

Assuring soldier safety:

QA's counter-IED

process and inspection mission

Matthew Montgomery | DCMA Public Affairs

According to the Joint Improvised Explosive Device Defeat Organization, IEDs are the weapon of choice for terrorists because they require limited skills to build and provide dramatic results for very little investment of time, money and effort.

This makes the work of Mark Weiss, Defense Contract Management Agency quality assurance specialist, very important to personnel currently serving overseas. Working out of the DCMA Denver office, Weiss provides oversight to a small company with a large focus in building antennas for Counter Radiofrequency IED Warfare systems.

The purpose of the device is to block the incoming detonation signal of an IED and successfully keep it from exploding while military vehicles are in the danger zone. "This system blocks devices which use radio frequency," said Weiss. "Basically, everything from a garage door opener to a cell phone signal is jammed."

Military personnel overseas depend on this device to work effectively. This means every aspect of the system must be checked prior to shipment.

"One of the main things I look at is the antenna base assembly," said Weiss. "I look at the manufacturing, make sure everything is where it is supposed to be, and the proper configurations are met."

Weiss spends a majority of his time reviewing the processes involved in production. This constant review helps ensure the final product is a quality one. "On most of my inspection visits I spend more time reviewing their processes than anything else," he said. "I usually take a copy of their detailed process plan, or DPP, and go through it with them while

Mark Weiss, Defense Contract Management Agency quality assurance specialist, inspects the Counter Radiofrequency Improvised Explosive Device Warfare system packaging before leaving the facility. (Photo by Matthew Montgomery, DCMA Public Affairs)

visiting various stations and watching their technicians."

"I also check training records to make sure employees performing tasks have been properly trained," continued Weiss. "I check the material certifications and make sure the materials being used are from acceptable sources. Occasionally, I will follow a system completely through the build process and check different aspects on separate visits."

The DCMA office is a geographically dispersed contract management office and quality assurance specialists divide their time between various contractors. "I usually don't spend a lot of time here on any given day, but spread it throughout the process," said Weiss.

Outside manufacturing, one of the last and most critical aspects of the quality process is ensuring the device operates as designed, which means a 100 percent frequency check on every antenna leaving the facility.

"The company uses a Graphical User Interface computer system to evaluate each of the antennas," said Weiss. "I check and make sure the different bands are operating correctly. Once all of the antennas have been tested, the results are compiled and then overlaid to check for any irregularities and make sure there are no anomalies."

The nature of the highly technical work means DCMA oversight is critical



to ensuring a quality product is delivered to the customer. Weiss indicated it's important to have unfettered access to their entire computer system, including all the programs. This helps him identify issues as they arise and address smaller concerns before they become bigger problems.

Weiss said good communication and information sharing can also have a positive effect on the final product. "It's important for the contractor to understand DCMA is here to help and not hinder the process. Ultimately, it's all about supporting the warfighter and ensuring a quality product is delivered." **C**