

Chemical Battalion Deployment

—the 490th participates in REFORGER 88

As commander of the 490th Chemical Battalion, I led a player cell on a deployment from Anniston, Alabama, to participate in REFORGER 88. The 490th is a generic headquarters and headquarters detachment (HHD) designed to provide command and control over three to five chemical companies, which may be any combination of smoke, decon, or NBC recon. For this exercise we were assigned two active duty decon companies (11th and 51st), one reserve decon company (318th) represented by a player cell, and one reserve smoke company (326th) also represented by a player cell.

FM 3-101, *Chemical Staffs and Units*, states that the Corps chemical battalion HHDs command and control the majority of the corps chemical units. This held true in that, with the exception of organic divisional or regimental chemical units and the corps' NBCC, I was assigned the rest of the corps' chemical units.

While my downtrace was locked in early, several issues had to be resolved with how I received directions. Initial planning had placed me subordinate to a chemical brigade which, at the last minute, was deleted from the exercise.

Given the number of chemical companies available and the fact that we constituted the only chemical battalion, the command and control which the brigade could

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provide was not needed. However, an attempt to place us directly under the corps chemical sections was vetoed by the corps commander who did not want an independent battalion in the corps rear area.

Several possibilities were evaluated. One criterion was who wanted us, and the corps MP brigade was selected. Not only did this turn out to be a very workable solution, but the compatibility of missions proved to be mutually beneficial. The MPs were invaluable in solving communications problems and facilitating our movements to decon sites and smoke lines. We were able to provide quick response decon support and provided them a few new tricks in using flame field expedients (FFE) and smoke in the rear area protection (RAP) mission.

My tactical operations center (TOC) was collocated with the MP brigade TOC, and one active company with a reserve player cell was placed with each of two MP battalion headquarters. This geographical alignment permitted us to support the entire corps rear, with each unit having a planning mission to provide support forward to the deployed divisions/regiments. The units developed detailed decon-



tamination plans based on kasernes and local training areas throughout the corps area. Each plan established movement routes from the unit to the site with a fire support plan to help secure the movement. Each site was reconned and various configurations were planned to account for wind shifts.

Pre-decon staging areas, link-up points, flow patterns, return lanes, assembly areas, and water sources were all identified and included in the plans. Limiting factors were included and each site rated according to what it could accept at one time, for example, platoon, company, or battalion—wheels only or no restrictions. I also required the companies to develop a smoke and fire support plan for each site.

To ensure we had events to react to, indicators of possible Blue (we were Gold) use of chemical weapons was included in pre-exercise in-



490th Chemical Battalion officers observe the helicopter decontamination operation.



Members of the 11th Chemical Company (Decon) decon Jaguar tank killer (top) and a light ambulance.

telligence summaries. Simulated chemical attacks were used throughout the exercise to cause commanders to assume appropriate levels of MOPP and control battle flow. Non-persistent agents were simulated to slow attacking forces for a short time (20 minutes). Semi-persistent agents were simulated to force commanders into higher MOPP for 2-6 hours, and persistent agents were simulated to force commanders into higher MOPP for longer periods and/or to cause significant restrictions to battlefield movements.

The exercise area tested our ability to exercise command and control. The maneuver box and areas where we actually conducted operations required us to physically cover an area of 90x120 kilometers. During the exercise, we put over 4,000 kilometers on our command vehicle. Communication was dependent on the MP brigade TOC who supported us very well with RATT, TASS, and Bundespost (commercial) phone service. We could not talk directly to the companies, but had

to go through the MP battalion, each of which went well beyond the call of duty to help make it work.

As a by-product of being collocated with the MP brigade, we were able to insert ourselves into RAP planning to an unexpected degree. For example, one MP battalion had established its command post near the top of a ski lift. A few hundred meters from the perimeter was an air strip used by gliders. This ideal landing zone (LZ) was considered a major area of concern by the battalion commander.

The decon company commander, hearing the problem briefed at a staff meeting, suggested the use of FFE to restrict use of the LZ. A plan was prepared and simulated FFE emplaced with the firing wire laid to an OP/LP. The controllers expressed their agreement as to the effectiveness of FFE in this situation. Unfortunately, no Blue force attempted a landing and we were denied the thrill of knocking helicopters out of the air (simulated, of course).

This use of FFE was extended to other high threat LZ/DZ to enhance rear area security. With this foot in

the door, we were able to inject the use of smoke generators to cover other possible LZ/DZ with a smoke blanket—in effect creating artificial terrain for a Threat heliborne or airborne unit to deal with. This causes Threat aircraft to fly above or through the smoke. This can cause the aircraft to expose itself to air defense weapons or to risk hitting a concealed obstacle, and no sane pilot would enjoy trying to land in a smoke cloud.

In addition to assisting in RAP and providing concealment of decon sites, smoke was planned to cover a deliberate attack. We infiltrated our smoke generator company into forward positions to cover a river crossing operation. Given prevailing winds, we would have been able to screen approximately 30 kilometers of river, and the attack was to take place over an 8-kilometer front with an air assault onto an overlooking hill mass as the initial attack. The area proved to be so suited for an attack that the Blue forces executed one before we were able to.



A litter casualty is decontaminated by the 51st Chemical Company (Decon).

It ended up as an escape and evasion exercise for my smoke unit commander as he traversed some 20 kilometers while being chased by a variety of Blue forces. Not so good a story as "The Great Escape," it nevertheless was talked about for days!

The 11th Chemical Company (Decon) conducted a decontamination of CH-47 helicopters. The procedures used were IAW FM 1-102. However, the scenario had the Chinooks becoming contaminated from landing in a dirty LZ.

The wash/rinse technique in FM 1-102 does not touch the undercarriage or wheels which seem to be the points most likely to be contaminated. The actual effectiveness of this technique needs to be

addressed. The basic setup consisted of a staging area, a wash point, a second wash point, a rinse point, and a checkpoint. The movements of the CH-47s were controlled by a Pathfinder team that ensured the safety of the operation by remaining unmasked.

Originally, we planned to process ten CH-47s, but mission requirements reduced the number to six. They were scheduled to arrive at 10-minute intervals. The first came directly to washpoint 1 while the second moved into the pre-decon staging area. At point 1 a hot water wash simulated the removal of gross contamination and any dirt/mud covering it. The second point was again a hot water wash to remove the agent. Point 3 was clear water rinse, and point 4 was a check for completeness of decon-

tamination. If any helicopter had tested positive for the agent, it would have been recycled through the site.

One of the most impressive operations was conducted by the 51st Chemical Company (Decon) in support of an armored cavalry regiment. This mission required the company to move some 80 kilometers through heavy troop movements and link up with the regiment's NBC company. The unit successfully completed the move and made link-up with 10 minutes to spare. The site was established and was operational well before the scheduled time. The fact that the contaminated squadron got lost trying to reach the link-up site and that the decon operation never came off was the only damper on an otherwise successful operation.

The 51st Chemical Company also executed an operation in support of a medical group which required them to decontaminate patients, terrain, and critical medical items. The scenario had a medical unit self-contained transportable (MUST) module losing its overpressure and the patients being exposed to chemical agents.

The hospital team took immediate action to reestablish positive pressure and protect the patients. The decon company used its M12A1 PDDAs to decon the road from a selected decon point to the MUST. Patients were evacuated from the MUST to the decon site where both ambulatory and litter patients were decontaminated. The decon company cleaned up the MUST unit and decontaminated critical medical items as designated by the hospital commander, for example, heart monitors and a blood-gas machine.

The highlight of our decon operations was a joint mission with a German Panzer Division on their kaserne. This mission demonstrated our interoperability as the Germans conducted a personnel decon while the 11th Chemical Company ran an equipment decon. The operation was observed by a member of the British Parliament, which added an even more exotic flavor to the endeavor.

A special interoperability review team was also present as we decontaminated Leopards, Marders, and Fuchs. The mission was a success due to prior coordination between the divisional chemical officer and the commander of the 11th Chemical Company. The 11th was equipped with adapters for the German fire hydrants which made water supply a simple matter. A key lesson learned was the need to have an equipment expert on hand to point out the areas on unfamiliar vehicles where contamination was most likely to be deposited.



A German infantry fighting vehicle undergoes final rinse at decon site.

Overall, we successfully attained our training objectives in successfully providing command and control over smoke and decon units, during the high-intensity maneuvers of REFORGER 88. The basic principles in FM 3-101 proved to be sound and the programming of a chemical force structure into a theater based on the number of chemical companies is workable. The critical link between the chemical battalion and the originator of taskings, that is, the corps chemical section, must have an intermediate stage for those early situations before a chemical brigade is present.

The solution of using the MP brigade was, from my perspective, the best possible way of doing it. The fact that COL Hugh Z. Clark, commander of the 14th MP Brigade, turned out to be an outstanding leader was fortunate. Also, the geographical orientation of the MP

brigade facilitated my requirement to provide decon and smoke support across the corps rear area. All in all a very successful operation. ●●

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