

New Jersey's oldest weekly newspaper Your neighborhood in print since July 13, 1822

News Record PATRIOT ATOM TABLOID

ISSN 2328-6113 (print)

ISSN 2328-6121 (online)

## New explosive ordnance disposal technology complex aims to save lives



## By JoAnne Castagna, Ed.D.

Master Sergeant (Retired) Alan Richwald was a veteran who fought for the United States and also for his fellow soldier by becoming an expert in how to render safe unexploded or live foreign ordnance on the battlefield to protect soldiers. He researched, wrote books, and shared his knowledge with many agencies and military services.

Recently, a new complex at Picatinny Arsenal was named after him and aims to operate in the spirit of his motto: "So others may live."

The Master Sergeant Alan Richwald Explosive Ordnance Disposal Disassembly and Robotics Complex was designed and constructed by The U.S. Army Corps of Engineers, New York District.

The complex is the first of its kind in the Army. The goal of the complex's personnel is to research and develop ways, including using robotic technology, to render safe live foreign ordnance on the battlefield to protect soldiers, including those responsible for recovering them and those performing missions down range.

"The complex really highlights the diversity of missions that we, as a district, provide in support of the military," said former District



Alan Richwald

Commander Col. Matthew Luzzatto. "It's not just barracks and airfields: It's that unique capability we have to help protect Soldier's lives."

Picatinny Arsenal is a U.S. Army installation that sits on over 6,000 acres in Morris County, New Jersey.

It's there that 6,000 scientists, engineers, and support personnel have the unique responsibility of developing virtually all of the Army's weaponry.

To support this mission, the Army Corps was asked to create the new complex. This was

done in collaboration with the Baltimore District, U.S. Army Corps of Engineers, New Jersey Department of Environmental Protection, Picatinny Enhancement Coalition, contractor Mason and Hanger Group Inc of Lexington, Kentucky, and contractor Benard Associates of Wayne, New Jersey.

The new state-of-the-art complex has three functions that includes a 10,234-square-foot concrete facility that uses specialized equipment to safely disassemble and analyze conventional foreign ordnance such as grenades and land mines; a 10,040-square-foot robotics building that is testing, researching, and developing robotic devices to retrieve explosives from battlefields; and five earth-covered concrete ordnance-storage magazines, covering 6,000 square feet of land, that are designed to contain an explosion within a designated area.



The Master Sergeant Alan Richwald Explosive Ordnance Disposal Disassembly and Robotics Complex was designed and constructed by The U.S. Army Corps of Engineers, New York District, and is located at Picatinny Arsenal, New Jersey.

Not only will this complex work to save soldiers' lives, but it was constructed with robust features to make it a safe work environment for the personnel performing the research and development.

"The goal of my team is to make as many operations related to the explosive ordnance disposal mission remote, often with the use of robots that can be sent downrange

instead of a person," said Brent Donahue, U.S. Army Combat Capabilities Development Command, Armaments Center, Picatinny Arsenal. "Our priority is reducing or eliminating the amount of time an actual person has to be within range of the explosive hazard."

"The work from this complex will help to save the lives of soldiers in two ways. First, the complex will be used to engineer and test robotic systems which will lessen the number of times trained explosive ordnance disposal soldiers will have to physically approach explosive hazards. Second, the more explosive hazards we can detect and render safe remotely on the battlefield, the more soldiers we will save from unexpected explosions," said Brent Donahue.

The work this complex is performing is extremely important to the Army.

According to the <u>Wounded Warrior Project's Annual Warrior Survey</u>, 84.2% of Wounded Warrior Project Warriors reported being injured during military service as a result of a number of events including blasts or explosions, and 73.2% of these individuals experienced head-related trauma immediately following these events.

The Army Corps got a taste of what soldiers deal with on the battlefield. While excavating during the project, workers discovered unexploded ordnance.

The project was halted and explosive ordnance disposal professionals from the Army Corps' Baltimore District were called in to safely remove them. This didn't come as a complete surprise to the project team because years ago the arsenal was a major producer of weapons for World War I and World War II.

"It was sort of a reminder of the importance of why we were building this facility," said Andrew Andreeko, project manager, New York District, U.S. Army Corps of Engineers.

Richwald who has passed, devoted most of his life – almost 60 years – to developing ways to defeat and neutralize the hazards presented by live ordnance.

This included traveling to dangerous war zones such as Bosnia, Iraq, and Afghanistan and personally recovering some of these explosives.

The engineers at Picatinny believe he would be proud of this new complex that is using the latest robotic technology to make explosive recovery even safer for the men and women in uniform who are protecting the United States.

Dr. JoAnne Castagna is a public affairs specialist and writer for the U.S. Army Corps of Engineers, New York District. She can be reached at <u>joanne.castagna@usace.army.mil</u>

