

Perhaps it is his love of gaming and experience competing as a tournament player that helped Specialist Nathan Guilde develop his innate sense for discerning imagery and his ability to quickly and confidently scan and identify targets. Guilde, an avid gamer, is one of the most successful Husky Mounted Detection System-Ground Penetrating Radar (HMDS-GPR) operators in Afghanistan.

Managed by Project Manager Close Combat Systems, HMDS provides the capability to detect and mark the location of buried low and non-metallic, as well as metallic-cased improved explosive devices (IEDs), pressure plates, and antitank landmines. At the foundation of this capability is the GPR, state-of-the-art technology that provides a three-dimensional view of objects buried in the ground to the operator. GPR panels are mounted to the front of existing Husky vehicles. The system transmits the images to a monitor inside the vehicle for the operator to review and determine threat potential. His alerts the operator to targets prior to detonation, greatly reducing the risk of injury to the crew and battle damage to the vehicle.

Hailing from Chicago, Illinois, Guilde entered the Army in 2009 where he was originally trained on road graders, later receiving instruction as part of the Route Clearance Patrol (RCP). It was there that his superior skills at identifying targets from imagery were first discovered. His training instructor initially thought that Guilde was simply identifying targets in the training lane that he had placed in the ground himself.

Taking the lead on route clearance missions, Guilde, of 887th Engineer Company, recalled an initial brief where he was told that the Husky is one of the safest platforms in theater but the vehicles behind him are not as well suited to sustain a blast. The knowledge that he is responsible for the lives of the entire RCP behind him that keeps him sharp. And as his successful finds continue, they contribute to increased confidence in both the system and the operator throughout the RCP. “We are confident enough to have decreased our reliance on dismounts, which place Soldiers on the ground, making it a much safer environment in a dangerous operation.” According to Guilde, the operator has to be confident in himself and the system first, then results will follow. And the HMDS is integral to that confidence. “It saves lives,” he said. “The RCPs could not operate without it.”

In October 2012, Guilde received the Bronze Star for his operation of HMDS. He has been credited with 18 finds during his tour of duty. His skill, combined with the HMDS GPR technology, undoubtedly saved Soldiers’ lives.

Described as a “game changer” in the fight to counter the IED threat, HMDS enables combat engineer units to more quickly and regularly check heavily used roads for IEDs, with improved rates of detection. According to a sergeant first class, master driver with the 181st Infantry Brigade, “HMDS is so important because it takes away the enemy’s ability to camouflage IEDs.” Early detection of a potential hazard allows the Husky vehicle to either circumvent the threat or pull back and allow the route clearance commander to begin an interrogation process. This autonomous threat detection also provides increased situational awareness to the operator who is not required to continuously monitor the screen for threats as he is alerted by the system through audio and visual cues. “As an operator, you can actually see the IED while it is in the ground. You see it on the monitor in front of you.”

The HMDS has scanned thousands of kilometers of Afghan roads and has recovered scores of IEDs. The scanned data can be stored for future analysis to evaluate product and operational improvements and as a tool to track enemy IED designs and placement tactics.

“The GPR system is fantastic,” according to a heavy equipment operator and Army private attached to the 20th Engineer Brigade. “The difference in this system and older methods is just night and day. It gives me a lot of confidence to go out and find IEDs.”

Since early 2009, over 150 HMDS have been fielded to Afghanistan. Numerous Field Service Representatives (FSRs) support both the operators and systems in theater, providing training, technical and maintenance support, along with software updates. And there exists a strong cooperative, collaborative relationship between operator, system, and FSR that is essential to building and retaining operators’ confidence. This success in theater might best be captured by a route clearance company commander, “Thought I would share with you that we had five GPR finds today. Let your guys know about it because you guys definitely share in that success. A lot of Soldiers and Marines stayed safe today because of what you guys do.”

Image 1:



Caption: Spc Guilde receives the Bronze Star for his operation of the Husky equipped with the Husky Mounted Detection System (HMDS) Ground Penetrating Radar.

Image 2:



Caption: