



## CROWS OPTION BOOSTS SITUATIONAL AWARENESS

PEO SOLDIER

When SPC Zachary Cline found himself in a Taliban ambush last summer, he was operating the .50 caliber M2 mounted on a Common Remotely Operated Weapons Station (CROWS) from the back of his commander's mine-resistant ambush-protected all-terrain vehicle (M-ATV). His unit instantly began to fight its way out.

In the first moments of the ensuing chaos, Cline guided the crosshairs on the CROWS' fire control screen on what appeared to be a legitimate target. He paused, then cross-checked with his seasoned troop commander (TC) in the front seat who was able to see Cline's sight picture on his own Driver's Visual Enhancement (DVE) screen. Check fire.

"The order was given not to fire, which in this theater is as important as firing sometimes," said Cline, an Infantryman who was on his first tour in a combat zone. "My TC saw it on the screen and, between the two of us, we determined that it wasn't a threat. If it had just been me, I probably would've made the same decision that we made together, but I might not have."

Cline's unit, Headquarters and Headquarters Troop (HHT), 6th Squadron, 8th Cavalry Regiment, 4th Infantry Brigade Combat Team, 3rd Infantry Division, piloted an enhancement to their CROWS system that leverages a simple cable to great advantage. The hardened cable patches the CROWS fire control unit video out to the DVE unit mounted in the front of the vehicle. This enables key personnel such as the TC to see the same CROWS sensor suite data and imagery that previously only the gunner could see from his position in the back of the vehicle. The enhanced situational awareness provided by the second screen delivers immediate tactical advantages with significant strategic implications.

"Seconds matter when you are talking about identifying a potential threat that could be catastrophic to your crew or your vehicle," said 1SG Christopher Williams, HHT, 6-8 Cavalry. "But, if you pull that trigger and it's not a threat, the strategic implications that could arise are very serious. Strategically, you could set yourself back weeks, months, or even years if you mistakenly engage."

Williams had been working with Product Manager Crew Served Weapons and the Rapid Equipping Force to secure the cables and additional DVEs he needed to outfit his unit's CROWS with second screen capability. The upgrade leverages existing items within the Army's inventory to connect the two systems. The new configuration allows more senior crew members typically situated in the front of a vehicle to lend their judgment to a gunner who may only



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**Assistant Product Manager MAJ Curtis Brooker and CROWS Engineer Matthew Moeller demonstrate the second screen option.**

have a year or two of experience under his belt.

Additionally, the second screen gives the commander the ability to reconnoiter potential targets out in sector far more effectively than he could with a pair of binoculars thanks to the 27-power daytime camera, thermal optics, and laser rangefinder of the CROWS.

When it comes to the rules of engagement and positive identification requirements, the second screen is of tremendous value.

"It reduces the burden of the gunner to have the TC be able to confirm the target with absolute certainty," said Cline. "It reduces the time that would've elapsed between identifying a target and engaging it. It reduces the burden on the gunner to verbally describe what he is seeing."

For Williams, the CROWS second screen option is something he would like to see live past deployment. Ideally, units train as they fight, which is why Williams would like to see TCs and CROWS gunners become proficient at identifying threat and non-threat targets to engage on a gunnery range before units are deployed into a theater of operations. Such training would make the verbal exchanges between the gunner and the TC a proficient battle drill.

"The second screen needs to be in absolutely every single vehicle because of the amazing amount of situational awareness it provides," said Williams. "It is essential to have a piece of equipment that makes every second count to ensure you are doing the right thing."