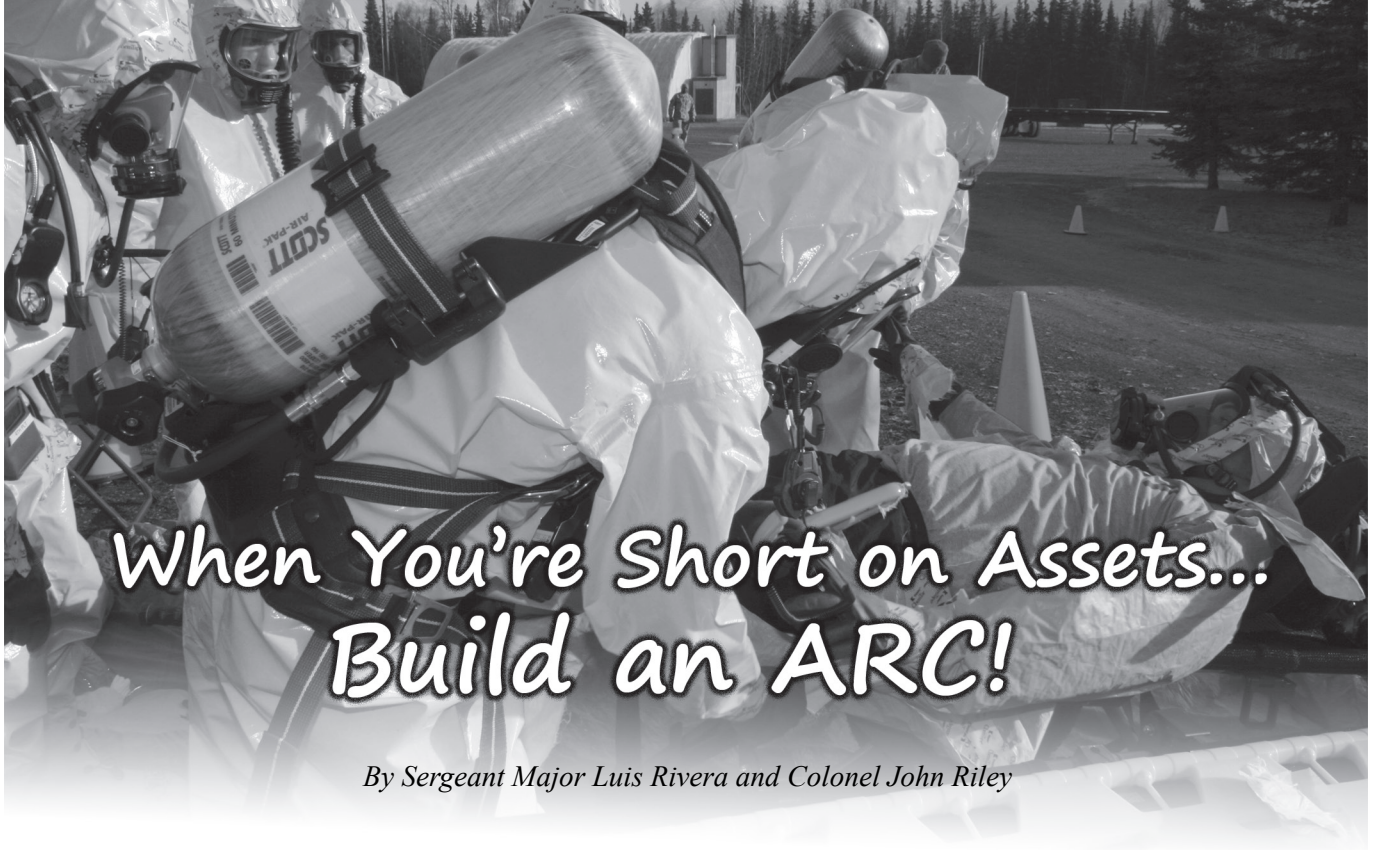

When You're Short on Assets... Build an ARC!

By Sergeant Major Luis Rivera and Colonel John Riley

The U.S. Army Pacific (USARPAC) has long been faced with the following fundamental facts that make the execution of many of their missions difficult:

- The USARPAC theater is the most geographically dispersed theater in the Army.
- It takes considerable time for support assets from the mainland to reach U.S. forces in the Pacific.

These facts became strikingly obvious to the USARPAC Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) Division in 2007, as the Joint Staff moved forward with plans to resource chemical, biological, radiological, and nuclear consequence management response forces (CCMRFs) within the continental United States. Since there was no plan to resource such an asset in the Pacific, the USARPAC staff developed a number of initiatives that addressed the response to possible CBRNE events in the Pacific using immediately available assets, while at the same time, waiting for additional assistance. In addition to equipping and training federal firefighters to fill some of the technical response roles in Japan, Hawaii, and Alaska, the USARPAC CBRNE Division developed another approach: Build an ARC.

The active response chemical, biological, radiological, and nuclear (ARC) team is USARPAC's solution to the requirement for a theater-deployable, Regular Army asset that is capable of conducting chemical, biological, radiological, and nuclear (CBRN) surveys, monitoring, sampling, and identification. Patterned closely after the Army National Guard weapons of mass destruction–civil support teams, ARC teams are manned with Military Occupational Specialty 74D CBRN Soldiers who are graduates of the Civil Support Skills Course or the Dismounted Reconnaissance Course. The ARC team equipment set contains the best available CBRN equipment, including substance identification instruments, self-contained breathing apparatus, and Occupational Safety and Health Administration Level A personal protective equipment.[1] As the operational manager for the Chemical, Biological, Radiological, and Nuclear Unmanned Ground Reconnaissance Program, USARPAC provided robotic CBRN reconnaissance platforms to the ARC teams in the 71st Chemical Company (Hawaii) and 95th Chemical Company (Alaska). With its suite of sensors, the Chemical, Biological, Radiological, and Nuclear Unmanned Ground Vehicle (CUGV) robot can collect chemical air samples and detect oxygen levels, explosive limits, volatile organic compounds, gamma radiation, toxic industrial chemicals, and chemical warfare agents. The CUGV enables ARC teams to

Members of the 71st Chemical Company ARC team receive a preoperations briefing during training at Barber's Point, Hawaii.

quickly deploy onboard cameras and sensors into an objective area to establish the "hot zone" and send any pertinent data to the ARC command post. ARC team leaders can share that data and real-time images of the incident scene with the incident commander within minutes of arriving on the scene of an event.

The 71st Chemical Company "Tropic ARC" Team completed their USARPAC CBRNE Division theater certification in June 2009 and have been decisively engaged ever since. According to one Tropic ARC team member, "The ARC Team involves hard, but great, cross-training—especially with different Hawaiian state and federal agencies. As an ARC team member, I see the Army CBRN specialist moving forward in a different and positive point of view." During the past year, the Tropic ARC Team—alongside the 93d Weapons of Mass Destruction–Civil Support Team (Hawaii) and civilian first responders on the islands of Oahu, Hawaii, and Kauai—participated in multiple, complex training exercises, ranging from civil defense scenarios to real-time air monitoring of Kiluea Volcano. The team also participated in the comprehensive Joint Response Hawaii 2009 Exercise at Schofield Barracks, in which external evaluators validated the ability of first responders and the U.S. Army Garrison Emergency Operations Center to integrate Department of Defense (DOD) incident management operations under a common organizational structure during a combined response to a simulated CBRN incident. In preparation for this exercise, the ARC team conducted numerous joint training missions with the 74th and 706th Ordnance Companies (Explosive Ordnance Disposal [EOD]). The training enabled the ARC and EOD teams to work together in assessing and sampling an incident scene.

The Tropic ARC Team deployed to the Republic of Singapore in December 2009 to demonstrate their capabilities alongside members of the Singapore Army's Chemical, Biological, Radiological, and Explosives Defence Group. Teamed with members of the 74th Ordnance Company, the 71st Chemical Company Soldiers spent two weeks in Singapore

A Soldier operates a CUGV robot during a bilateral-capabilities demonstration in the Republic of Singapore.

The 95th Chemical Company ARC team members conduct monitoring during a site survey.

training with their fellow CBRN and ordnance Soldiers. The Hawaii-based Soldiers found their Singaporean partners to be similarly trained in surveying and sampling techniques, and the nations had nearly identical robotic platforms supporting the CBRN and EOD missions.

An "Arctic ARC" Team has also been formed in the 95th Chemical Company. The team received equipment and initial training in October 2009. Ten Soldiers attended the Dismounted Reconnaissance Course held at Fort Leonard Wood, Missouri, in January 2010. The Arctic ARC Team, which is expected to be certified for operations by USARPAC by Summer 2010, has been invited to participate in the 2010 Arctic Edge Exercise. This year's exercise is designed to focus on an earthquake affecting Alaska, and the overarching goal is to improve Alaska's ability to manage disruption from natural disasters. This exercise will allow 95th Chemical Company Soldiers to gain experience in working with civil authorities at a CBRN consequence management event.

Endnote:

[1]Occupational Safety and Health Administration Level A personal protective equipment includes a positive-pressure, full facepiece, self-contained breathing apparatus or positive-pressure, supplied-air respirator with escape self-contained breathing apparatus; totally encapsulating chemical-protective suit; coveralls; long underwear; outer, chemical-resistant gloves; inner, chemical-resistant gloves; chemical-resistant boots with steel toe and shank; hard hat; and disposable protective suit, gloves, and boots.

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