

Chemical Battalion Support in the CENTCOM Area of Operation

By Major Antonio Amos

Unit deployments are very demanding events that are stressful for both the units and family members. Planning ahead can alleviate stress and, more importantly, ensure that your unit is well prepared to perform its mission. Bottom line: Don't wait until a deployment to get your unit ready. Create a generic deployment timeline (X-hour sequence) that covers all critical events that lead up to a deployment. The timeline should include family support briefings, mandatory training, soldier readiness processing (SRP), deployment ceremonies, maintenance checks, vehicle and equipment loading, and family time.

This article describes some of the actions taken by the 83d Chemical Battalion, Fort Polk, Louisiana, for its deployment to the United States Central Command (CENTCOM) area of operation. It is intended to serve as a guide for future chemical unit deployments.

Predeployment Planning

Planning for the battalion's operations in Southwest Asia began in mid-December. The battalion staff had completed a three-day orders drill under the tutelage of the Joint Readiness Training Center's Leadership Training Program in November, so we were grounded in the fundamentals of the military decision-making process (MDMP). Although the battalion still had not received a deployment order, it was clear that it would deploy. The battalion had obtained Combined Forces Land Component Commander (CFLCC) planning documents, which indicated that we had a full spectrum of units to task-organize, including the Biological Integrated Detection System (BIDS), the M93A1 Fox NBC Reconnaissance System, heavy decontamination, and smoke units. The problem was that there was no brigade or other intermediate operations plan to guide our orders production process. After two days of considering different approaches to plan development, we decided that the classic MDMP framework was the best way to approach the tactical problem.

The battalion pursued two broad courses of action to

support Operation Enduring Freedom (OEF) and eventually Operation Iraqi Freedom (OIF). These were assigning tasks to pure companies or task-organizing company teams. In developing the plan, there were no preconceived notions as to which course of action would be chosen. After analyzing the CFLCC's priorities of nuclear, biological, and chemical (NBC) support, force flow projections, and the assets already in theater, the S3 began to array forces. Units were broken into their lowest operational element, such as decontamination platoons, smoke platoons, BIDS teams, and Fox squads. Next, these elements were positioned at critical nodes based on stated priorities. Once this was complete, a Battlefield Operation

System Simulator crosswalk was conducted to assess survivability, sustainability, and communication. From this analysis and the ensuing war games, it became clear that the best means to command and control the squads and platoons was as company teams. The battlefield geometry of the battalion's area of operation and mission indicated that to support the primary key nodes, we should build multifunctional teams composed of chemical surveillance/reconnaissance, biological surveillance, and decontamination assets.

Personnel Actions

Pending deployments always tend to bring personnel problems to the surface. Single-parent households without family care plans; sick family members; and pending divorces, weddings, and

Predeployment Preparation Checklist

- Identify deployable and nondeployable personnel.
- Report personnel shortfalls to your higher headquarters.
- Ensure that all deployable personnel have a viable family care plan.
- Remember that shifting personnel will alter your rating schemes.
- Identify a rear detachment that includes a competent chain of command that can effectively—
 - √ support rear-detachment soldiers and family members.
 - √ provide assistance to deployed soldiers.
- Identify equipment shortfalls.
- Ensure that all shortages are on order.
- Publish a packing list as soon as possible.
- Ensure that soldiers comply with the packing list.

childbirths are just some of the issues that bring into question a soldier's deployment status. The personnel section kept an updated by-name manifest of all deploying soldiers. However, this list kept changing due to the frequently changing status of many soldiers.

After developing a deployment roster and identifying the rear detachment, the battalion conducted a family readiness group predeployment briefing on topics such as health care, finance, wills, powers of attorney, and child care. The predeployment briefing was very helpful for soldiers and spouses prior to conducting SRP.

SRP gave soldiers an opportunity to take care of medical, dental, legal, administrative, and financial matters. Coordinating for SRP was easy. It was difficult, however, to keep track of immunization records when some soldiers missed the SRP date. The installation G1 also developed a new procedure to validate SRP packets that involved a lot of red tape. Unfortunately, the battalion wasn't aware of the new procedures and had to make late-night and last-minute adjustments. Also, many soldiers failed to take care of personal issues such as updating their records. And when the battalion arrived in country, we were surprised by the fact that all personnel actions had to go through the home station. Without updating records, soldiers run the risk of pay problems and promotion discrepancies because of poor connectivity between the deployed unit and the home station. Tracking and submitting personnel status (PERSTAT) reports went very well because the reports were set up early, making the status easy to track. Getting in touch with our higher headquarters before deploying and getting a copy of its PERSTAT format was a big help.

Unfortunately, some processes did not go very well. The battalion headquarters was ill-equipped to deliver mail to units that were spread out over vast distances. The rating chain for Officer Evaluation Reports (OERs) and Noncommissioned Officer Evaluation Reports (NCOERs) was also unclear. The deployment order never established whether the battalion's higher headquarters during deployment would take the place of our parent brigade to process awards, OERs, and NCOERs. The battalion personnel section also had to go through the Personnel Support Battalion at Fort Polk to process personnel actions. The S1 section had to rely heavily on fax, e-mail, and telephone calls to process personnel actions. Fortunately, the battalion rear detachment was extremely helpful in lending assistance and alleviating problems.

Advanced Echelon Operations

In mid-January, the first element deployed from the battalion. This advanced echelon (ADVON) was composed of the battalion S3, the assistant S3, the S4 noncommissioned officer in charge, a company executive officer (who had redeployed from Kuwait in August), a

company supply sergeant, a driver, and a communications specialist. The overarching mission of the ADVON was to get movement on some key areas that were essential to the battalion's ability to quickly receive passengers and equipment, stage, and begin mission execution. Deployment of the ADVON proved valuable because many prerequisite tasks were handled before the arrival of the battalion main body:

- Obtaining maps and satellite imagery of mission areas
- Identifying and initiating coordination to obtain access to communications resources in theater
- Identifying procedures to initiate/continue required immunizations
- Reviewing recent planning documents and adjusting the battalion plan as necessary
- Initiating coordination with all supported units and conducting initial reconnaissance of the mission
- Obtaining approval of the battalion's operational concept
- Establishing supply accounts
- Identifying theater stockages of key NBC defense supplies
- Establishing maintenance support relationships

The ADVON arrived in theater just ahead of the "bow wave" of forces that began in early February. During this time, the ADVON established relationships with points of contact throughout Kuwait, which proved invaluable as the battalion conducted reception, staging, onward movement, and integration throughout the deployment. Execution of the ADVON tasks also allowed the battalion to focus its efforts on receiving and staging equipment with minimum friction associated with becoming established in a new area of operation. Additionally, since the battalion tactical plan had been staffed and approved already, the formal operations order briefing was given 24 hours after the main body arrived, providing maximum planning time to the companies.

While ADVON operations were valuable, one significant improvement could have been made—the inclusion of two high-mobility, multipurpose wheeled vehicles (HMMWVs) in the ADVON flow to facilitate reconnaissance and supply operations.

Mission Execution/Task Organization

As discussed previously, war gaming and predeployment planning indicated that the company team was the best way to employ the battalion's assets during OEF/OIF. The success of this concept validated our concept of deploying multifunctional teams in chemical, biological, and radiological defense. The argument can be made that this is not a new concept, but the difference

here is the placement of Fox vehicles and BIDS under a non-like-type headquarters. Over the past year, the battalion had worked hard to sell the idea that BIDS platoons can be effectively commanded and controlled by something other than a BIDS company headquarters. This is probably attributable to the fact that biological surveillance technology is still relatively new and unfamiliar to most in the Chemical Corps, which may lead to a conservative approach to asset employment.

An additional benefit of this approach has been the tremendous development of leaders at all levels by forcing them out of their comfort zone of leading soldiers to execute their familiar lines of NBC operations. This was not easy. A great deal of training, back briefs, and rehearsals was required at every site to train soldiers and leaders to leverage the multiple capabilities available to them. Likewise, there were inevitable differences in tactics, techniques, and procedures and leadership styles. Simple personality conflicts sometimes arose from combining soldiers and leaders from as many as four different companies. In the end, these conflicts were worked through and resolved. Four months of continuous operations and dozens of fragmentary orders confirmed that the company team concept works. Simply put, it puts the right assets at the right place at the right time—with a clear chain of command.

With the success of OIF ground operations, the battalion altered the task organization based on requirements to position forces farther north. Each shift required a new round of mini-war games and course-of-action comparisons. The difficulty of making these adjustments was eased somewhat by the arrival of additional decontamination assets in theater and the decreasing Iraqi capability to attack southern locations with weapons of mass destruction as the coalition advanced north and Patriot coverage proved impenetrable.

While the battalion's approach to unit task organization has proven successful, implementing sustainable command and support relationships was a significant challenge, particularly during offensive preparations and early in offensive operations. The austere structure of the chemical battalion headquarters and headquarters detachment, and the great distances that separated units, made logistics support an ongoing challenge. Although there are considerable advantages to chemical task organization structures, these advantages can be offset if unit readiness cannot be sustained. Doctrine provides the solution to this problem. Units can be placed in a direct support, general support, or operational control role and still receive some or all classes of supply from the supported unit. Too often, staff officers unnecessarily place themselves in a doctrinal



Chemical company team operations in Kuwait

box by limiting unit command and support relationships to those found in Figure F-1 of Field Manual 101-5, *Staff Organization and Operations*, when doctrine actually provides for much greater flexibility. Appendix F of this manual states that “definitions of command and support relationships do not always cover every situation.... Specific support tasks must be listed above the accepted doctrinal definition of a command and support relationship.” Unfortunately, we found these specific support tasks to be rarely listed, and even when they were, they were often ignored. Fortunately, these relationships were worked out over time, and all units remained fully mission capable throughout the operation.

Chemical Battalion Viability

Based on the experiences of Operation Desert Storm, OEF, and OIF, arguments can be made for and against the efficacy of battalion and brigade chemical headquarters structures in combat. OIF force flow did not support inclusion of a brigade-level chemical headquarters until after organized resistance across Iraq was destroyed, so assessment of brigade command and control is not possible. Further, there is probably some bias as to the value of the chemical battalion headquarters structure. With that said, this battalion's experience and observations during OIF indicate that the chemical battalion headquarters remains a valuable command and control structure. The chemical battalion headquarters is focused on the command and control of chemical units, ensuring a holistic approach to chemical unit employment. This approach typically leads to the most efficient employment of scarce assets. In contrast, chemical staffs are primarily designed and resourced to advise commanders. While chemical staffs monitor the status and location of subordinate chemical units, they are simply

not manned or otherwise resourced to command and control multiple chemical units.

Once operations were under way, disposition of the assets under the battalion's control was routinely assessed, and adjustments were made as operations progressed. It was not always clear that this level of planning and consideration was involved in determining the employment of chemical units across the area of operation, and it appeared that there were instances when units task-organized elsewhere in theater were not used to their full potential. In one case, a Fox-equipped platoon remained in an assembly area 90 kilometers from Iraq as friendly forces attacked north into the infamous Baghdad "Red Zone," which was the suspected trigger area for Iraqi chemical weapons use. Similarly, a BIDS platoon was tasked to provide surveillance 40 kilometers to the rear of combat forces as they postured in tactical assembly areas along the Iraqi border awaiting line of departure. While the precise rationale for these employment decisions is unknown, it seems likely that better use would have been made of these units if they had been placed under a dedicated battalion headquarters.

Command and Control

Using a chemical battalion headquarters to command and control chemical assets as they spread across the battlefield was very challenging. The battalion's decision to employ assets using company teams presented monumental challenges to the battalion's ability to communicate with those assets. The standard company team was composed of decontamination, NBC reconnaissance, and biological surveillance assets. The mixture of communications assets and capabilities gave the battalion the flexibility to use redundant communications linkages. Each BIDS team was equipped with an

AN/GRC-193 radio with a planning range of 300 to 500 kilometers, which allowed the battalion to communicate with company teams over great distances. Since the battalion headquarters was not equipped with an AN/GRC-193, the battalion acquired one for use in the tactical operations center.

The distribution and use of secure fills for the Single-Channel, Ground-to-Air Radio System (SINCGARS) was also a challenge. When a company team was assigned to another higher headquarters, it received the fill from that headquarters. That eliminated the battalion's ability to communicate via frequency modulated (FM) radios unless it switched to its fill. In any case, the amplitude modulated (AM) AN/GRC-193 radio was the battalion's best long-range asset.

AM versus TACSAT

Although the AM radio was the battalion's best long-range communications asset, tactical satellite (TACSAT) communications, because of its reliability and range, is always preferable to AM radios. Although AM communication has a planning range of 300 to 500 kilometers, distances of 3,000 kilometers-plus have been achieved. The frequency range of AM radios is from 1.6-29.999 megahertz. Each frequency in this range has an ideal transmission environment.

During OEF/OIF, the battalion was able to establish only intermittent AM communications with its units. Some frequencies work best during the day, others work best at night. Some that transmit well with heavy skies cannot be used with clear skies. To effectively use AM communications over long distances, you need a wide spread of frequencies to account for the changes in environmental conditions. However, frequency availability was a huge problem. During OEF/OIF, AM communications was

heavily used by commercial and private venues because of the distances between unit locations. The battalion signal officer was eventually able to obtain a wide range of AM frequencies to ensure reliable AM communications through diverse weather conditions. The battalion learned that it is necessary to coordinate with local frequency managers well before deployment to get a good spread of frequencies.

TACSATs such as Spitfires can be used with greater ease in changing environments. Once the antenna is pointed to the right azimuth and the equipment locates the necessary satellite, you have a virtually unlimited communication range.



BIDS operations in Iraq

Mountainous terrain, which can block your view of satellites, and stormy weather are the only factors that may interfere with transmissions.

Although TACSAT communication is far more reliable, it is also harder to acquire. Satellites have a limited number of signals that can transmit at any one time. Getting satellite time keeps many units from using TACSAT. With the high value placed on satellite time, only extremely high-priority units with a need for long-range communication can usually gain access. Tactical commanders must realize that during a time of high chemical and biological threat, the mission of chemical units is a high-priority mission that requires the allotment of TACSAT equipment and satellite time accordingly.

Multiple Net Requirements

The ideal operational environment has several nets assigned to the battalion—one command net for each company, and one net per platoon. This breakout limits unnecessary traffic on each net and provides for clear lines of communication from commanders to their subordinate units. During OEF/OIF, FM frequencies were hard to get. As a result, each company and the battalion headquarters had only one net available to them, which required following strict radio discipline. Strict radio procedures were developed at the company level to ensure that lines were free for operational traffic.

Communications Zone Operations

The mission of chemical units in any communications zone is planned around a need for reconnaissance in those areas and not on the range of their communication. This can pose a serious problem for both chemical and biological detection units. BIDS platoons have AN/GRC-193s in all of their vehicles, so their effective range of communication (taking environmental factors into account) is about 300 kilometers. But as mentioned before, this range can vary greatly. Even Fox units are equipped with only SINCGARS, giving them an effective range of 35 kilometers.

Fox units are often put at a disadvantage on reconnaissance patrols that skate on the edge of their FM range. Unless they are provided with retransmit capability by the unit they've been attached to, they must often find alternate means to talk back to their command posts. The need for NBC Fox reconnaissance assets to report the timely confirmation or denial of chemical agents employed on the battlefield magnifies the need for long-range communications.

To remedy this situation, alternate long-range communication assets must be acquired or allotted to these units. Ideal secondary sources of long-range communications are secure cell phones or secure Iridium satellite phones. During OEF/OIF, many units used Smart

Phone zone radios as an effective form of secure, redundant communication. Repeaters spread throughout Kuwait gave these Smart Phones border-to-border range, which proved useful for in-country operations. Since there is currently no mobile subscriber equipment in southern Kuwait, Smart Phones are not only an effective means of reconnaissance reporting but also of reporting from companies to higher headquarters. The battalion also installed the Force XXI Battlefield Command—Brigade and Below (FBCB2) System in five Fox vehicles and a command HMMWV during the deployment. This gave the battalion the ability to track assets real time and allowed units to view the common operational picture.

Predeployment/Deployment Logistics Considerations

Once the 83d Chemical Battalion received notification of deployment, a preplanned timeline immediately went into effect, which was critical in keeping units on track during equipment uploading, pallet building, Unit-Level Alert Control Center (ULACC) operations, and household goods and privately owned vehicle (POV) storage. Simultaneously, automated unit equipment lists were turned in to the installation transportation office (ITO) to build deployment equipment lists, which in turn were used to initiate Level 4 time-phased force deployment data for air and sea transportation.

Equipment Uploading

It was important to ensure that each company deployed with specified classes of supply. If we were deploying to an immature theater, it would be necessary to plus up (120 days) Class II office supplies, Class IX prescribed load list and repair parts, and Class XI personal hygiene items. Since the battalion used commercial equipment, such as lamps and printers that take commercial bulbs and ink, the battalion S4 attempted to acquire a four-month supply of these items. However, they were hard to come by in country, and shipment time from the states took several weeks.

The S4 coordinated with personnel at the seaport of debarkation (SPOD) to brief unit movement officers on the specifics of SPOD operations, uploading containers, and support and dunnage requirements of containers. Coordination was also made with the ITO to brief the unit movement officers on the specifics of aerial port of debarkation (APOD) operations and uploading ammunition, supplies, baggage, equipment, and weapons, that would accompany the troops.

Pallet Building

Units were stocked with a consolidated list of pallet-building materials from the ITO. The following materials were needed for one pallet:

- 1 463L pallet
- 8 cardboard deployment systems with covers
- 1 roll of bubble-wrap
- 1 roll of shrink-wrap
- 1 cargo net
- 2 rolls of tape

ULACC Operations

This process validated equipment for air and sea transportation before convoy operations to the SPOD. There are four areas within the ULACC that must be checked—maintenance, secondary load, weighing and taping vehicles, and hazardous material (HAZMAT)—before a vehicle is validated and certified as fit for transportation overseas.

The process started with organizational maintenance. The maintenance team validated each piece of rolling stock and major end item. If 10/20-level faults were found, deficiencies were fixed on-site. The battalion also coordinated for direct-support-level maintenance. If deficiencies were found, they were corrected on-site as well.

We coordinated with the ITO for secondary load verification and weighing and taping vehicles for deployment equipment list validation. During the secondary load verification process, the ITO ensured that all secondary loads were properly loaded, with dunnage and shoring materials securing the load. All rolling stock was weighed and taped to ensure that the equipment was within height and weight specifications for the type of airframe or ship.

The ITO verified all HAZMAT paperwork for correctness before posting the documents and warning placards to the respective container. The unit HAZMAT personnel carried a complete set of documents during movement in case the SPOD operations had any questions concerning the contents of containers. Once HAZMAT was verified, the validation process for that container or rolling stock was complete.

Household Goods Storage

The S4 coordinated with the ITO for a unit consolidated household goods brief. The battalion scheduled packing and pickup dates, by unit, a couple of days before validated airflow time of movement through the APOD.

POV Storage

The S4 also coordinated with the point of contact for the installation consolidated POV storage lot point for proper paperwork for storing vehicles. A date was scheduled one day before validated airflow time of

movement through the APOD. If your installation does not have a consolidated POV storage lot, contact the installation military police/physical security department for details on how to construct a unit-level storage lot.

Husbanding Chemical Assets

It is critical that chemical leaders at all levels take responsibility for chemical units operating in the battlespace. Too many times during our deployment, there was a “hands-off” approach to husbanding resources coming to this area of operation. For example, this headquarters provided vehicles and other assets to our war-traced units because it was the right thing to do, regardless of whether the units were task-organized to the 83d Chemical Battalion or not. Until we as a Corps start to look out for all our assets, we will continue to allow chemical units to wander around the battlefield without the proper guidance or mentorship. Additionally, we should not become so wedded to the execution of the operation plan. In my view, our chemical staffs at all levels—from the chemical battalion up to the CENTCOM levels—were tied into fighting the plan, not fighting the conditions or the enemy. While my view may be jaded as a chemical battalion commander, we did not do many things that would ensure our success. Examples of some of the things I would change are listed below:

- Chemical staffs and commanders should have conducted back briefs and rock drills to ensure that we met the CFLCC’s intent for employment of chemical units. This was even more critical because we did not have a chemical brigade to interface with the higher-level command headquarters.
- Higher-level staffs tended to micromanage commanders instead of providing a task and purpose for each mission. This was also tied to the lack of a higher-level command and control headquarters. But in my view, it was tied to the continued execution of OEF and deployment of assets for that operation.

Even with the operational challenges, the NBC architecture worked. We know what we need to do to improve in our respective staffs and commands. Our requirement as leaders is to take this organization as a “way forward” to improve our systems and capabilities.

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