



Doctrine, Tactics, and Training for the NBCRV

By Mr. Gene Weinreis

U.S. forces face an ongoing threat from a variety of chemical, biological, radiological, nuclear, and high-yield explosive (CBRNE) devices across a broad range of military operations. The number of rogue nations, nonnational terrorists, and criminal organizations capable of developing, possessing, and deploying CBRNE weapons is steadily increasing. In recent years, the range of potential weapons use (from sarin in a Tokyo subway by the Aum Shinrikyo cult in March 1995 to jet aircraft on 11 September 2001) range from blackmail, acts of terrorism, and the operational use of chlorine or nitric acid on the battlefield during military operations.

All unit commanders train their Soldiers in the principles of contamination avoidance, protection, and decontamination to prepare for operations in a chemical, biological, radiological, and nuclear (CBRN) environment. By practicing avoidance, detection, identification, sheltering, and reconnaissance missions, Soldiers can avoid CBRN contamination and, thus, minimize or eliminate casualties and maintain mission performance and logistical-intensive decontamination requirements. U.S. Forces are capable of conducting individual and collective protection to sustain operations in the operational environment. Individual protection includes physical protection devices, immunizations, and pretreatments to help combat growing CBRN threats. With the growing threat of CBRN, it is vital that joint U.S.

Forces use their full capabilities to detect, identify, warn, treat, find, and prosecute the growing list of combatants and terrorists who hate the free world. One such method of defense could include the Stryker Nuclear, Biological, and Chemical Reconnaissance Vehicle (NBCRV)—the newest, fully capable CBRNE vehicle being fielded in the Army. With the completion of new equipment training on the NBCRV, Soldiers will see the new system significantly change the “how-to-fight” doctrine to accomplish wartime and design missions.

Stryker Brigades will be using NBCRVs for their primary reconnaissance vehicles. Other units are presently using the M93A1 Nuclear, Biological, and Chemical Reconnaissance System (Fox) or the M31A1 Biological Integrated Detection System (BIDS) for CBRN detection and confirmation operations. The NBCRV will complement the older systems. Over time, our CBRN capabilities for the confirmation and denial of CBRNE hazards are continuously improving based on new technology.

Doctrine and tactics training (DTT) assists commanders, leaders, staffs, and crews with employing the unique combat capabilities offered by the NBCRV. The early phases of DTT refresh and mentor all Soldiers on the key elements required for NBCRV reconnaissance missions following operational new equipment training



Collecting a soil sample during reconnaissance

(OPNET) (where Soldiers first learn how specific pieces of equipment work). Phase I of DTT covers the—

- CBRN operational environment.
- CBRN detection and biological and chemical sampling.
- CBRN sample evacuation procedures.
- CBRN employment tactics, techniques, and procedures (TTP).
- Procedures for NBCRV crew drills.
- Defense Advanced Global Positioning System Receiver (DAGR), which replaces the Precision Lightweight Global Positioning System Receiver.
- Force XXI battle command–brigade and below (FBCB2) system.

Soldiers learn to operate the onboard screen and control panel to work the sensors on the NBCRV, but the true test comes when Soldiers learn to deploy and employ their new equipment by operating sensors in a tactical environment of battlefield drills. From tabletop exercises (TTXs) conducted in the classroom to maneuvering exercises in the field, military occupational specialty 74D Soldiers gain a clear and precise understanding of how to conduct unit planning, preparation, and execution of complete, effective, and successful NBCRV missions.

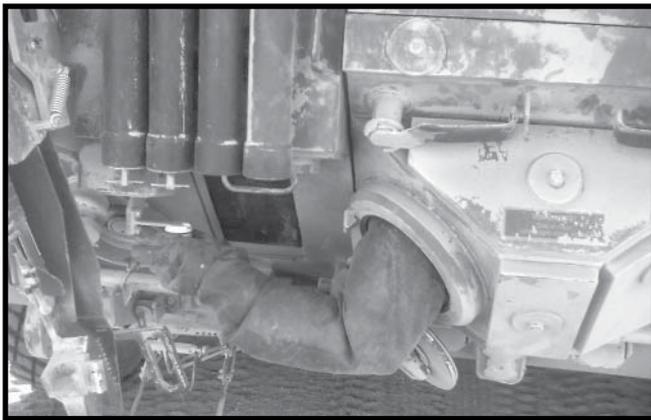
Phase II of DTT is taught concurrently with Phase I and covers leader training. During two days of training, commanders and surveyors plan, prepare, and conduct troop-leading procedures (TLPs) (see table below for sequence) and employ the NBCRV using TTXs. Meanwhile, drivers and assistant surveyors are busy in the field operating the NBCRV. The third day culminates with the entire platoon assembled to conduct TTXs (guided by facilitators).

When applying warning orders and intelligence preparation of the battlefield data, NBCRV crews are constantly using TLPs to ensure success in their missions. The sequence of TLPs varies based on tactical situations.

Crews conduct and execute numerous CBRN search and survey missions during field training exercises (FTXs) to gain greater insight and understanding of the sensors in the NBCRVs. The FTXs also deal with real-world problems (such as flat tires, brake failures, sensor malfunctions, and fuel and oil requirements).

Recently, a successful DTT took place at the Southern California Logistics Airport (SCLA) (the old George Air Force Base, which closed in December 1992) where Soldiers learned to deploy and employ NBCRV system capabilities and to confirm or deny the presence of CBRN

Sequence of Troop-Leading Procedures	
Sequence of Events	Action by NBCRV Platoon Leader
Receive mission.	Issue initial warning order. Perform mission analysis. Provide initial time analysis. Restate mission.
Issue warning order.	Issue warning order.
Make tentative plans.	Prepare estimation of situation and courses of action (COAs). Consider mission, enemy, terrain and weather, troops and support available, time available, civil considerations (METT-TC). Compare COAs.
Initiate movement.	Issue a warning, fragmentary, or movement order.
Conduct reconnaissance.	Perform reconnaissance when possible (terrain analyses are vital if the location will significantly affect the use of CBRNE weapon detection).
Complete operation plan.	Prepare operation plan or order.
Issue order.	Issue an operation or fragmentary order.
Supervise personnel.	Conduct rehearsals.
	Update intelligence and weather information.
	Execute mission.



Putting a cap on a sample bottle being prepared for shipment

hazards. Just as all military training must embody how-to-fight doctrine, the DTT provided actual battlefield drills and exercises—the vital “what-to-do” guidance to survive on the battlefield and in the current contemporary operational environment.

The U.S. Army Chemical School at Fort Leonard Wood, Missouri, is currently conducting instructor and key personnel training for NBCRVs to support the L6 institutional training course. Institutional training is scheduled to start in the second quarter of fiscal year 2008.

Traditionally, reconnaissance operations were self-taught tasks, gained by reading field manuals, mission

training plans (MTPs), combined arms training strategies, or distributed learning in virtual reality, scenario-based learning or other media programs. But NBCRV drivers, commanders, surveyors, and assistant surveyors must perform CBRN tasks to standard; or they will never know how to successfully complete a CBRN reconnaissance mission. Numerous real-world problems must be successfully acted upon by crew members to survive in the CBRNE operational environment of today. ●●

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Mr. Weinreis is a training specialist with the Maneuver Support Center, Capability Development and Integration Directorate, Requirements Determination Division, Combating WMD/New Systems Branch, Fort Leonard Wood.



Stryker NBCRV conducting a route reconnaissance mission at SCLA

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