

## Armed Security Training-Low Light Shooting



[Armed Security Training-Low Light Shooting](#). While an individual may be a very proficient marksman in the daylight hours, when there is little to no light present many things change. The FBI's Uniform Crime Report shows that the worst time for officers to encounter violence is between 8pm and 2am. This being said, the student must be able to be an accurate and effective shooter in these low-light situations. If the student is unprepared, he/she could be putting himself/herself and/or others in harm's way (heightened safety awareness is a must in low-light).

### IDENTIFICATION

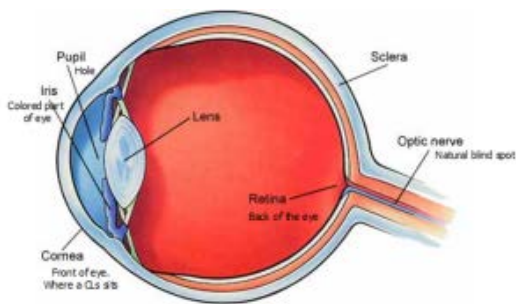
The **MOST IMPORTANT** requirement that comes along with nighttime or low-light shooting remains the same. This requirement is IDENTIFICATION; one must always identify their target without doubt and know exactly what is in the foreground and background of the threat. The student should also be aware that it is easy to get caught up looking at shadows, and if there is ever ANY doubt regarding identification, the student should **NOT** engage the target.

## TRAINING FOR LOW-LIGHT SHOOTING

It is very important for the student to know that shooting in daylight conditions is great for getting a grasp of the [fundamentals of marksmanship](#). The student should understand that these same fundamentals are directly transferable to low-light scenarios. However, while the fundamentals stay the same, many variables are introduced into low-light situations (correct use of flashlights, using night sights, changes in your vision...). It is also important that the student understand that low light simulators such as goggles and welders masks are largely ineffective and do not represent real Armed Security Training-Low Light Shooting.

## HUMAN VISION

To better understand how to shoot at night (or in low-light); one must understand at least the basics of how the eye works. The eyes are made up of two classes of photo sensors which are rods and cones which are located in the retina.



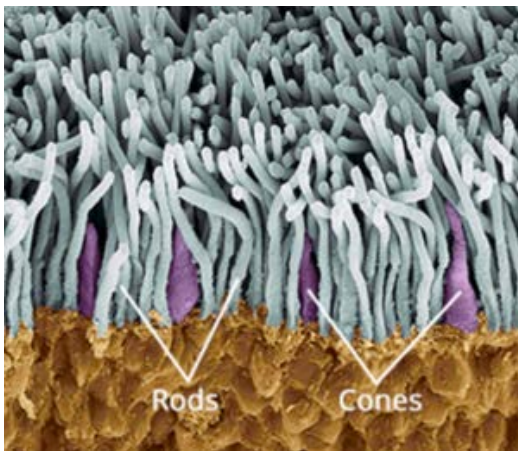
Rods and Cones are located in the eye's retina

## CONES

In the light of day our vision is facilitated by cones. These are spread throughout the retina but are mostly concentrated in the fovea. The cones in our eyes allow us to see colors, as well as black and white. They also help us to distinguish fine details and give us the ability to perceive depth. The cones also allow us to maintain accurate focus on our targets and be able to track moving threats.

## **RODS**

As for rods, they aid us in our ability to see in low light. For the most part rods are for nighttime and diminished light use and unlike cones the fovea lacks rods. There are some limitations that must be overcome in low-light due to how rods work. Rods only pick up black and white, depth perception will be very limited, and fine detail will be almost non-existent. Also, it takes time for our rods to adjust before we can utilize them effectively. Just to adapt to the darkness takes from 7-10 minutes, and 20-30 minutes to be used efficiently.



## **UNAIDED SHOOTING TECHNIQUES**

Fortunately in most situations ambient light be enough that a flashlight will not be necessary. Being that most dangerous situations develop very quickly, there is a good chance that the student will not have enough time to safely deploy a flashlight. This is supported by the fact that in 71% of officer killed incidents, the distance between the victim and offender was less than 10 feet (often within 2 feet).

## **DAYTIME PRACTICE**

As mentioned previously, the fundamentals can and should be engrained during daylight training. This should prepare the student for nighttime shooting by

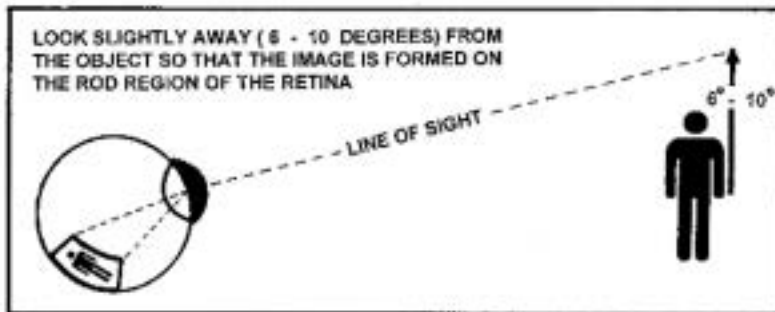
creating muscle memory and giving the student the confidence they need in their shooting ability.

## **SILHOUETTE THE SIGHT**

If ambient light is available, line your sight up in a better lit area. Then slide your firearm horizontally keeping the sight as still as possible onto the threat. This will allow one to use available light to get their sights aligned without necessarily being able to see the sights as clearly as one would like.

## **OFF CENTER VISION AND SCANNING**

Now that the basics about rods are understood, it is known that the fovea lacks rods. Because of this, it is much easier to see and identify threats if you look just to the side of it. To use your rods to best of their capability you should look away from the object or threat you are trying to view slightly, about 6-10 degrees. This will allow the image to be formed in the rod region of the retina.



## **SHOOTING AIDS**

### **Laser Sights**

There is no doubting that a laser can be effective. There are many advantages that may make a laser device appealing to many. It is also important to note that there are disadvantages associated with using a laser device as well.



### **Positive attributes of using a laser device are:**

1. They allow for more accuracy in difficult positions (especially positions where one cannot pick up their sights)
2. They can be used as training aids in dry fire practice
3. Could potentially allow for faster target acquisition at longer distances

### **Disadvantages of using a laser device**

1. Potentially slower target acquisition than using regular sights
2. They can give away position
3. In daylight they become very hard to see
4. Can cause the user to become overly reliant on the laser
5. Decrease peripheral vision as they draw focus to the dot
6. If more than one person is using a laser device it can create confusion

### **Night Sights**

Just like with laser devices and many other firearms and gear there are advantages and disadvantages to everything. With night sights it is no different. While having a set of sights that light up at night provide quick and easy acquisition, they also may give off enough light to give away the users position, or cause vision passed the sights to be limited.





## **Flashlights**

The flashlight's main function is illumination. This includes illumination for movement, navigation, and searching, as well as for identification and engagement of a threat. Flashlights have many more uses as well and one should know how to use one to their tactical advantage. If used improperly a flashlight can give up ones position putting them in great danger.

Note: Always bring on-duty flashlight to the range

### **Tactical Advantages to Using a Flashlight:**

1. Increases one's ability to identify target, threat, and background
2. Temporarily affect a threat's vision
3. Allows the user to control the light in the room

### **Tactical Disadvantages to Using a Flashlight**

1. Use can be limited in tight places
2. If pointed toward a white wall or mirror one can temporarily blind themselves
3. May give position away

There are many more advantages and disadvantages, however it is important to note that correct use of a light can be a life saver. To be efficient one must train on proper use.

### **Flashlight Techniques**

There are many different techniques that can be employed when using a flashlight during Armed Security Training-Low Light Shooting. It is important to note once again that each has its own tactical advantages and disadvantages.

**FBI**



**Harries**



**Side by side**



**Palm squeeze**





5. Reloading and malfunction clearing (light is turned **“OFF”** for the following)
  1. Under the armpit
  2. Inside the waistband
  3. Behind the support knee

**There are many more ways to use and hold a flashlight these are just some examples**

Another thing to consider is a weapon mounted light. These are nice to have giving an individual the same illuminating power while allowing them to use both hands for positive control on the firearm. A downside is that one may be pointing their firearm at something they do not intend to destroy.