strength and conditioning program.

The squat is a widely used exercise that involves a powerful movement (1, 3). A common goal is to achieve both muscle size and strength (1, 3). There are many types of squatting movements. Along with these variations come different methodologies and applications.

Back Squat
The back squat is one of the most common squat methods used to develop the lower body (1). The muscles emphasized in this exercise are the quadriceps, hamstrings, and gluteals. The back squat is more gluteal/hamstring dominant. It is performed by placing the barbell on the back of the shoulders and across the shoulder blades. The tactical athlete assumes a Universal Athletic Stance with feet parallel and hips width apart. However, the toe of the rear foot is in line with the instep of the forward foot. The tactical athlete begins by extending the knees and pushing through the heels of the feet in an upward direction. Once in the standing position, the tactical athlete then returns to the starting position by lowering the body by pushing the hips back and flexing at the knees until the desired depth is reached, completing one full repetition.

Bottom Squat
The bottom squat can be performed in either the back squat or front squat position. The difference is in the positioning of the feet. The tactical athlete assumes the Universal Athletic Stance with feet parallel and hips width apart. The tactical athlete begins by lowering the body by pushing the hips back and flexing at the knees until the desired depth is reached. Once the desired depth is achieved, the tactical athlete then returns to the starting position, completing one full repetition.

Front Squat
The front squat is another common squat method used to develop the lower body. The muscles emphasized in this exercise are the quadriceps, hamstrings, and gluteals. The front squat is more quadriceps dominant. It is performed by placing the barbell on the front of the shoulders across the deltoid muscles. The tactical athlete assumes a Universal Athletic Stance with feet hips width apart. The tactical athlete begins by lowering the body by pushing the hips back and flexing at the knees until the desired depth is reached. Once the desired depth is achieved, the tactical athlete then returns to the starting position, completing one full repetition.

Staggered Squat
The staggered squat can be performed in either the back squat or front squat position. The difference is in the positioning of the feet. The tactical athlete assumes the Universal Athletic Stance with feet parallel and hips width apart. However, the toe of the rear foot is in line with the instep of the forward foot. The tactical athlete begins by lowering the body by pushing the hips back and flexing at the knees until the desired depth is reached. Once the desired depth is achieved, the tactical athlete then returns to the starting position, completing one full repetition.

Time Under Tension (TUT)
The TUT method is used to increase the amount of time it takes to perform each repetition thus eliciting a higher blood lactate level (3). This method can be applied to any of the above exercises however; it is considered an advanced method and should only be employed by experienced lifters.

Speed of Movement
Both speed and strength are two of the most desirable physical qualities in athletics. Most often these are trained separately however they are related (2). The tempo that is prescribed should reflect the desired outcome of the exercise. When absolute strength is desired, a longer elapsed time is needed. When explosiveness is the desired outcome, a shorter elapsed time is needed. However the most important outcome we are looking for in the tactical athlete is the Rate of Force Development (RFD). It is possible for someone to have high levels of strength but not be able to generate force quickly. Many programs that use RFD typically have the athletes move through the movement as fast as they can. The issue with this type of instruction is that the muscles spend a larger portion of the time decelerating the load (2). Controlling the speed is the...
key element with this methodology. As with TUT, this is a more advanced training method and the athlete should attain high levels of maximum strength before implementing.

References
