

Technology and training critical in evolving EOD landscape

EOD specialist discusses integration of HazMasterG3 with the Gemini handheld chemical analyzer.

Meet Alan Higgins, EOD specialist

The Thermo Scientific™ Gemini™ analyzer for chemical identification now incorporates the HazMasterG3® decision support system from Alluvium LLC.

Available as an option on the portable analyzer, HazMasterG3 (HMG3) enables interactive problem solving on scene. This gives responders the capability to gain actionable insights and make more informed decisions.



We asked Alan Higgins of Federal Resources to weigh in on how the hardware-software integration would benefit EOD operators in the field. Alan is a 25 year veteran of the US Marine Corps., and a highly experienced EOD operator with multiple

combat tours in support of both conventional and special operations forces. He currently serves as the company's EOD Program Manager.

Q: What is the current state of the EOD landscape?

A: When I was coming up in EOD, the focus was on ordnance, with a small degree of training on IEDs. Now, the two have flipped, with more focus on IEDs and less on ordnance.

The threats are ever-evolving. Not just IEDs, but mass-produced, assembly-line manufacture of IEDs. HME continues to be a threat, and the use of sensitive primary explosives, normally considered too sensitive for practical use, is very concerning and dangerous.

The chemical threat has re-emerged, and not only that, but so has use of homemade, improvised chemical threats. The use of locally manufactured ordnance items by terrorist organizations is also a growing concern.

Q: How have “tools of the trade” evolved over the course of your career?

A: EOD has become much more technologically reliant, and sees a fairly rapid turnover of equipment and instruments. Proper training is more important than ever before!

IEDs were the “what-if” scenario, where now, they’re the primary weapon of our enemies. We’ve had to become electronics technicians, chemists and engineers to stay on top of the rapidly changing IED environment. The need for proper training has never been higher, and those that aren’t properly trained or fail to grasp the concepts, usually pay in blood.

Q: How do you think the combination of Gemini and HazMasterG3 will benefit EOD or HazMat teams?

A: The incorporation of HMG3 adds important capability. It’s a very nice complement to the identification capabilities of the Gemini.

From an operational perspective, the incorporation of the G3 enables the EOD or HazMat technician to rapidly make informed decisions downrange on the target: PPE decisions, prioritizing work, predicting reactions, determining what products are being made in labs, keeping incompatible materials separated – all critical issues.

Q: What are the advantages of integrating HazMasterG3 with Gemini?

A: Now, the EOD technician can make informed decisions while downrange. This speeds up the prosecution of those incidents where the Gemini-HMG3 would be put to use. Gemini tells you the “what?” with respect to a chemical. HMG3 provides the “so what?” – what does this mean to you, the EOD technician? Hazard identification is as equally important as chemical identification.

Q: How do you see the field of EOD evolving?

A: EOD is not a static environment, and technology will play an ever-increasing role. The EOD techs and the tools they employ will have to be smarter, faster and more reliable. Vendors that tend to rest on their laurels or fail to grasp the imperative of speed and adaptability will be left on the sidelines, observing those that comprehend the environment in which we operate.

Thanks for your time, Alan.



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