



Handgun Upgrade



Purpose

To explore various options to replace the department's current duty weapon to a weapon that offers the option to run a pistol mounted red dot optic and in doing so switch from .45ACP to 9mm.

To complete this objective, the firearms cadre obtained 2 Sig P320 handguns for a trial period of 45 days to acclimate the firearms cadre with the weapon platform to better evaluate the vast differences between platforms. After this testing period the cadre decided on the Glock 45.

Why 9mm?

Since 2007 several companies have dramatically increased the terminal effectiveness of many premium line law enforcement projectiles. 9mm Luger options now offers select projectiles which are, under identical testing conditions, outperforming most of the premium line .40 S&W and .45 Auto projectiles tested by the FBI.

Shot placement is paramount and law enforcement officers on average strike an adversary with only 20 – 30 percent of the shots fired during a shooting incident. 9mm Luger options offers higher magazine capacities, less recoil, lower cost (both in ammunition and wear on the weapons) and higher functional reliability rates. The majority of FBI shooters are both FASTER in shot strings fired and more ACCURATE with shooting a 9mm Luger.

Why 9mm? (cont.)

In terms of damage sustained there is little to no noticeable difference in the wound tracks between premium line law Auto enforcement projectiles from 9mm Luger through the .45 Auto. Due to the elastic nature of most human tissue and the low velocity of handgun projectiles relative to rifle projectiles, it has long been established by medical professionals, experienced in evaluating gunshot wounds, that the damage along a wound path visible at autopsy or during surgery cannot be distinguished between the common handgun calibers used in law enforcement.

Optics v. Iron Sights

Simplicity - Iron sights rely on your ability to line up all components for maximum precision. Pistol mounted optics give you the aiming point up front. This allows for your focus on your shot instead of lining everything up to take the shot. A red dot makes acquiring and tracking your target much easier than just using iron sights.

Accuracy - Another thing about iron sights is that you need to be aware of your focal plane when using them. With red dot optics, you don't. This eliminates human error from manual sighting that can impact accuracy, and pistol mounted optics reticles are notably precise once they've been properly zeroed.

Target Acquisition - A high-quality pistol mounted optic has a crisp, bright dot that can be easily seen in nearly any lighting condition. Your eyes are instantly drawn to the aiming point, and the dot is incredibly accurate, which provides more confidence to take the shot quicker.

Situational Awareness – Pistol mounted optics are specifically designed for shooting with both eyes open, unlike iron sights and most riflescopes. Shooting with both eyes open allows the shooter to maintain maximum situational awareness with a full field of view. Pistol mounted optics are ideal for duty use because officers can locate and track targets without losing sight of what is unfolding on scene.

Liability

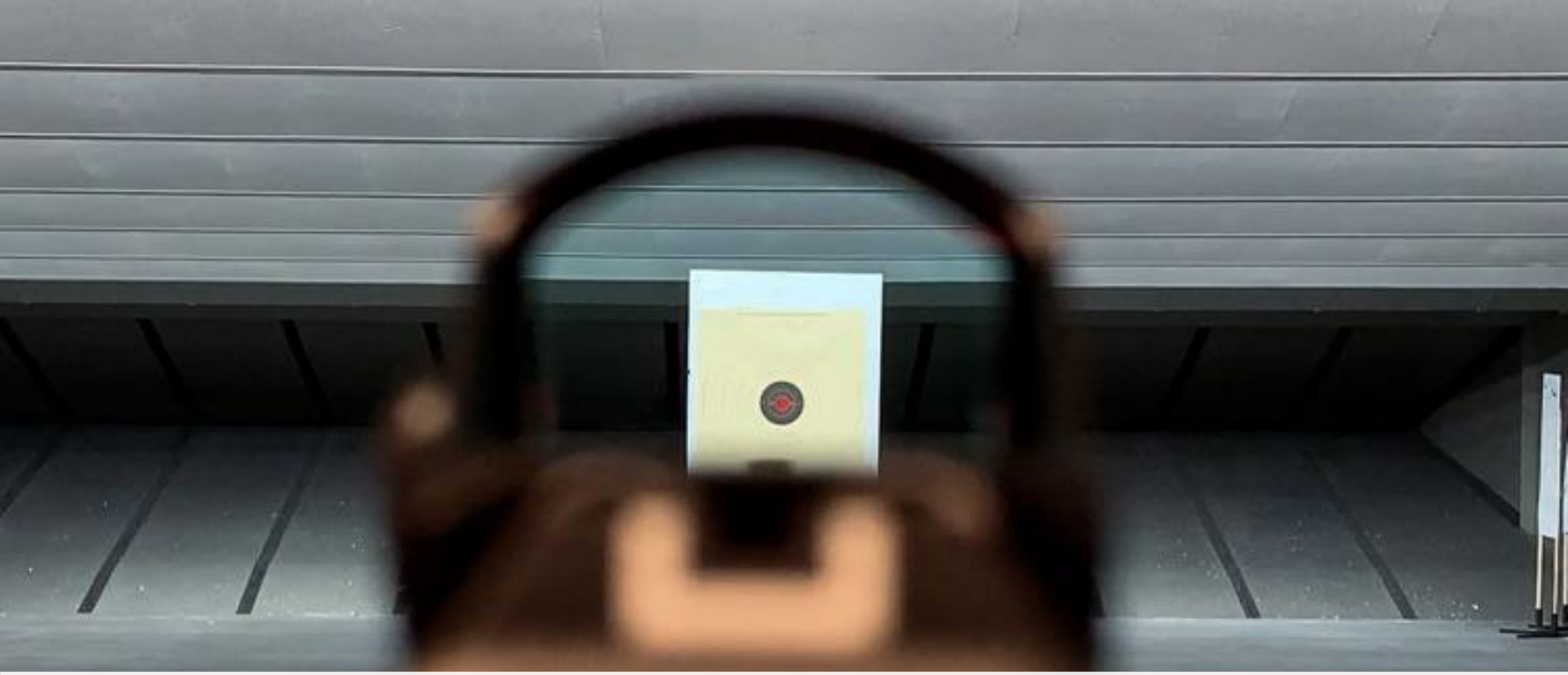
“An optic gives you the opportunity to see your sight and be target-focused. They allow police officers to focus on the threat, make a good use-of-force decision and then superimpose the red dot on the threat. In low-light engagements, it allows you to see and to make good, solid hits”

- Sig Sauer Academy Chief Training Officer Scott Reidy, 30 years LE and 4 years USMC.

Pistol mounted optics make it so shooters no longer have to focus on “equal height, equal light” and can focus on the target instead. Normally, accurate shooting requires a focused front sight post with blurred rear sights and blurred target. This is a major problem from a use of force stand point. What if while aiming at an armed suspect, the suspect suddenly drops the weapon? Will the Officer be able to see that if the suspect (target) is blurry? What if an innocent bystander walks between the suspect (target) and the Officer?



Sight picture
w/ traditional iron sights



Sight picture
w/ optic



Glock 45 (9mm) w/ Aimpoint ACRO optic

Glock 45

A crossover design originally developed for the US Military. The Glock 45 encompasses the full gripped design of the Glock 17 paired with the compact barrel of the Glock 19.

This weapon is the perfect balance of capacity and ease of carry making it easier for Officers of all sizes to confidently and comfortably utilize this weapon.

Over the few years the makeup of the department has changed drastically. With the addition of three female officers, this handgun has proven to be more versatile to fit our new variety.



Why we chose the Glock 45

We chose Glock because it is a platform that we are familiar with and comfortable with. This department has been using Glock handguns for more than a decade and have not had any instances of malfunctions with the weapons. Our firearms instructors are all Glock certified armorers, and our patrol division has extensive training with the Glock platform.

During this testing period we did try two separate versions of the Sig Sauer P320, while we thoroughly enjoyed the craftsmanship of the firearms it made sense from both a practical and cost standpoint to stick with Glock. The Sig Sauer equivalent of the Glock 45 w/ Acro would cost roughly \$150.00 more per gun costing a rough total of \$5,250.00 extra.

We should also note that the FBI, the standard in law enforcement, also uses a variant of the Glock 45 as their issued duty pistol. The Connecticut State Police has also switched from Sig Sauer to the Glock 45.

Aimpoint ACRO P2

Magnification: 1X

Objective Lens Dimensions: 20x20 mm

Reticle: 3.5-MOA red dot

Length: 1.9 inches

Weight: 2.1 ounces

It's an enclosed-tube design, more commonly seen on carbines, but now adapted for handguns. Advantages of the closed tube are immediately apparent: The entire system is, as the name implies, closed to the elements. While other dot styles leave the emitter open to the environment where it can potentially be impacted by rain, snow, mud, dust or other everyday hindrances, the Acro is sealed.



Why we chose the Aimpoint ACRO

We chose the Aimpoint ACRO because it is one of the few pistol mounted optics that are considered by the FBI to be “duty rated”. The FBI has tested several different types of optics numerous types of drills to test multiple factors of the optic to include durability, ease of use, sight picture and several other rigorous tests. Only the Aimpoint ACRO and the Trijicon RMR have been approved by the agency to be issued to agents in the field.

While testing these weapons we found that we needed an optic with a closed emitter. Our region has weather that changes by the hour. The closed emitter style that is the ACRO enables our officer’s optics to free from water, dirt, snow and any other type of debris that could inhibit the use of the optic. The optic incorporates internal 3D cues that assist the user in locating the red dot and properly aligning the optic.

Cost of ammunition

Jurek Brothers (Winchester) – 2022

Training .45 (500/case) = \$157.39
x 12 = \$1,888.68

Duty .45 (500/case) = \$214.56 x 4
= \$858.24

Total = \$2,746.92

Training 9mm (500/case) =
\$114.60 x 12 = \$1,375.20

Duty 9mm (500/case) = \$160.14 x
4 = \$640.56

Total = \$2,015.76

Total Savings = \$731.16

5-year savings = \$3,655.80

7-year savings = \$5,118.12

AAA Police Supply (Federal) – 2021

Training .45 (1000/case) = \$281.00
x 10 = \$2,810.00

Duty .45 (1000/case) = \$385.00 x 2 =
\$770.00

Total = \$3,580.00

Training 9mm (1000/case) =
\$203.00 x 10 = \$2030.00

Duty 9mm (1000/case) = 287.00 x
2 = \$574.00

Total = \$2,604.00

Total Savings = \$976.00

5-year savings = \$4,880.00

7-year savings = \$6,832.00



Bristol, CT

On Wednesday October 12, 2022 at 10:42pm three Bristol Police Officers were ambushed by a rifle wielding suspect. Officer Alec Iurato, the only surviving Officer on scene was equipped with a 9mm handgun with a pistol mounted Trijicon optic. Despite being severely wounded and his brother Officers having already been killed, Officer Iurato was able to shoot and kill the suspect with one round to the neck from a distance of 90 feet. During the time of the shooting the area was dark being lit only by weapon and street lights. The use of a pistol mounted optic, gave Officer Iurato a huge advantage, despite being outgunned, to engage the suspect with a clear sight picture to make his one and possibly only shot count.