

NBC Defense in the

—dynamics of the static arena

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Great strides have been made recently in NBC defense. New doctrine emphasizes contamination avoidance and hasty decontamination. NBC companies are being restructured to perform a dual mission — smoke and decon. New and better equipment, such as the M8A1 Chemical Agent Alarm and the Chemical Agent Monitor, have been or will be fielded in the near future.

The primary thrust of these developments has been to meet the NBC needs of a deployed corps. In most cases, activities forward of the corps rear boundary are dynamic, and NBC doctrine and equipment have been engineered accordingly.

Significant advances in NBC defense for mobile forces now allow the Army to turn its attention to a more static arena, specifically the European Rear Combat Zone/Communication Zone (RCZ/COMMZ). The 21st Support Command (SUPCOM), the Army's largest forward deployed logistical command, is responsible for supporting US corps and NATO elements operating in the RCZ/COMMZ.

The subject of NBC defense requirements in the RCZ/COMMZ can quickly end up in the "too hard" box, if we deal only with gross numbers. The following thumbnail sketch of the 21st Support Command gives the background information

necessary to understand the magnitude of NBC requirements in this key strategic area.

The command's responsibility stretches over 153,000 square miles and includes military installations in five NATO nations. Its primary missions include:

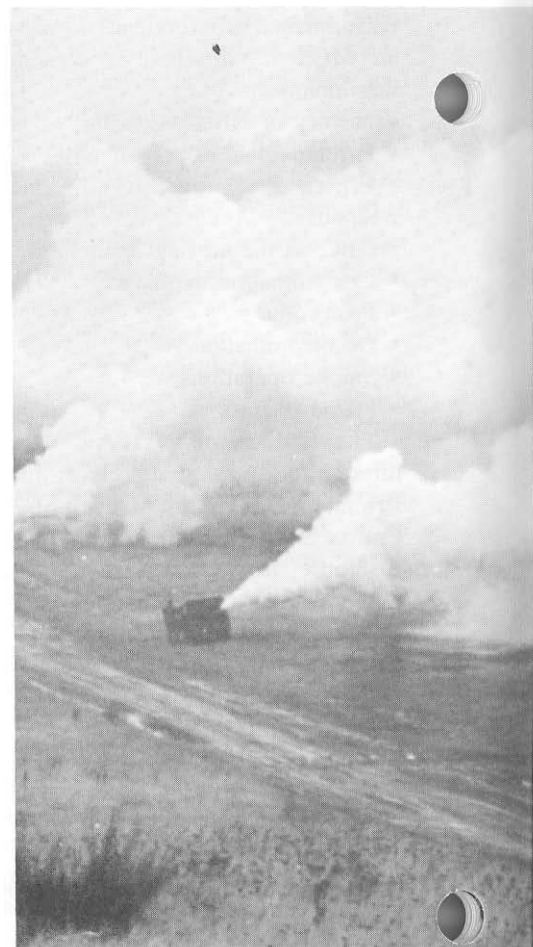
- Storing and maintaining prepositioned materiel configured to unit sets (POMCUS) valued at \$4.3 billion.
- Storing ammunition worth \$4.9 billion.
- Storing theater reserve stocks valued at \$4.7 billion at nine major sites and four subsites.

The 21st SUPCOM took the challenge of NBC defense in the RCZ/COMMZ out of the "too hard" box in 1983. Readiness at that time was hampered by the lack of definitive guidance on NBC warning and reporting, decontamination, and the employment of smoke. In addition, NBC funding and equipment procurement needed attention and host nation support had not been adequately evaluated. Most exercises, including those in the Return of Forces to Germany (REFORGER) series, had limited NBC play.

One of the 21st SUPCOM's first

major tasks was establishing an NBC Warning and Reporting System (NBCWRS). Normal lines of communication based on the chain of command failed to meet this goal. For example, the command's 95th

REFORGER exercises, including smoke operations, provide excellent training in NBC defense in the RCZ/COMMZ.



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Military Police Battalion headquarters is in Mannheim, West Germany, but has detachments as far away as Bremerhaven, 578 kilometers to the north. Other elements of the command disperse similarly.

Readers familiar with the organization of the 21st SUPCOM know that it is divided into area support groups (ASGs). Each of these ASGs contains area support battalions that will evolve from the major

communities throughout the theater. Herein lies the framework for an NBCWRS.

In 1984, the command published an NBC warning and reporting circular which was distributed to all non-21st SUPCOM units in the RCZ/COMMZ

and to all reinforcing units that would ultimately pass through the theater. The circular advises these units of the warning and reporting scheme for any given location. In addition, liaison was established with the German Territorial Command, a unit with a well-established NBCWRS. This coordination ensures timely exchange of information. The exchange occurs at various levels of command ensuring a good distribution of NBC event information. Similar efforts are underway with Belgium, the Netherlands, and Luxembourg.

Communications between 21st SUPCOM and the ASGs via telephone and radio teletype lack the rapid, accurate response needed for NBC defense. Research led to establishment of a dedicated TELEX system with terminals at the command and headquarters in Kaiserslautern, at other area support group, and at other selected locations in the 21st SUPCOM area.

Weather information is critical to NBC defense. The TELEX network also provides the vital link to the



USAREUR Staff Weather Office and gives 21st SUPCOM accurate, real-time weather data. Additionally, weather is received from the German military through their liaison element in the headquarters. Subsequent exercises have proved the worth of this system.

After ensuring rapid dissemination of NBC information, the command turned its attention to decontamination. The primary question was, "What assets beyond unit level are available to support the theater?" The current peacetime authorization is one decontamination company, the 10th Chemical Company in Kaiserslautern. Although that company is quite capable, the size of the command's area of responsibility requires additional assets.

The addition of wartime US elements and the Wartime Host Nation Support (WHNS) with Decontamination Asset Inventory—meet this

requirement. Within the Federal Republic of Germany, the WHNS establishes five strategically located decontamination battalions to support US forces in wartime. The German government actively pursues the equipping and manning of these units.

Moreover, all 21st SUPCOM units identified host nation assets in their areas of operation which could aid decontamination efforts. Assets identified include water sources (fire hydrant schematics, swimming pools, streams, and so forth), decon locations such as quarries (to minimize run-off problems), car washes, gymnasiums, and so forth. German military organizations and fire departments were particularly helpful in that respect because they had already developed a plan for identifying some of these assets. If the need arises for host nation assets, the request goes through existing liaison channels to the appropriate host nation agency for approval. In addition, the territorial armies have their own decontamination units which could

conceivably provide additional support.

Another requirement was to prepare NBC defense for the 21st SUPCOM civilian work force. A significant part of accomplishing the 21st SUPCOM mission depends upon these civilian employees. The command programmed and received the funds necessary to purchase contingency stocks of chemical defense equipment for its emergency-essential Department of the Army civilians and local nationals. This equipment is now on hand.

The command was the first in Europe to initiate and complete annual NBC defense survival skills training for its DA civilians. Efforts are also under way to include civilians in readiness exercises. The command is also prepared to train emergency-essential local nationals before or after mobilization.

REFORGER exercises provide an excellent opportunity to conduct military training pertinent to successful NBC defense in the

The 10th NBC Chemical Company is shown in action during REFORGER 86. Host nations provide additional support.



RCZ/COMMZ. The 21st SUPCOM has conducted recovery exercises involving corps customers uploading ammunition at a 21st ammunition supply point and with REFORGER troops conducting marshalling area operations after a POMCUS draw. The units used the NBCWS to report attacks and to request decontamination support from the 21st SUPCOM.

Chemical agent simulators (M9 SPAL) were used to initiate attacks during the REFORGER 86 recovery exercise. Affected units conducted detection and decontamination operations and requested assistance from the marshalling area control group. After the request was forwarded through the ASG to HQ, 21st SUPCOM, the 10th NBC Chemical Company (Decon) responded and assisted the unit in its troop decon and conducted equipment decon of contaminated vehicles. The decon operation was covered by smoke as well.

Smoke operations were conducted in REFORGER 84, 85, and 86. The most ambitious exercise was REFORGER 86. The 6900th Civilian Support Group employed smoke to cover unit activities in marshalling areas following POMCUS issue. In one area, a field artillery battalion's activity was screened; in another an entire main support battalion's marshalling area activity (several hundred vehicles and trailers, and 30 GP medium tents) was screened. Additionally, dummy screens were employed. Subsequent aerial and ground photography showed the complete value of smoke screening in marshalling area operations.

The RCZ/COMMZ has a great variety of facilities and activities which can benefit from smoke operations. Airfields, ports, POMCUS sites, theater reserve stocks, and marshalling/staging areas are representative of the excellent smoke candidates in the theater. The 21st SUPCOM has developed smoke usage procedures and deployment plans for

In addition to decontamination and smoke assets.

REFORGER units.

The command, in conjunction with the German Territorial Southern Command, has developed a series of joint decontamination exercises to give territorial units practice in decontaminating US forces equipment and personnel. This important exercise exposes the host nation units (a significant part of our rear area decon assets) to the peculiarities and differences of US equipment versus German equipment. For example, one of the steps in the German personnel decontamination station's operation calls for removal and immersion of the protective mask in a decontamination solution. This works well with the German canister type mask, but would render our masks ineffective. These exercises improve the interoperability of NATO units in NBC defense. The first of these exercises was conducted in June 1986.

NBC defense is dynamic and successes in one area highlight needs in others. Of particular concern are the NBC defense requirements of the numerous fixed facilities located throughout the RCZ/COMMZ.

NBC defense at fixed sites receives increased emphasis, not only at the support command level but also at the Department of the Army and the Department of Defense. The 21st SUPCOM provides representative maps and drawings of critical installations to the Training and Doctrine Command and to the US Army Chemical Center and School, Fort McClellan, Alabama. These agencies, in conjunction with the Combat Research, Development, and Engineering Command, and the 21st SUPCOM, plan on-site evaluations to determine what is needed to develop detection, warning, and collective

protection systems for fixed-site wartime facilities.

Meanwhile, the 21st SUPCOM initiated its own pilot program of collective protection using existing US Army doctrine and materiel. Lessons learned with this program should improve subsequent collective protection efforts.

Other areas in which the command expects to be the test bed include large-scale equipment decon/tamination, chemical agent-resistant covers, collective protection device employment, computerized hardware and software for the NBCWS, and noncorrosive decontaminants.

The 21st SUPCOM has made significant progress in NBC defense in the RCZ/COMMZ, but the continuing challenge in the rear area demands the attention of the entire chemical community. Success in the air-land battle hinges on the execution of the command's missions of reception and onward movement of reinforcing units, and supply and maintenance activities. Airfield and port operations, vehicle and equipment maintenance, must continue even in an NBC environment.

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