

## By Major Jon A. Brierton

The sun rises over Forward Operating Base (FOB) Santa Fe, located in "The Box" at the National Training Center (NTC), Fort Irwin, California, for another rotation of Operation Sand Castle, where the 412th Engineer Command serves as the action agent for the United States Army Reserve Command's current Army Force Generation exercise. A unique feature of this exercise is the requirement that the Active Army brigade combat team (BCT) and the Army Reserve brigade coexist in the same operational environment as they would in-theater. Each component has to adapt to the other, thus creating a mutually supporting relationship that yields an overall stronger fighting force.

However, the training that occurs between the two components is just the beginning. In addition to training individual Soldiers, Operation Sand Castle gives the Army a chance to exercise its newest operational structure. The 301st Maneuver Enhancement Brigade (MEB) from Fort Lewis, Washington, and the 210th Regional Support Group (RSG) from Fort Buchanan, Puerto Rico, are two new structures in the Army. This year's operation focused on emerging MEB and RSG doctrine and the dynamics that take place between the seniorlevel commands within a BCT's operational environment, executing full spectrum counterinsurgency operations. NTC provides the opportunity to test these structures as new doctrine is still being developed.

The 301st MEB and 210th RSG catapulted the exercise to the next level by planning, coordinating, and executing a robust training plan which, coupled with the desert environment and the NTC rotational scenario, resulted in conditions that resemble those in Iraq and Afghanistan. The 301st MEB consisting of engineer, military police, and chemical battalions—coordinated with the 2d Heavy Brigade Combat Team, 1st Infantry Division (2/1 HBCT), from Fort Riley, Kansas, and controlled all operations off the FOB, while the 210th RSG controlled all operations on the FOB.

The 301st MEB operated in "The Box," coordinating and supporting 2/1 HBCT with mobility through its gap-crossing and route clearance capabilities and with horizontal and vertical engineer capabilities not resident in the BCT command structure. During an attack on the National Urban Warfare Complex (NUWC), known as *Medina Jabal*, the 301st MEB exercised its air space management and fires control capability by coordinating with the BCT close-air and fire support assets to mitigate the Opposing Force (OPFOR) attack. Within minutes, Apache helicopters were over the site, providing relief to the Operation Sand Castle units, and unmanned aerial vehicles circled the area to keep the OPFOR away.

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The mock village of Medina Jabal gives Soldiers a realistic taste of duty in Iraq.

Throughout the operation, the 301st MEB directed mounted combat patrols, route reconnaissance, route security, and mobility operations in a competitive environment while directing simultaneous construction operations at the NUWC, the mock village of *Medina Wasl* at Four Corners, the rock quarry, and the southeast corner of Area of Operation Bronco, along Alternate Supply Route Long Island. The mission at Four Corners was an extra project assigned when the 301st MEB hit the ground. This complex project consisted of constructing a 90-foot concrete traffic circle near *Medina Wasl*. The 365th Engineer Battalion tackled the project and when it was finished, the 301st, 2/1 HBCT, and the village mayor conducted a ribbon-cutting ceremony with townspeople attending the event as they would in Iraq.

NTC's mission is to prepare Soldiers, Sailors, Airmen, and Marines for deployment in support of the War on Terrorism. The main focus of Operation Sand Castle is to prepare Army Reserve Soldiers for potential deployments, and the operational mission is to provide upgrades to NTC facilities and the NUWC, the premier training area for BCTs. Operation Sand Castle, now entering the fourth year of a planned ten-year operation, is improving the infrastructure of the NUWC to replicate conditions in Iraq and Afghanistan more accurately, so Soldiers have a better idea of what to expect when they deploy. This creates a two-fold effect that provides Army Reserve Soldiers a training opportunity that greatly improves their tactical and technical skills, while simultaneously improving the infrastructure of the installation and enhancing the post's ability to train the total force for the future. This is made possible by having Operation Sand Castle units written into the rotational scenario under the watchful oversight of observer/ controller-trainers (O/C-Ts). The 120th Infantry Brigade, 1st Army Division West, provided 58 O/C-Ts for the operation, helping to stage all the training events normally conducted by a BCT, to include situational training exercises and center of excellence training opportunities. The O/C-Ts coordinated for OPFOR and ran the mounted combat patrol and convoy livefire lanes for the participating units.

Operation Sand Castle units experienced many indirectfire attacks and civil disturbances not only at the FOB but also at the NUWC. While the units traversed the main supply routes, combat patrols were engaged by improvised explosive devices (IEDs) and vehicle-borne IEDs. Snipers attacked both the FOB and the various project sites. These key OPFOR engagements not only added to the realism of the exercise but also tested the units' battle drills and standing operating procedures (SOPs). The units are taking the lessons learned and improving their SOPs for use in-theater.



Soldiers and performers pose after the first USO show presented in "The Box" at NTC during a rotation.

The Army Reserve is not the strategic force of the past but has transformed into an operational force. The number of units participating in Operation Sand Castle has tripled since its beginnings four years ago. This year the operation had more than 54 separate units, with more than 2,500 Soldiers on the ground experiencing the best training the Army has to offer. These motivated Soldiers established an FOB that provided all life support and sustainment requirements. For example, in addition to its measure-of-training-effectiveness mission to provide level one medical care to the task force at FOB Santa Fe, medical personnel from the 328th Combat Support Hospital also trained and certified 408 Soldiers as combat lifesavers and 17 as combat lifesaver instructors.

The Operation Sand Castle task force conducted more than 55 missions, encompassing force protection, route clearance and dry-gap-crossing mobility operations, quarry operations, and vertical and horizontal construction operations. The construction effort netted more than 26,000 tons of gravel and railroad ballast used in the construction of 11 pre-engineered buildings, 14 concrete masonry unit buildings, 8,900 feet of railroad bed, and more than 10,600 feet of roads. In addition, the 655th Asphalt Detachment repaired more than 400 meters of damage to the main supply route and helped resurface two parking lots in the cantonment area.

Operation Sand Castle units also conducted 29 individual and crew-served weapons, live hand grenade and live demolitions range sessions, and 30 situational training exercise lanes that covered mounted combat patrol; convoy live-fire; medical trauma; and chemical, biological, radiological, and nuclear tasks. The Soldiers have access to a myriad of outstanding training opportunities, such as the Joint Center of Excellence for IED Defeat. More than 180 Soldiers were trained on the latest tactics, techniques, and procedures for IED defeat; electronic countermeasures; route clearance; robotics; and entry control point and escalation-of-force operations.

Another notable first was the United Service Organizations (USO) show conducted at the midpoint of the exercise by a Hollywood comedian and two Los Angeles-area bands. This was the first time that a USO show was presented in "The Box" at NTC during a rotation. The show gave the troops a few hours of downtime to regenerate as they prepared to finish their aggressive combat and construction operational tempo and replicated the FOB experience.

This year, the Army National Guard was integrated into the training. As Operation Sand Castle continues to increase in size and magnitude, there are plans to invite the other branches of the Service for joint training. The way ahead is to eventually train with armed forces from other countries in an effort to fully match conditions in-theater. The 412th Engineer Command continues to raise the bar and take training to the next level in an effort to help our Service members survive and win the War on Terrorism.

Major Brierton is the chief of operations for the 412th Engineer Command. He has been the lead action officer for Operation Sand Castle for the last two years. He has deployed to Iraq as the assistant operations and training officer and battle captain of the 983d Engineer Battalion and has commanded a light engineer equipment company. He is a graduate of the Combined Arms and Services Staff School and holds a master's in organizational management from the University of Phoenix.