



Above: Nuclear Disablement Team 1 trained with the 5th Special Forces Group (Airborne) during an air assault exercise that took them from Fort Campbell, Kentucky, to Hollywood, Alabama, where they successfully simulated powering down the Bellefonte Nuclear Power Plant. A CH-47 “Chinook” from the 101st Combat Aviation Brigade supported the air assault training exercise. Courtesy photo.

## NUCLEAR DISABLEMENT TEAM VALIDATES MISSION AT SIMULATED NUCLEAR POWER PLANT IN ALABAMA

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A one-of-a-kind U.S. Army team validated its ability to shut down a simulated nuclear power plant during an air assault training exercise in Hollywood, Alabama.

Nuclear Disablement Team 1 trained with the 5th Special Forces Group (Airborne) during an exercise that took them from Fort Campbell, Kentucky, to Hollywood, Alabama, where they successfully simulated powering down the Bellefonte Nuclear Power Plant.

The plant is not operational, unfinished, and does not store nuclear fuel, making the site a safe and realistic training ground for this exercise.

Capt. David D. Manzanares, the Nuclear Medical Science officer from NDT 1, said the exercise increased interoperability and mission readiness. “The possibility of dealing with a damaged nuclear power station or emergencies involving nuclear reactors in a hostile environment is an emerging threat,” said Manzanares.

“This training event was complex, dynamic and challenged our technical expertise.”

Originally from Managua, Nicaragua, Manzanares immigrated to the U.S. when he was five and was raised in Miami. He joined the Army in 2003 and served as a Health Physics NCO before becoming a Nuclear Medical Science officer.

As the Nuclear Medical Science officer on NDT 1, Manzanares fills the force health protection role by identifying radiological health risks for current and future operations and maintaining team occupational radiation doses as low as reasonably achievable. Manzanares also advises on-scene commanders, command staff and the NDT chief on operational exposure guidance and radiation health risk.

During the exercise, Manzanares leveraged his experience from serving as a Health Physics NCO at

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the Armed Forces Radiobiology Research Institute (AFRRI) in Bethesda, Maryland. "The radiation platforms utilized at AFRRI allow researchers to run experiments at high or very high radiation fields," said Manzanares, who earned his bachelor's degree from Thomas Edison State University with a concentration in Mathematics and Science. "Radiation dose rates would be similar to those experienced in a nuclear or radiological event."

Maj. Aaron J. Heffelfinger, the deputy chief of the NDT 1, said the Idaho National Laboratory provided a simulator that helped to create a more realistic nuclear power plant.

Heffelfinger said the exercise was unique because shutting down the reactor was incorporated in a tactical training exercise. "The simulator was placed within the control room, which for all training intents and purposes, created a realistic nuclear power plant for the force to assault, seize, and deliberately power down," said Heffelfinger. "Our formal reactor training has been with industry or at a national lab in a more classroom-oriented environment. It was always instructional training, whereas this was a validation of all the training we have previously received."

A native of Moore Township, Pennsylvania, who previously served as an Air Defense Artillery officer, Heffelfinger said the exercise validated the NDTs critical mission of disrupting the nuclear fuel cycle at a nuclear power plant (NPP).

Heffelfinger said the mission disrupts the nuclear fuel cycle and keeps adversaries from obtaining nuclear weapons. "NPPs are a key part of the nuclear fuel cycle. It is the place all plutonium is produced. Therefore, reactors are a key area in nuclear weapon pathway defeat," said Heffelfinger. "The NDT's ability to assess the state of a reactor, and if needed, control and shut it down, is crucial for our mission success and those we are directly supporting."

As the U.S. military trains to deter or defeat near-peer adversaries, Heffelfinger said having NDTs that are trained, equipped and ready is critical for supporting joint conventional and Special Forces during large-scale combat operations. "The NDTs are the only asset in the DoD with this skillset," said Heffelfinger. "The training event helped the teamwork through logistical issues, integration with a Special Forces unit and ensuring the right people with the right skillsets were

**Below: Nuclear Disablement Team 1 trained with the 5th Special Forces Group (Airborne) during an air assault exercise that took them from Fort Campbell, Kentucky, to Hollywood, Alabama, where they successfully simulated powering down the Bellefonte Nuclear Power Plant. (From the left) Capt. Samuel J. Bunn, Maj. Aaron J. Heffelfinger, Capt. David D. Manzanares and Staff Sgt. Rigoberto Olmeda from Nuclear Disablement Team 1 participate in the training exercise. Courtesy photo.**







**Above: Nuclear Disablement Team 1 trained with the 5th Special Forces Group (Airborne) during an air assault exercise that took them from Fort Campbell, Kentucky, to Hollywood, Alabama, where they successfully simulated powering down the Bellefonte Nuclear Power Plant. (From the left) Maj. Aaron J. Heffelfinger, Staff Sgt. Rigoberto Olmeda, Capt. David D. Manzanares and Capt. Samuel J. Bunn from Nuclear Disablement Team 1 participate in the training exercise. Courtesy photo.**

brought to bear on the objective. The lessons learned will absolutely increase the teams' lethality supporting future contingency operations or large-scale combat operations."

Nuclear Disablement Team 1 (NDT 1) is part of the 20th Chemical, Biological, Radiological, Nuclear, Explosives (CBRNE) Command, the U.S. military's premier CBRNE formation. The U.S. Department of Defense's only Nuclear Disablement Teams — NDT 1 "Manhattan," NDT 2 "Iron Maiden" and NDT 3 "Vandals" — are all stationed on Aberdeen Proving Ground, Maryland.

NDTs include Nuclear and Countering WMD (FA 52) officers, an Explosive Ordnance Disposal officer, a Nuclear Medical Science officer and a Health Physics noncommissioned officer.

As the U.S. Department of Defense's nuclear subject matter experts, NDTs directly contribute to the nation's strategic deterrence by staying ready to exploit and disable nuclear and radiological WMD infrastructure and components to deny near-term capability to adversaries. The NDTs facilitate follow-on WMD elimination operations.

Nuclear Disablement Teams also serve on the FBI-led National Technical Nuclear Forensics Ground Collection Task Force, which trains to conduct post-blast nuclear forensics.

In addition to three NDTs, the Aberdeen Proving Ground, Maryland-headquartered 20th CBRNE Command is home to 75 percent of the active-duty U.S. Army's Chemical, Biological, Radiological, Nuclear (CBRN) specialists and Explosive Ordnance Disposal technicians, as well as the 1st Area Medical Laboratory, CBRNE Analytical and Remediation Activity and five Weapons of Mass Destruction Coordination Teams. ■

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is the Deputy Public Affairs Director for the 20th Chemical, Biological, Radiological, Nuclear, Explosives (CBRNE) Command, the U.S. Department of Defense's premier multifunctional and deployable CBRNE formation. A retired U.S. Navy Chief Journalist with a master's degree in nonfiction writing from Johns Hopkins University, he previously served as a Pacific Stars & Stripes reporter and a civilian public affairs officer for the U.S. Navy, U.S. Air Force, U.S. Coast Guard and U.S. Department of Defense.