## **New Optic to Aid Machine Gunners**

## **JUSTIN SWEET**

Accuracy by volume has been a long-standing denigration of the shooting style of machine gunners. However, that is about to change with the new Family of Weapons Sight – Crew Served (FWS-CS) machine-gun optic that provides Soldiers increased accuracy and lethality by leveraging the most up-to-date weapon sight and wireless technology.

Project Manager Soldier Maneuver and Precision Targeting (PM SMPT) held a Soldier Touchpoint (STP) with Soldiers of the 82nd Airborne Division in February. The Soldier feedback from the STP ensures end users are involved throughout the development of the FWS-CS and it has marked advancements in capability compared to legacy equipment.

"With a program as complex as ours, we need feedback early and often in order to ensure we get our machine gunners what they need in the final product," said MAJ John Nikiforakis, PM SMPT Assistant Product Manager. "Mounted machine gunners have the difficult task of providing guidance to the crew, ensuring protection of their vehicle, and most importantly providing lethal effects on the enemy. The FWS-CS ensures that the gunners in turrets have the best optic for all battlefield conditions and one that mounts to any crew-served weapon in the Army's inventory."

"We're comparing shooting data from the current M145 Machine-Gun Optic (MGO) to the FWS-CS to see if we can engage targets at unknown distances faster and more accurately," said 1LT Anthony Ramirez of the 2nd Battalion, 325th Airborne Infantry Regiment (AIR), 82nd Airborne Division. "The biggest benefit of the FWS-CS is that there's a built-in laser rangefinder and ballistic calculator, so it determines the range and adjusts the reticle. All we have to do is put the reticle on the target and engage."

The FWS-CS is the first machine-gun optic to utilize the "disturbed reticle" technology. Along with calculating the range to the target, the ballistic calculator can adjust for air density and works with any of the Army's current machine gun systems.

"Typically you have to walk your fire on target, but with the FWS-CS you have impact on the first burst," said SGT Jose Perez, also from 2-325 AIR. "It's a really cool system that can be used with multiple firearms, including the M240, MK19, and .50 cal."

In addition to the disturbed reticle, the FWS-CS can be used day or night and in limited visibility conditions, providing Soldiers greater lethality on the battlefield.



The Family of Weapons Sight – Crew Served (FWS-CS) machine-gun optic can be used day or night and in limited visibility conditions. (U.S. Army photo)

"It is a day and thermal sight. So it allows us to operate in a multitude of environments and be able to engage under more conditions than the M145 is capable of," said 1LT Ramirez. "It has the capability to look through fog and other inclement weather conditions that the old M145 wouldn't be able to reach out and see."

The FWS-CS utilizes long-wave thermal technology and a high-definition digital day display that provides users with an extremely detailed field of view and many options for customizing the reticle and display. In addition to its stand-alone performance, the FWS-CS is one of many programs within PM SMPT to utilize wireless technology. The Intra-Soldier Wireless (ISW) system allows the FWS-CS to connect to a Helmet Mounted Display (HMD).

Read more about the FWS-CS at https://www.peosoldier.army.mil/News/Article-Display/Article/2573777/.

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