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U.S. Army
Chemical, Biological, Radiological, and Nuclear School
(573) XXX-XXXX
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COMMANDANT

COL Vance P. Visser 563-8053
<vance.p.visser@us.army.mil>

ASSISTANT COMMANDANT

COL Jeffrey Brodeur 563-8053
<jeffery-brodeur@us.army.mil>

CHIEF OF STAFF

LTC Brant Hoskins 563-8052
<brant.hoskins@us.army.mil>

REGIMENTAL COMMAND SERGEANT MAJOR

CSM Gabriel S. Arnold 563-6133
<gabriel.s.arnold@us.army.mil>

DEPUTY ASSISTANT COMMANDANT- ARMY RESERVE

SGM Richard Lamy 563-4026
<richard.lamy@us.army.mil>

DEPUTY ASSISTANT COMMANDANT-NATIONAL GUARD

MAJ Javid Heravi 563-7676
<javid.heravi@us.army.mil>

3D CHEMICAL BRIGADE

COL James Bonner 596-0016
<james.bonner@us.army.mil>

DIRECTORATE OF TRAINING AND LEADER DEVELOPMENT

COL Nate Farmer 563-4111
<nathaniel-farmer@us.army.mil>

PERSONNEL DEVELOPMENT OFFICE

SGM Montonya Boozier 563-7691
<montonya.boozier@us.army.mil>

CHEMICAL DEFENSE TRAINING FACILITY

Mr. Daniel Murray 596-0608
<daniel-murray@us.army.mil>

CHIEF OF DOCTRINE

MAJ Andrew Reichert 563-8189
<andrew.reichert@us.army.mil>

G-37 AT-PUBLICATIONS

Managing Editor, Diane E. Eidson 563-4137
<diane.eidson@us.army.mil>

Editor, Diana K. Dean 563-5004
<diana.k.dean@us.army.mil>

Editorial Assistant, Phyllis E. Grayson 563-7651
<phyllis.grayson@us.army.mil>

Graphic Designer, Kathryn M. Troxell 563-5267
<kathryn.troxell@us.army.mil>

Contributing graphic designer, Jennifer Morgan

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By Order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:



JOYCE E. MORROW
Administrative Assistant to the
Secretary of the Army
1210010

ARMY CHEMICAL REVIEW

THE PROFESSIONAL BULLETIN OF THE CHEMICAL CORPS
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Front cover—Regimental Command Sergeant Major Ted A. Lopez hands Colonel Vance P. Visser the sword during a change of responsibility ceremony.

Back cover—U.S. Army Chemical Corps “Step Out of the Ordinary,” designed by Dennis Schellingberger.

Chief of Chemical and Commandant, U.S. Army Chemical, Biological, Radiological, and Nuclear School



Colonel Vance P. Visser

Fellow Dragon Warriors:

What an incredible and dynamic 6 months it has been for our Army and our Regiment. Last December, we completed major operations in Iraq. And while it is great to have that mission behind us, it is sobering that we lost several thousand men and women—and that an even greater number were wounded—in action. When I drafted this article, 22 members of our Regiment had fallen in battle. We will never forget their sacrifices. We are also continuing to conduct operations in Afghanistan, and members of our Regiment are embedded in units throughout the country. This remains a volatile area; please keep all of our deployed teammates in your thoughts and prayers.

Along with ongoing combat operations, members of our Regiment are simultaneously preparing for and executing duties in support of Homeland defense. As many of you know, our Reserve Component forces have been a part of the chemical, biological, radiological, and nuclear response enterprise (CRE) for several years. Regular Army chemical, biological, radiological, and nuclear (CBRN) forces are now sourced as a part of the CRE (as the defense chemical, biological, radiological, and nuclear response force [DCRF]; as command and control chemical, biological, radiological, and nuclear response element [C2CRE] A; or as C2CRE B). The U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS) is working with the Homeland Defense/Civil Support Office at the Maneuver Support Center of Excellence (MSCoE) to find and implement the best possible manning, training, and equipping strategies to ensure that our team is ready when called.

In the last few months, we completed a very successful Chemical Brigade Training Council and Senior Enlisted Leader Forum here at Fort Leonard Wood. The output is serving us well as we continue to work with MSCoE; the U.S. Army Training and Doctrine Command (TRADOC); and Headquarters, Department of the Army, on the development of the Army of 2020, the Army Capstone Concept, the Army Operating Concept, and a number of experiments that will shape the Army and our Regiment for years to come. We will continue to provide updates on developments from these initiatives in the months ahead.

I would like to welcome Command Sergeant Major Gabriel Arnold, who became our 12th Regimental Command Sergeant Major at a 26 April 2012 ceremony at Fort Leonard Wood. Regimental Command Sergeant Major Arnold, his wife Viviane, and their three children join us from his recent posting as the command sergeant major of Area Support Group 1, Camp Henry, Republic of Korea. Regimental Command Sergeant Major Arnold has a wealth of leadership experience gained from assignments ranging from squad leader to command sergeant major in a variety of CBRN and non-CBRN assignments. We are truly fortunate to have a seasoned noncommissioned officer of his caliber at the helm of our Regiment.

Following are updates on some of our Chemical Regiment initiatives:

- **Stryker Nuclear, Biological, and Chemical Reconnaissance Vehicle (NBCRV).** In December 2011, the Under Secretary of Defense for Acquisition, Technology, and Logistics authorized the full-rate production of the Stryker NBCRV system. A total of 274 of these systems will be fielded across the three Army components and the USACBRNS. Initial fielding has occurred at Joint Base Lewis-McChord, Washington; Fort Hood, Texas; and Korea; full fielding to the Regular Army is tentatively scheduled to be completed in fiscal year (FY) 2015. U.S. Army Reserve and Army National Guard forces can expect fielding to begin in FY 15.
- **Hazmat technician certification.** During 2d Quarter, FY 12, the 84th Chemical Battalion executed a Military Occupational Specialty 74D advanced individual training pilot on 14 training modules. The focus was on hazmat, decontamination, biological, and radiological operations modules. In addition, a program of instruction validation was executed on the Basic Officer Leader Course. The ultimate goal is to incorporate hazmat technician certification training into the core curricula beginning with the first classes of FY 13. Soldiers who complete this training are programmed to receive certification up to hazmat technician with International Fire Service Accreditation Congress accreditation standards.

- **One Army School System.** In an effort to standardize professional education across the Regiment, USACBRNS—in conjunction with the U.S. Army Reserve and the Army National Guard—is launching the TRADOC One Army School System Implementation Plan well ahead of the TRADOC-designated 1 October 2015 target date. This initiative will standardize programs of instruction for professional courses (Military Occupational Specialty–Transition, Advanced Leader Course, Senior Leader Course); allow for the sharing of resources (instructors and facilities) among the components; and enable Soldiers from all components throughout the Regiment to receive a standardized, professional education.
- **CBRN Force Design Update.** Throughout the past 18 months, USACBRNS—in conjunction with MSCoE—developed a CBRN Force Design Update that, if approved, will modify the Regiment’s structure to address gaps in our capacity to execute hazard assessments and characterizations during decisive actions. Highlights of the Force Design Update include increasing the number of chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE) (formerly technical escort) companies from six to 11 and standardizing the design of battalion headquarters across the Regular Army and Reserve Components. The Force Design Update is currently being staffed worldwide and is tentatively scheduled to be presented to the vice chief of staff of the Army for a decision in November 2012. For questions or further details, contact Lieutenant Colonel Kevin Kugel at <kevin.kugel@conus.army.mil> or Mr. Larry Lazo at <larry.lazo@conus.army.mil>.

During the past few months, I have had the opportunity to speak with many of you about preparing for selection boards; I would like to address this issue again. The Army is shrinking and becoming more selective in all areas, including the areas of reenlistment, education, promotion, and nominative assignments. For you—as individuals and leaders—to remain competitive, you must actively manage your professional affairs. You must maintain a current official photograph, you must ensure that your officer or enlisted record briefs are accurate and up to date, and you must review and certify board files when you are within zones of consideration. The management of your official file requires your personal attention.

We look forward to seeing many of you at the Home of our Regiment for the CBRN Conference 26–28 June 2012 (see page 18). There are a number of great events planned, and the engagements are sure to be personally and professionally rewarding. Registration is available at <http://www.wood.army.mil/wood_cms/usacbrns.shtml>.

Thank you for the sacrifices that you make every day in the cause of freedom. It is an honor to be a part of your team.

Elementis Regamus Proelium!



The graphic features the words "Army Values" in large, bold, blue letters on the left. To the right, a list of values is arranged in a descending staircase pattern: Loyalty, Duty, Respect, Selfless Service, Honor, Integrity, and Personal Courage. On the far right is the official seal of the Department of the Army, United States of America, featuring a central figure with a sword and a shield, surrounded by the text "DEPARTMENT OF THE ARMY" and "UNITED STATES OF AMERICA" with the year "1775" at the bottom.

Regimental Command Sergeant Major

Greetings to the chemical, biological, radiological, and nuclear (CBRN) community!

I am honored and humbled to serve as your 12th Regimental Command Sergeant Major. My wife Viviane and I are excited about the opportunity to work for CBRN Soldiers, Civilians, Retirees, and Family Members. And to be clear, I work for you—not the other way around.

My mission and vision are the same as those outlined by the Chief of Chemical in the Chemical Corps Regimental Campaign Plan. I encourage all CBRN Soldiers and leaders to read and understand the Regimental Campaign Plan, including the five lines of effort from which we will operate. This information can be accessed by visiting the U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS) Web site at http://www.wood.army.mil/wood_cms/usacbrns.shtml; clicking on the *CKN CBRN Knowledge Network Website* button; and selecting the “Regimental Campaign Plan FY 11–12 (Final—19 Jan 2011)” link. A common access card (CAC) login is required.

Beyond the mission and vision, additional goals that I wish to pursue include—

- **Ensuring that Soldiers and leaders clearly understand what it means to be part of a profession of arms.** As members of the Chemical Corps, we are a part of the profession of arms—which was built from a base of values, standards, discipline, and fitness. The Army values serve to guide us in doing the right thing. And there are standards associated with everything we do—from wearing our uniforms to conducting sensitive-site exploitation. The standards can only be achieved through a disciplined application of our skills, coupled with our mental and physical fitness. We are professional Soldiers who not only perform our warrior tasks and drills, but who—unlike any other Soldiers—also train and maintain certification as CBRN experts. We are the ones who are responsible for protecting our Nation against CBRN threats at home and abroad.
- **Unifying the Regiment through team building and the building of a sense of Regiment.** I intend for all CBRN Soldiers across the Army to feel that they are an important part of the Chemical Corps Regiment—not just those in our CBRN formations, but all Dragon Soldiers assigned to different units across the Army. I plan to make use of professional development forums and the knowledge and experience of our senior enlisted leaders to achieve my team-building goals.

- **Bridging the gap between our Regular Army, U.S. Army Reserve (USAR), and Army National Guard (ARNG) components.** The Chemical Corps currently consists of about 35 percent Regular Army, 28 percent USAR, and 37 percent ARNG Soldiers. The USAR and ARNG have changed dramatically since the beginning of the Global War on Terrorism; they no longer function as a strategic reserve. Their formations, which consist of a young generation with an operational mindset, have deployed right alongside the Regular Army, where they have done an excellent job. Our attempt to bridge the gap between the three components will involve training all Soldiers together and to the same standard, beginning with institutional training and the One Army School System.



Command Sergeant Major
Gabriel S. Arnold

- **Restoring ownership of training with NCOs.** I want NCOs—not contractors—training our Soldiers. Our NCOs will lead our training in all areas, ranging from teaching Soldiers how to be Soldiers to instructing students on how to use dismounted reconnaissance equipment. I expect NCOs to be subject matter experts. NCOs who don't know the answer to a question need to open a book, research the subject, get smart, and implement solutions.
- **Returning to the “basics.”** Before 11 September 2001, our Army performed well in basic areas including maintenance, inspections, property accountability, weight control, physical fitness, the execution of flags and bars, the orders process, the aspects of military decisionmaking, and troop leading procedures. We now need to get “back to the basics,” starting with Soldier standards and discipline.

I look forward to visiting your formations to teach, coach, and mentor and to learn from you.

Readiness is paramount. We must be ready for today and prepared for tomorrow. Our Nation is counting on us.

Elementis Regamus Proelium!

Farewell From

Regimental Command Sergeant Major Ted A. Lopez

The last 4 years as your regimental command sergeant major have been the best time of my career. Your support of the Chemical Corps is unbelievable, and my wife Tanya and I want to thank you very much for what you do each and every day.

To our Warriors: During my tour as the regimental command sergeant major, I have witnessed some of the most professional young Soldiers of my 33 years, 1 month, and 24 days in the Army. You are doing such a great job of supporting our Nation and our allies throughout the world. Thank you.

To our Families: Your sacrifice for our Warriors truly amazes me. Without you, we could not get the job done. Thank you.

To our Gold Star Families: You are the strength of our Nation. We are truly blessed to have served with your Soldiers, who made the ultimate sacrifice. God bless you all. Tanya and I are so grateful to you. Thank you.

To our Civilian work force: You don't always get enough credit. I send a "shot across the bow" for you. Thank you.

To the One Army School System: Regular Army and Reserve Component personnel are providing relevant and realistic institutional training during this era of persistent conflict. Thank you.

As the regimental command sergeant major, I have had the privilege of seeing our diversified chemical, biological, radiological, and nuclear (CBRN) Warriors conduct a myriad of missions in support of our Nation. I have watched CBRN Soldiers in Iraq conduct sensitive-site exploitations; perform presumptive analyses; and take new technologies, training, and skills to the next level—all while living by the Warrior Ethos. I have watched CBRN Soldiers in Afghanistan conduct counter improvised explosive lanes for all Warriors entering Afghanistan. And I have watched CBRN Soldiers perform consequence management missions at home and abroad. I have also seen our CBRN Warriors go through many transformations and mission changes. For example, the 4th Chemical Company, Camp Casey, Korea, experienced significant force structure changes and recently received a new piece of equipment (a nuclear, biological, and chemical reconnaissance vehicle).

I truly believe that we have put the proper lines of effort and the appropriate mechanisms in place to take the U.S. Army Chemical Corps and the U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS) to 2020. It is up to you to make things happen. The USACBRNS leadership has done a phenomenal job of supporting CBRN Warriors in the past and will continue to do so in the future.

Our Army has changed over the past 33 years. When I entered the post-Vietnam Army in 1979, it was in turmoil. I spent most of my first 10 years of duty in Germany, which is where I was when we won the Cold War. It is also where I was when the Chemical Corps began a push to upgrade reconnaissance and detection capabilities. During the Desert Shield/Desert Storm era, Chemical Soldiers were the "hot ticket;" everyone wanted to be next to a Chemical Warrior when the Scud missiles were flying. Following the Cold War and the Gulf War, the Chemical Corps went through a downsizing process, which in turn, was followed by a 10-year period of growth and prosperity.



**Command Sergeant Major
Ted A. Lopez**

I have been truly blessed to serve with the best Soldiers and leaders throughout my career. I have had many different assignments, but those that proved to be the best building blocks for becoming a command sergeant major were first sergeant (two times), Department of the Army inspector general, operations sergeant major, and Sergeants Major Academy instructor.

Together, Tanya and I are finishing our last 13 years with the Army as a command sergeant major team. I have served as the command sergeant major of the 83d Chemical Battalion; the command sergeant major of the 23d Chemical Battalion; the command sergeant major of the Division Support Command, 2d Infantry Division; the command sergeant major of the 1st Maneuver Enhancement Brigade (MEB); the commandant of the Fort Polk Noncommissioned Officer Academy; the post/garrison command sergeant major at Carlisle Barracks, Pennsylvania; and the 11th Regimental Command Sergeant Major of the Chemical Corps and USACBRNS.

It truly has been an adventure to serve with you for so many years. There has never been a day that I was not proud of our Army and our Corps. I thank every one of you for providing your wisdom, guidance, instruction, coaching, and inspiration to help me achieve my dream of being a CBRN Warrior. God bless every one of you, and God bless this great Nation.

Elementis Regamus Proelium!

Campaign Plan 2.0:

Harnessing an SCP to Enhance the Chemical Corps RCP

By Lieutenant Colonel John D. Shank

The formalization of the Chemical Corps Regimental Campaign Plan (RCP) has done much for our strategic progress throughout the past 2 years. However, more could—and should—be done. To make the RCP more effective, we need to deliberately and systematically develop a supporting strategic communication plan (SCP).

An SCP can help set the conditions for success and arm organizations and individuals with the information needed to help the Chemical Corps achieve its RCP objectives. Organizations and individuals can assist by informing key decision-makers and helping to shape decisions that affect the Corps. An important component of an effective SCP is a matrix that shows key events and explains how those events interrelate and build upon one another throughout the course of the year. The desired end state for this coordinated and synchronized strategic communication effort would be an improvement in the ability of the Chemical Corps to accomplish the RCP objectives.

The RCP in Support of Guidance From Higher Levels

The RCP and supporting SCP must be nested in support of higher-level guidance and priorities provided by the President through the Department of Defense (DOD), the Chief of Staff of the Army, and the commander of the U.S. Army Training and Doctrine Command (TRADOC). During this fiscal year, all of these people and organizations have discussed areas and efforts that the Chemical Corps can—and should—support.

In the preamble to “Sustaining U.S. Global Leadership: Priorities for 21st Century Defense,” President Barack Obama states, “As we end today’s wars and reshape our armed forces, we will ensure that our military is agile, flexible, and ready for

the full range of contingencies. In particular, we will continue to invest in the capabilities critical to future success, including . . . countering weapons of mass destruction [WMD] . . .”¹ In a supporting letter, Secretary of Defense Leon Panetta indicates that the DOD strategic guidance will “preserve our ability to conduct the missions we judge most important to protecting core national interests” and one of the specific missions listed is “countering [WMD].”²

The DOD paper entitled “Sustaining U.S. Global Leadership: Priorities for 21st Century Defense” discusses several priorities and efforts that the Chemical Corps should support via the RCP. The paper states that “In this resource-constrained era, we will work with [North Atlantic Treaty Organization] allies to develop a ‘smart defense’ approach to pool, share, and specialize capabilities as needed to meet 21st century challenges.”³ Countering WMD is a specialized capability that fits appropriately in this area. The paper also states that “The proliferation of nuclear, biological, and chemical weapons technology has the potential to magnify the threats posed by regional state actors, giving them more freedom of action to challenge U.S. interests. Terrorist access to even simple nuclear devices poses the prospect of devastating consequences for the United States. Accordingly, the [DOD] will continue to enhance its capabilities, acting with an array of domestic and foreign partners, to conduct effective operations to counter the proliferation of WMD.”⁴ According to the section entitled “Primary Missions of the U.S. Armed Forces,” the joint force will need to recalibrate its capabilities and make selective additional investments to succeed in countering WMD. The paper indicates that “In partnership with other elements of the U.S. government, DOD will continue to invest in capabilities to detect, protect against, and respond to WMD use, should preventive measures fail.”

At the October 2011 Association of the U.S. Army convention, General Raymond T. Odierno, Chief of Staff of the Army, discussed several areas that could be supported by the RCP. One of the focus areas was the Army commitment to provide specialized, small-unit capabilities that could defeat potential adversaries. Most Chemical Corps capabilities fall within this area. General Odierno also discussed the need for the Army to be responsive toward combatant commanders and to engage with our allies while building partner capacity. These are areas that can be actively supported by the Chemical Corps. The questions are: Do TRADOC and the Army's senior leaders know how our Corps can assist in these efforts? And if not, how can we improve our strategic communication so that they understand our capability in helping to achieve Department of Army (DA) and TRADOC objectives?

The SCP and Chemical Corps Objectives

In conjunction with the RCP, a Chemical Corps SCP would help the Corps achieve its objectives. The SCP would provide leaders; chemical, biological, radiological, and nuclear (CBRN) Soldiers; and civilians with the strategies and tactics necessary to effectively communicate with target audiences. Properly executed, the plan would focus RCP efforts; educate key leaders about the Chemical Corps and its mission; explain why leaders should support RCP efforts; and illustrate how, when, and where leaders could help. The SCP, which must be executed in conjunction with the RCP, would provide guidance to internal and external audiences.

Effective strategic communication of the RCP begins with the commandant's intent and key messages. Strategic communication objectives should be developed and coordinated to posture the Chemical Corps for future success. Some examples of SCP objectives include—

- **Objective 1: Educate key leaders and target audiences.** The focus of strategic communication efforts should be on the development of clear, distinctive messages to educate and inform. Countering WMD is a complex and difficult concept for even the most enthusiastic advocate to understand and explain. Additional time and attention should be paid to educating and informing those people and organizations who can directly influence decisions that affect the Corps. For example, because reducing the amount of time that a maneuver unit spends in an elevated, mission-oriented protective posture helps maintain combat effectiveness, the U.S. Army Maneuver Center of Excellence could serve as a strong advocate for equipment that allows for the rapid decontamination of vehicles. Leaders of the U. S. Army Fires Center of Excellence could serve as strong advocates for more enhanced projected obscuration rounds. But have these organizations been educated and informed? Have we helped them understand that it would be in their best interest (and that of the Army) to develop and field these specific capabilities?

- **Objective 2: Foster advocates for the Chemical Corps.** We must develop a specific action plan for coordination with organizations and people who may be inclined to support and serve as advocates for the Chemical Corps. The action plan should address the use of programs, events, and engagement opportunities to energize potential advocates to use their influence in helping to achieve RCP objectives and support the Army's overarching goals.
- **Objective 3: Retain current leaders.** It is just as important to retain quality CBRN officers and noncommissioned officers (NCOs) as it is to bring in new lieutenants and advanced individual training-qualified Soldiers. And it is less expensive to retain current CBRN Soldiers than it is to continually recruit and educate new prospects. Investing in our internal communication channels will help with this issue. It will also allow our CBRN warriors to be empowered, informed, and enthused about their branch and the Corps mission. Media exposure highlighting CBRN Soldier contributions and achievements is (with the proper operational security, foreign disclosure office, and public affairs office review and approval) a good way to promote pride in the Chemical Corps. It also aids in recruiting and retention efforts.

The Strategic Communication Audience

The identification of audience groups (including key organizations and individual stakeholders) is a critical component of designing an effective SCP. Some of the key organizations capable of influencing RCP success include the—

- Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics; Office of the Secretary of Defense.
- Joint Requirements Office, Joint Chief of Staff for Force Structure, Resources, and Assessment (J-8).
- Joint Program Executive Office for Chemical and Biological Defense.
- Defense Threat Reduction Agency.
- U.S. Strategic Command.
- Office of the Deputy Chiefs of Staff for Operations and Plans (G-3), Logistics (G-4), and Resource Management (G-8), DA.
- U.S. Army Nuclear and Combating WMD Agency.
- TRADOC.
- U.S. Army Maneuver, Maneuver Support, and Fires Centers of Excellence.

People within these organizations can influence the planning, programming, budgeting, and execution process cycle and the systems development and acquisition cycles. Stakeholders include organizations or individuals with a direct

interest, involvement, or investment in the Chemical Corps mission. CBRN officers and NCOs and members of the Chemical Corps Regimental Association are examples of stakeholders who could be provided with information and asked to support and serve as advocates for RCP efforts and goals.

Strategic Communication Planning

To reap the greatest benefit, strategic communication planning should occur in conjunction with operational planning. The SCP consists of a detailed plan containing written themes and messages for each particular key audience group, stakeholder, and event. The planners decide when, where, how, and to whom to most effectively present the message. Strategic communication planning is a holistic, effects-based endeavor that must be coordinated and synchronized in space and time. It is a process that works best with multiple forms of contact—just as with conventional battlefield planning. Using multiple forms of contact with several different mediums improves our chances of achieving the desired effects on the target—or, in this case, the target audience.

A key component of the SCP is a matrix that illustrates the key events and the interrelationships between important events that affect the directed mission. The planning, programming, budgeting, and execution cycle; the total Army analysis process; the combatant commander's joint priority list; and other major factors such as DOD/DA level policy statements can impact the RCP. Once the key events have been identified, the strategic communication planners hold a "targeting board" to nominate people (targets) and to identify strategic communication capabilities that can be directed against those targets. As an additional benefit, laying out a timeline and illustrating the interrelationships make it easier to educate the entire community of interest on the nature and schedule of priority events and it helps leaders explain the importance of completing a project by a certain date. It also helps ensure that conditions for the particular event are properly set.

Additional Resources for Strengthening the RCP and SCP

The Chemical Corps would benefit from receiving input on the RCP and the supporting SCP from external organizations and individuals. An outside perspective would provide valuable, additional insights into portions of the RCP that could be strengthened. An outside perspective wouldn't be required to come only from military organizations like TRADOC or the U.S. Army Combined Arms Center; it could also come from business or political leaders. For example, senior staffers from congressional offices are very familiar with how to plan, coordinate, and execute political campaign plans. Although there are differences between the Chemical Corps RCP and a political campaign plan, it would be interesting to observe whether the congressional staffers—after receiving an education on the RCP—could come up with new ways to approach problems. At the very least, it would be an

opportunity for us to reinforce our SCP themes and messages with the congressional staffers so that they will be better armed to support the Chemical Corps and the U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS) in the future. It can be critical to have key congressional staffers who are armed with current facts and information present during budget discussions. According to Major General Thomas Spoehr (the former director of Force Development, G-8, DA), the most successful Army fiscal year 2013–2017 program objective memorandum organizations were those that had done their homework and had their facts ready to be presented at a moment's notice. An SCP would help ensure that the proper people have the facts and that they have been educated about the Chemical Corps efforts and how those efforts fit into the overarching Army plan.

Conclusion

Chemical Corps SCP is needed to solidify and focus the Corps, key leaders, and potential advocates on RCP efforts and goals. An SCP would have a synergistic effect. It would educate senior leaders and decisionmakers on what we are trying to do, and it would explain how our efforts are nested with the policy and strategic guidance issued by the President, the Secretary of Defense, and the Secretary of the Army. Once organizations and individuals have been educated on the RCP and the countering WMD mission, they will likely be more willing to support Chemical Corps efforts and more willing to help us strengthen the defense of our Nation against WMD.

Endnotes:

¹President Barack Obama, preamble to "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense," 3 January 2012.

²Secretary of Defense Leon Panetta, supporting letter for "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense," 5 January 2012.

³"Sustaining U.S. Global Leadership: Priorities for 21st Century Defense," DOD, January 2012.

⁴Ibid.

Lieutenant Colonel Shank currently serves as the executive officer for the commander, U.S. Army Cadet Command, Fort Knox, Kentucky. He holds a bachelor's degree in biology from Wheaton College, Illinois, and a master's degree from the Command and General Staff College, Fort Leavenworth, Kansas.



IMPROVING CBRN READINESS

THROUGH INCREASED REGULAR ARMY-RESERVE COMPONENT INTEROPERABILITY

By Colonel Clark H. Summers

According to the recently released 2012 Defense Strategy Review (“Sustaining U.S. Global Leadership: Priorities for 21st Century Defense”¹), significant reductions in resources committed to military readiness are anticipated, while challenges to U.S. strategic national interests are predicted to simultaneously increase. To meet requirements outlined in the 2012 Defense Strategy Review, Regular Army-Reserve Component (RC) interoperability must be increased. Creative, no-cost or low-cost methods of achieving this goal should be carefully considered. Options include—

- Integrating Regular Army Soldiers directly into RC formations.
- Opening command and branch-qualifying assignments to either Regular Army or RC officers.
- Making Regular Army-RC collective training mandatory for chemical, biological, radiological, and nuclear (CBRN) operational units.

The U.S. Army Chemical Corps is a reflection of the traditional model for American military forces—a relatively small, standing Regular Army supported by a broad militia- or community-based RC. Throughout its 95-year history—particularly following the end of the Vietnam War in 1975 and the Cold War in 1989—the active Chemical Corps, like the Regular Army, has been maintained only at levels necessary to meet operational contingencies, with the RC expected to meet the greatest strategic needs. This model has allowed for the expansion or contraction of forces based on the budgets and resources necessary to meet warfighting demands.

The Army faces a number of unique strategic challenges today. Although campaigns in Iraq and Afghanistan are coming to an end, the strategic environment remains one of enduring conflict, thus demanding a sustained level of readiness.² However, in keeping with the traditional American response to ending military campaigns, significant reductions in resources and funding are now underway.³ These reductions are the result of a 38 percent cut in Department of Defense (DOD)

budgets throughout the next quadrennial period.⁴ Plans involve cutting Regular Army personnel from 570,000 to 490,000 by 2017⁵ and reducing the number of brigade combat teams (the principal unit of operational warfighting) by 15.⁶ And unlike past downsizings, the end strengths of the U.S. Army Reserve (USAR) and the Army National Guard will remain constant,⁷ rather than increasing due to the inactivation of large, formerly Regular Army formations. U.S. Army CBRN forces are already operationally dependent upon the RC. Two of three U.S. Army Forces Command chemical brigades are RC—one USAR and one Army National Guard. Of 11 chemical battalions, six are RC. And 58 of the Army’s 78 chemical companies (or 74 percent) are RC.⁸ In the years ahead, this reliance on RC forces will be particularly significant. U.S. Secretary of Defense Leon Panetta designates the countering of weapons of mass destruction and the provision of defense support of civil authorities as primary missions of the U.S. Army.⁹ Chemical units provide the critical capabilities needed to meet the demands of these missions; therefore, they must be operationally effective.

Given the reliance of the Chemical Corps upon the RC, maximizing the operational effectiveness of CBRN forces requires increases in Regular Army-RC interoperability. RC forces must be strengthened to provide the greater bridging capabilities necessary to sustain operational needs as Regular Army forces are constrained and reduced. “Strengthening forces” has traditionally meant “increasing spending,” but this will not be a viable approach for the foreseeable future. Instead, strengthening the RC will require creative, budget-neutral approaches or approaches that provide clear cost benefits from the outset; other approaches are not likely to be implemented. No-cost or low-cost options that should be carefully considered by Regular Army and RC Chemical Corps leaders include integrating Regular Army Soldiers directly into RC formations to improve unit readiness, opening command and branch-qualifying assignments to Regular Army and RC officers, and requiring annual Regular Army-RC collective training for all CBRN operational units.

Integrating Regular Army Soldiers Directly Into RC Formations to Improve Unit Readiness

RC units that are at less than 80 percent *available* strength could be brought to that level of readiness by balancing the increase against a 90 percent level of *available* readiness within a comparable Regular Army unit of assignment that was responsible for providing Soldiers to the RC. Regular Army units not sustained at a 90 percent personnel readiness level would not serve as RC “donors” or “bill payers.” This would ensure that Regular Army and RC units were maintained at acceptable levels of readiness, that their end strengths remained constant, and that there was no impact to personnel budgetary costs. Little substantial modification to existing personnel management systems would be required. The RC would still recruit against an identified available billet, but the billet would not be filled until the individual RC Soldier completed advanced individual training (normally a 24-month process from enlistment to duty military occupational specialty qualification) and the Regular Army Soldier was allowed a permanent change of station to the next unit of assignment.¹⁰ The Active Guard Reserve Program could serve as a model for providing necessary personnel and family support to widely dispersed individuals assigned to community-based units.

The integration of Regular Army Soldiers into the RC would ensure that an acceptable level of readiness could be reached and that key, noncommissioned officer developmental leadership positions could be filled at the team, squad, and platoon levels. An additional benefit is that Regular Army Soldiers could be exposed to potential RC service opportunities that could be pursued following the completion of their enlistments.

Opening Command and Branch-Qualifying Assignments to Regular Army and RC Officers

The U.S. Army has not gone to war without Regular Army–RC integration since the days of Operation Desert Shield. Commanders who understand the unique characteristics, capabilities, and limitations of Regular Army and RC units are better prepared to lead Soldiers in combat and meet mission objectives. And given the preponderance of CBRN assets within the RC, this observation is particularly relevant for Chemical Corps leaders. To meet the developmental need, Regular Army officers should be given the option to apply and be selected for command of RC companies and battalions. Combining chemical company and battalion commands in a common pool would result in four times the number of opportunities for company command and two times the number of opportunities for battalion command.¹¹

Regular Army officers who command only Regular Army units are not required to deal with a significant number of unique challenges common in RC formations. Successful RC

officers must manage recruitment, individual training from initial entry through full duty military occupational specialty qualification, monthly personnel accountability, unit training events, and the balance between military and civilian career expectations of assigned Soldiers—all distinct unit readiness challenges that Regular Army officers rarely face. These unique expectations are supplementary to the commonly accepted leader tasks of planning, programming, and executing collective personnel, training, and sustainment readiness; taking care of Soldiers; and maintaining personal professional standards. Regretfully, many RC command billets go unfilled because qualified officers are not available. Allowing Regular Army officers to apply and be selected for command billets would help mitigate this problem and simultaneously provide significant and meaningful professional development opportunities for the Regular Army officer.

In the same way, RC officers would be afforded the opportunity to compete and be selected for assignment to Regular Army commands and branch-qualifying assignments through active duty operational support funding. RC officers would benefit from this arrangement by serving as unit executive officers and battalion and brigade operations officers. They would then return to their RC units with 2 or more years of valuable, intensive immersion experience in the most current CBRN tactical environment. If successful, the program could be expanded to include senior noncommissioned officers (first sergeants and command sergeants major) to broaden the Regular Army–RC experience pool.

Requiring Annual Regular Army–RC Collective Training for All CBRN Operational Units

The old, often quoted axiom of “we train as we fight” is very applicable to Regular Army–RC collective training. Since the Army will fight as a combined Regular Army–RC force, combined Regular Army–RC training should be the rule rather than the exception. Due to significant differences in planning factors, much of the current Regular Army–RC training is limited or ad hoc. This should be changed so that combined training is deliberate, thorough and, most of all, routine.

Ensuring that integrated Regular Army–RC training is deliberate, thorough, and routine will require a paradigm shift; the traditional, peacetime attitude that each component resides in its own, isolated world must be overcome. Knowledge management systems, Web-based processes, and applications allow high degrees of information sharing and coordination previously only possible through face-to-face liaison. These tools allow RC commanders to participate in quarterly training briefings, get their resource requirements validated by higher (Regular Army or RC) headquarters, and synchronize/coordinate yearly training calendars. Briefings can be done via videoconferencing and Web-based knowledge management applications, coupled with annual or semiannual events conducted in person. During Regular Army quarterly

training briefings, RC commanders could focus on collective readiness and required resources—not on discussing RC-specific data such as the battle-focused readiness review or other, similar “name tape” level data. There would be 2 additional months during each quarter in which RC commanders could address RC-unique briefing and data requirements and conduct standard unit strength reporting. This would increase consistency between Regular Army and RC units and set the stage for improved accountability in achieving Regular Army–RC integration.

The annual officer evaluation report could be used to ensure accountability for Regular Army–RC integration. The simple addition of a required officer evaluation report entry for a commander’s major performance accomplishments (covering the nature of the unit’s combined or integrated Regular Army–RC event, describing the outcome of the event, and explaining how success or improvement was measured) would serve as a powerful incentive to make Regular Army–RC integration work. Successful integration could provide an additional qualifier to justify a senior rater’s “above center of mass” rating. More importantly, it would recognize and reinforce the fundamental principle that the responsibility for unit success rests squarely with the commander, whether that commander is a member of the Regular Army or the RC.

Conclusion

Each of the proposed options for increasing Regular Army–RC interoperability—integrating Regular Army Soldiers directly into RC formations, opening command and branch-qualifying assignments to Regular Army and RC officers, and making Regular Army–RC collective training mandatory for CBRN operational units—shares a common underlying assumption: The Chemical Corps can be improved by the shared, common experiences of CBRN Soldiers working across the components. All of the proposed options would make use of existing institutional Army systems and processes and would require little or no additional funding. Due to its already heavy reliance on the USAR and Army National Guard, the Chemical Corps—more than any other branch or functional area—is uniquely positioned to experiment and develop methods of maximizing the benefits of Regular Army–RC integration. These benefits would mitigate the risks expected from the extended periods of limited resources now predicted. The lessons learned would ultimately benefit all branches of the Total Army.

Endnotes:

¹“Sustaining U.S. Global Leadership: Priorities for 21st Century Defense,” DOD, January 2012.

²Secretary of Defense Leon Panetta, supporting letter for “Sustaining U.S. Global Leadership: Priorities for 21st Century Defense,” 5 January 2012.

³“A Statement on the Posture of the United States Army 2012,” statement submitted by the Honorable John M.

McHugh and General Raymond T. Odierno to the committees and subcommittees of the U.S. Senate and the House of Representatives, 2d Session, 122th Congress, February 2012.

⁴Jonathan Masters, “Defense Spending and the Deficit Debate,” *Campaign 2012: Renewing America*, Council on Foreign Relations, 8 November 2011, <<http://www.cfr.org/united-states/defense-spending-deficit-debate/p26442>>, accessed on 3 April 2012.

⁵Tom Vanden Brook, “Defense Secretary Leon Panetta Defends a Leaner Military,” *USA Today*, 26 January 2012, <<http://www.usatoday.com/news/washington/story/2012-01-26/panetta-military-defense-cuts/52805056/1>>, accessed on 3 April 2012.

⁶Jim Lacey, “Gutting the Defense Budget,” *National Review Online*, 11 January 2012, <<http://www.nationalreview.com/articles/287713/gutting-defense-budget-jim-lacey>>, accessed on 3 April 2012.

⁷“President Unveils FY2013 Budget,” Reserve Officers Association, 15 February 2012, <http://www.roa.org/site/DocServer/FY2013_End_Strength.pdf?docID=34842>, accessed on 3 April 2012.

⁸Stew Magnuson, “National Guard, Army Chemical Units Criticized for Being Untrained, Unprepared,” *National Defense*, June 2007, <<http://www.nationaldefensemagazine.org/ARCHIVE/2007/JUNE/Pages/NationalGuardArmyChem2618.aspx?PF=1>>, accessed on 3 April 2012. (Numbers are based on CBRN forces currently assigned to the U.S. Army Forces Command: the 48th Chemical Brigade, with five chemical battalions [Regular Army]; the 415th Chemical Brigade, with four chemical battalions [USAR]; and the 31st Chemical Brigade, with two chemical battalions [Army National Guard]).

⁹Panetta, 2012.

¹⁰During a recent 12-month period, one typical RC CBRN battalion consistently reported an available duty military occupational specialty qualification rate of 72 percent, with a high of 79 percent and a low of 68 percent. (Reported data collected by Colonel Clark H. Summers.)

¹¹Magnuson, 2007, and data obtained from the U.S. Army Forces Command. As of 2007, there were 20 Regular Army and 58 RC chemical companies and five Regular Army and six RC chemical battalions.

Colonel Summers is the commander of the USAR Consequence Management Unit, Abingdon, Maryland. He is a graduate of the New Mexico Military Institute; and he holds master’s degrees in international relations from Salve Regina University, Newport, Rhode Island, and in strategic studies from the U.S. Army War College, Carlisle Barracks, Pennsylvania.

Training and Developing CBRN Warrior Leaders: *A CBRN AIT Analysis and the Way Ahead*

By Lieutenant Colonel Thomas A. Duncan II

With the end of the war in Iraq and the ongoing reduction of combat power in Afghanistan, the Army is now focusing on the force of 2020 and the Chemical Corps is concentrating on how to best support weapons of mass destruction counterforce; chemical, biological, radiological, and nuclear (CBRN) defense; and CBRN consequence management. The force of the future will require that Chemical Corps Soldiers be more technically skilled so that they may confront a myriad of potential threats in an unpredictable world.

In response to demands from the field to modernize our courses and to ensure that initial military training is a “. . . rigorous, foundational learning experience that combines indoctrination into the Army culture (values, character, and the Warrior Ethos) with the basic skills training, comprehensive fitness, and specialized CBRN foundational skills and knowledge,”¹ Colonel Vance P. Visser—Chief of Chemical and Commandant, U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS)—published the Chemical Corps Regimental Campaign Plan for fiscal years 2011–2012.²

During the same time frame, Major General Richard Longo—Deputy Commanding General for Initial Military Training, U.S. Army Training and Doctrine Command—ordered a review of all advanced individual training (AIT) and basic officer leader courses throughout the Army. On 14 July 2011, Major General Longo concurred with Colonel Visser’s plan to modernize CBRN (74D) AIT and meet the needs of operational CBRN brigades.

After several months of updating lesson plans, certifying instructors, and obtaining new equipment, the 84th Chemical Battalion—in close coordination with the Directorate of Training and Leader Development, USACBRNS, and the Directorate of Education and Training Execution, 3d Chemical Brigade—conducted a new CBRN AIT pilot course (Class 05-12) from January to March 2012 at Fort Leonard Wood, Missouri.

Pilot Course Demographics

CBRN AIT Class 05-12 was identified as the pilot course in July 2011—when the composition of the class was completely unknown. To help ensure that the class was comprised of a representative sample of students, participants were selected through normal U.S. Army Training and Doctrine Command acquisition processes. The percentages of students from the various components (28 percent from the Regular Army, 27 percent from the U.S. Army Reserve [USAR], and 44 percent from the Army National Guard [ARNG]) generally reflected the Army-wide composition of the Chemical Corps.³ (See Figure 1.)

At the start of the class, there were 81 Soldiers—including 14 military occupational specialty—transfers (MOS-Ts), who are generally more experienced than the average student. While such a large percentage of MOS-T participants was unplanned, their presence allowed an assessment of the ability to integrate the new training into the USAR MOS-T course conducted by the Total Army School System Battalion at Fort Leonard Wood.

All Class 05-12 students were high school graduates, and six of them (7.4 percent) had college degrees. Fifteen of the students (18.5 percent) had Armed Services Vocational Aptitude Battery (ASVAB) General Technical (GT) scores of more than 110. (The maximum possible GT score is 160; a GT score of at least 110 qualifies a Soldier for any job in the Army.) Most of the Soldiers of Class 05-12 relied on their high school education and basic combat training and AIT coursework to meet the academic challenges of the pilot course.

Pilot Structure and Course Flow

All CBRN AIT classes are divided into two platoons that execute training on slightly different schedules, but with essentially the same course flow. This arrangement



Class 05-12 students

actually allowed the execution of two pilots within Class 05-12; Pilot 1 was conducted with 1st Platoon, and Pilot 2 was conducted with 2d Platoon.

For the pilot course, several key changes were made to the existing CBRN AIT blocks of instruction. The following changes—which were aimed at modernizing the course, implementing the Army Learning Model, adding academic rigor, and improving foundational technical instruction—were made:

- New chemical defense equipment (Joint Chemical Agent Detector) training was added.
- M26 Joint Service Transportable Decontamination System–Small Scale training was expanded.

- Mass casualty decontamination (MCD) training was introduced.
- Biological defense training time was expanded from 1 day to 3 days, with the addition of handheld assay training and a biological situational training exercise lane.
- Radiological defense training was modernized to include an introduction to high-frequency radio and laser threats and lessons learned from Operation Tomodachi. A practical exercise involving radioactive sources was also expanded.
- Hazmat operations and technician training was added.
- A culminating field training exercise (FTX) was updated to better serve as a test of students’ newly acquired technical skills in the areas of new equipment, dismounted CBRN reconnaissance, and reaction to hazmat incidents.

Category	Total	Male	Female
Regular Army	23	10	13
USAR	22	15	7
ARNG	36	22	14
MOS-T	14	13	1
Age 17-20	29	14	15
Age 21-25	26	14	12
Age 26-30	12	9	3
Age 31-35	8	6	2
Age 36+	6	4	2
GT score >105	21	12	9
GT score 100-105	23	14	9
GT score <100	36	20	16
GT score unknown	1	1	0
College degree	6	2	4
Prior hazmat certification	0	0	0
Total Soldiers	81	47	34

Figure 1. Pilot course demographics

Course Flow

The pilot course consisted of Modules A–L, and the course flow was conducted according to the vision outlined in the Deputy Commanding General for Initial Military Training-approved Chemical Corps Regimental Campaign Plan and the CBRN AIT program of instruction, which was approved by the U.S. Army Training and Doctrine Command Training Operations Management Activity in January 2012. (See Figure 2, page 14.) Some of the most significant course modules are discussed below.

Module B: Professional Military Training

Although the focus of the CBRN AIT class is now more technical, the emphasis on basic Soldier requirements such as Army values and physical readiness and other mandated training has not been lost. And the commitment to reinforcing Army values extends well beyond the formal 1.5-hour block of instruction. The enforcement of discipline and values is the number one task; these elements are integrated into all training. The AIT class builds upon the physical readiness training that Soldiers received during

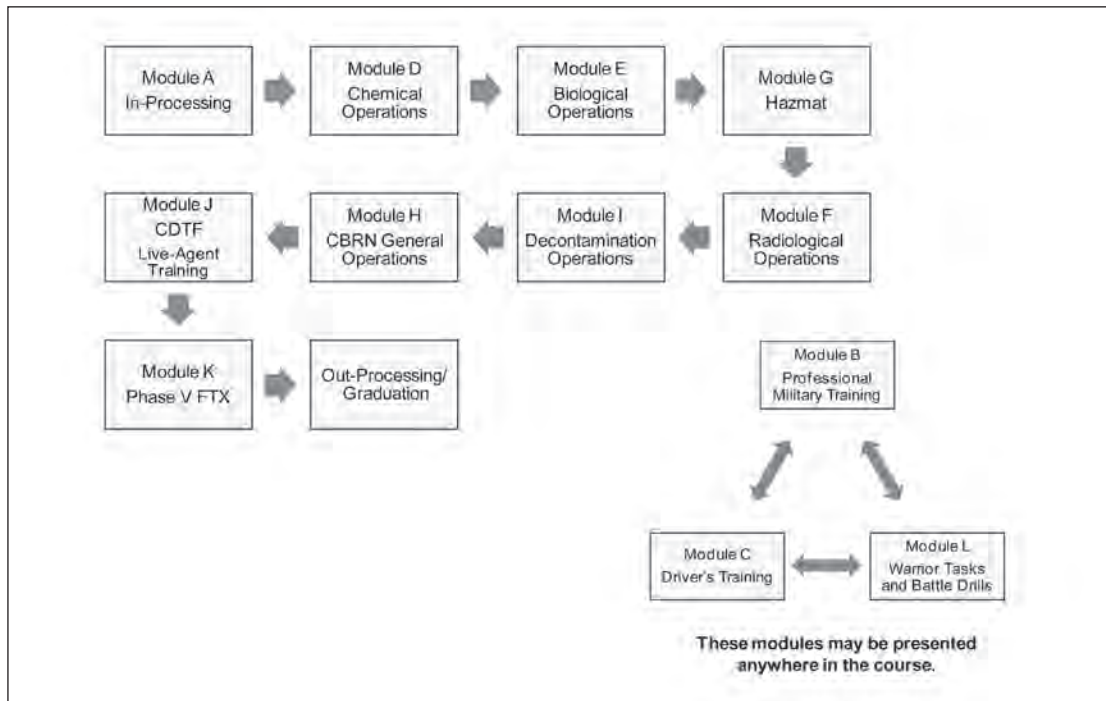


Figure 2. CBRN AIT class map

previous basic combat training. Other mandated training (personal finance, sexual harassment and assault prevention and response training) is also conducted. Time is spent enforcing Army standards and setting Soldiers on the path to success in their gaining units.

Module D: Chemical Operations

New Joint Chemical Agent Detector training was introduced in the Chemical Operations module of the pilot course, while training hours for the devices to be replaced by the Joint Chemical Agent Detector were reduced. Time spent training Soldiers to “Provide Technical Advice on Chemical Agents and Compounds” was also increased to expand Soldiers’ basic understanding of chemical agents. Additional time was spent familiarizing Soldiers with threat agents in the Chemical and Biological Operations course modules.

Module E: Biological Operations

In an effort to meet the USACBRNS commandant’s intent to expand the Corps ability to respond to potential biological threats, updates were made to the Biological Operations module. The module was expanded from 1 day to 3 days. The “Biological Warfare Agent and Dissemination Techniques” and “Effects of Weather and Terrain” classes present a firm foundation regarding the most significant potential biological threats. AIT students now receive training that is comparable to the instruction received by lieutenants attending the Chemical Basic Officer Leader Course. A biological situational training exercise that focuses on a sensitive-site assessment scenario was also added to increase

hands-on application of the training. Furthermore, the academic rigor of the course was increased with the addition of a written biological test.

Module G: Hazmat

The most significant of the changes to the AIT class was the increase in the length of hazmat training from 10.2 hours to 89.1 hours. Previous AIT Soldiers were certified on hazmat awareness only and trained on select hazmat operations tasks only; however, students in the AIT pilot course had the opportunity to become hazmat operations-certified and hazmat technician-certified.

The hazmat awareness test results were typical for an AIT class: 88.9 percent of the class became certified on hazmat awareness, while 7.4 percent passed with scores ranging from 70 to 79 percent.⁴ (See Figure 3.)

Hazmat operations test results demonstrated that some AIT students were challenged by the more technical material: 56.8 percent of the class was hazmat operations-certified, while an additional 17.3 percent were successfully trained; 22.2 percent of the class scored less than 70 percent and failed to achieve certification or training standards. A correlation between a Soldier’s ASVAB GT score and his or her test performance was evident: 90 percent of the students who had GT scores of more than 105 received hazmat operations certification, while none of them failed; 33 percent of the students who had GT scores of less than 100 became hazmat operations-certified, while 25 percent of them were successfully trained and 39 percent of them failed. (See Figure 4.)

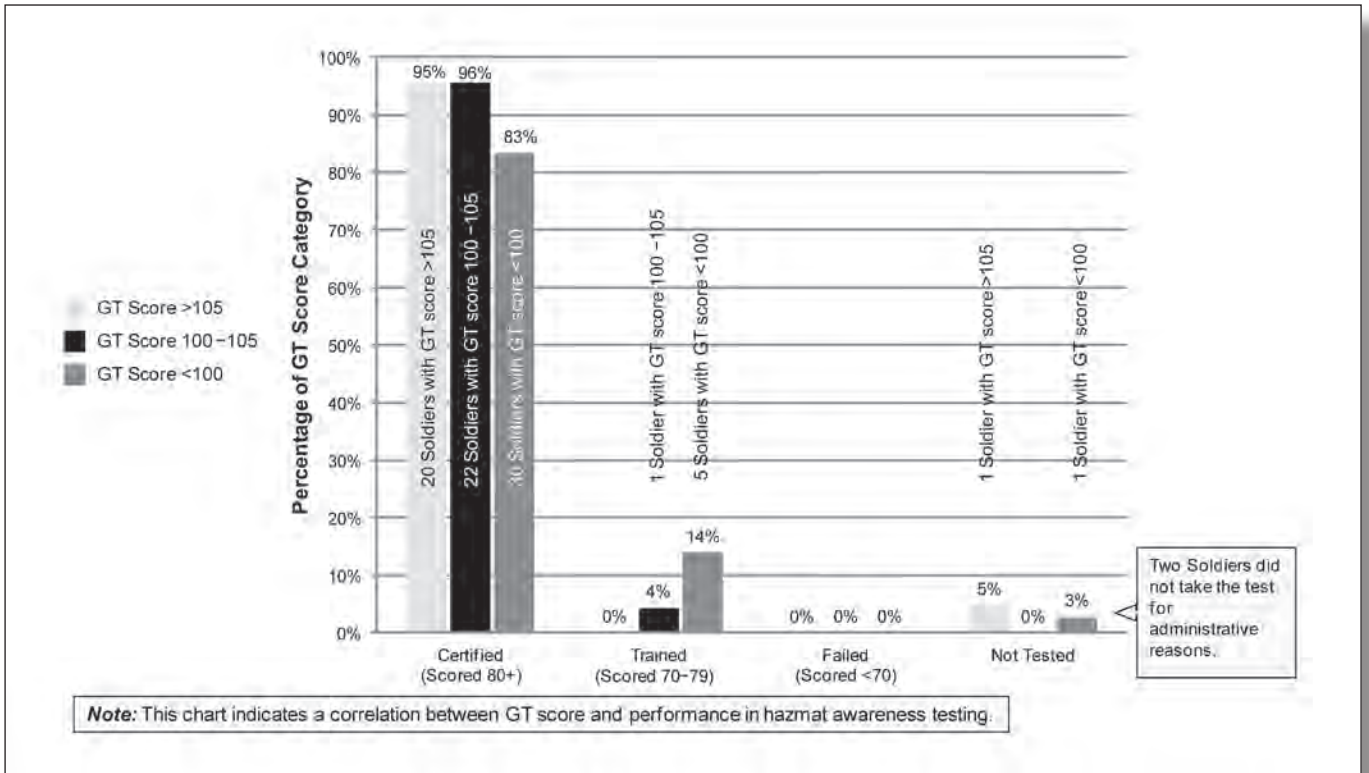


Figure 3. Hazmat awareness certification by GT score

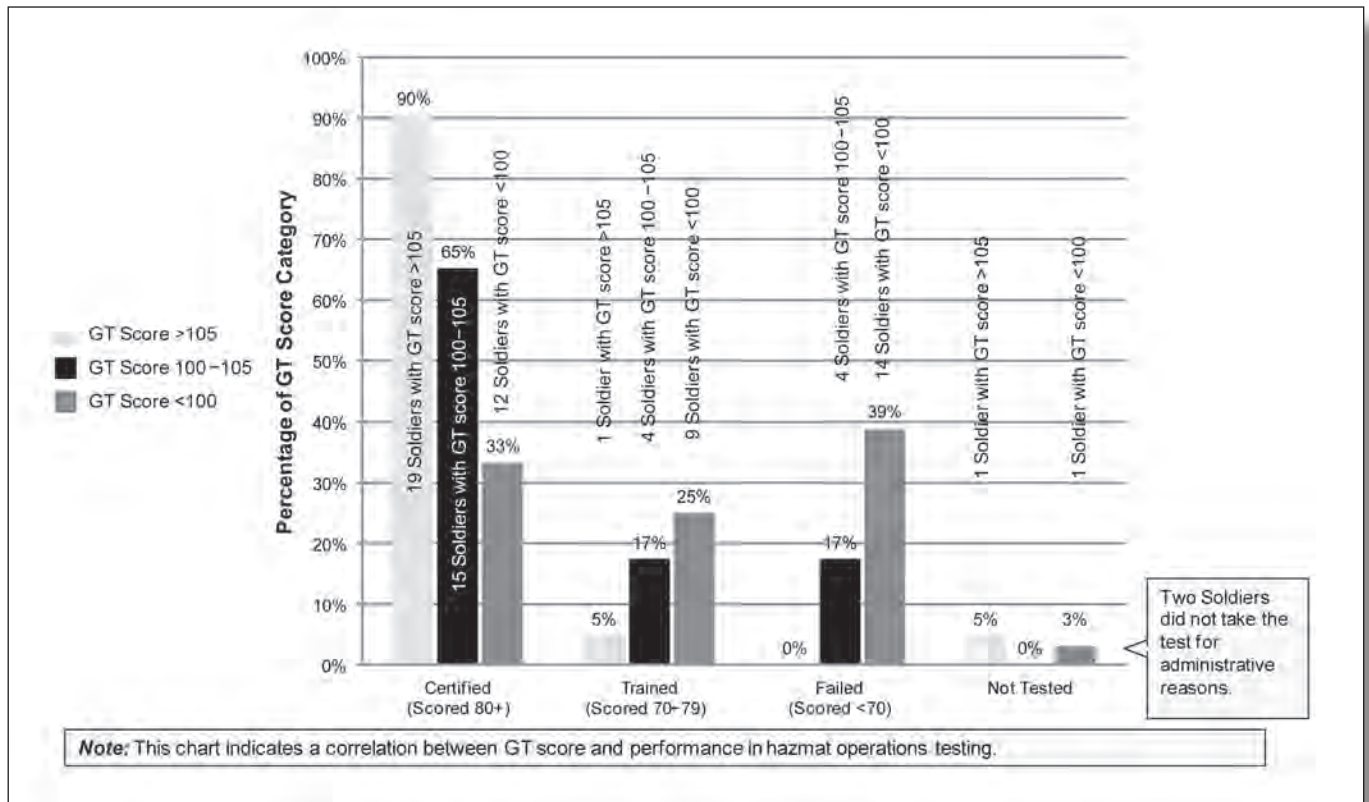


Figure 4. Hazmat operations certification by GT score

There was also a correlation between a Soldier's ASVAB Skilled Technical (ST) score and his or her test performance: 90 percent of the students who had ST scores of more than 105 received hazmat operations certification, while 43 percent of the students who had ST scores of less than 100 became hazmat operations-certified.⁵

The hazmat technician evaluation was split into two tests—Technician I and Technician II. To become hazmat technician-certified, individuals must pass the hazmat awareness and hazmat operations tests with scores of 80 percent or greater. (See Figure 5.)

In the AIT pilot course, 44.4 percent of the students became hazmat technician-certified, 17.3 percent were successfully trained, and 33.3 percent failed. Again, test results showed a correlation with students' GT scores: 86 percent of the students who had GT scores of more than 105 became hazmat technician-certified, while none of them failed; only 17 percent of the students who had GT scores of less than 100 became certified; and 56 percent of the Soldiers who had GT scores of less than 100 failed the hazmat technician certification test.

And, again, there was a correlation between a Soldier's ASVAB ST score and his or her test performance: All students who had ST scores of 100 or more were successfully trained—and 89 percent of them received hazmat technician certification; 25 percent of the students who had ST scores of less than 100 failed the hazmat technician test.

These analyses have led to the conclusion that more analyses are required before hazmat operations and hazmat technician certification can be fully implemented in the AIT class. The next AIT class scheduled to conduct hazmat operations certification is to be held in June 2012. Adjustments will be made in an attempt to improve the success rate of trained and certified students, and resources will be organized to execute this training for about 2,200 CBRN AIT students each year. The inclusion of this training represents an increase in USA-CBRNS hazmat operations training of about 46 percent, which requires additional certified instructors, nursing support, costly equipment, maintenance support, and compliance (testing and quality assurance) personnel.

Module F: Radiological Operations

The Radiological Operations module carried CBRN Soldier training into the 21st century. Students were introduced to radiological dispersion devices, high-frequency radio and laser hazards, and lessons learned from Operation Tomodachi.

The radiological laboratory team introduced students to radiological dispersion devices—the most likely near-term radiological terrorist threat. Radiological dispersion devices are explosive devices that are capable of spreading radiologically contaminated material throughout an area, causing fear and creating a detection and decontamination challenge. The use of live sources and an increase in hands-on training with radiation detection equipment boosted Soldiers' confidence in their ability to identify and mitigate radiological threats.

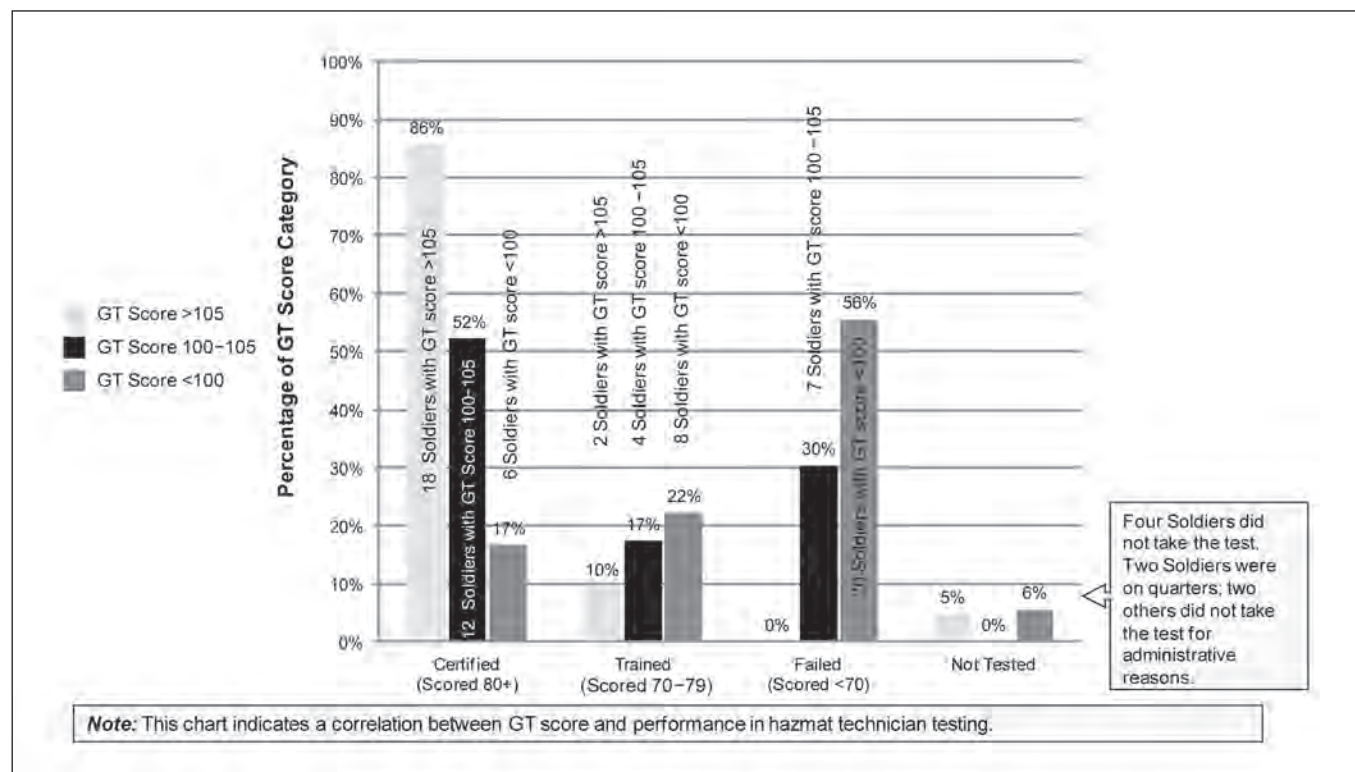


Figure 5. Hazmat technician certification by GT score

Students were also introduced to two new threats encountered on the battlefields of Iraq and Afghanistan—high-frequency radio and laser hazards, which (due to changes in communications and targeting technology) have become more prevalent on today's battlefield. Soldiers are becoming familiar with these new threats as part of a comprehensive introduction to modern threats on a complex battlefield.

The United States contributed significantly to Japan's response to the Fukushima nuclear disaster, which was triggered by a major March 2011 earthquake and tsunami. Within a short time, instructors with the Edwin R. Bradley Radiological Teaching Laboratories at Fort Leonard Wood were integrating lessons learned from Operation Tomodachi into the classroom, laying a foundation for Soldiers to react to battlefield and civil radiological incidents.

Module I: Decontamination Operations

Decontamination Operations training also underwent significant changes. Because more than 20 companies within the USAR and the ARNG still have the M12A1 Power-Driven Decontamination Apparatus, the CBRN AIT class continues to contain an introduction to the M12A1; however, now that the M26 Joint Service Transportable Decontamination System—Small Scale is the primary decontamination apparatus, the training time for the M12A1 was reduced from 16 hours to 3.5 hours for the pilot course, while the M26 training was expanded. The M26 instruction consists of a short classroom introduction, followed by hands-on equipment training and a practical exercise involving the decontamination of personnel and equipment.

Based on requests from the field for an increased focus on personnel decontamination, MCD training was also introduced in the AIT pilot course. An MCD practical exercise (with a complete equipment set) was implemented in AIT Class 05-12. Once hazmat operations training is fully implemented in the AIT class, students will have the opportunity to become MCD-certified.

Module H: CBRN General Operations

While the time spent training the CBRN General Operations module has been reduced from 77.7 hours to 54.6 hours, the training remains a relevant investment in the preparation of Soldiers who are not directly bound to a CBRN unit. The focus of this module is on CBRN equipment accountability and maintenance, mask fitting and maintenance, the development of a CBRN training program, the CBRN Warning and Reporting System, and the CBRN threat brief and U.S. policies. This instruction provides a foundation that enables students to operate as unit CBRN Soldiers. During the final after action review, several of the pilot course students who were headed to non-CBRN units emphasized the need for maintaining this module.

Module J: Chemical Defense Training Facility Live-Agent Training

Live-agent training at the Chemical Defense Training Facility continues to provide a critical, confidence-building exercise for trainees. Because Soldiers are not routinely exposed to toxic environments, the Chemical Defense Training Facility represents one of the few opportunities available to instill Soldiers with self-confidence and confidence in their equipment and to ensure that they are prepared to execute CBRN tasks in support of combined arms maneuver, wide area security, and homeland defense operations.

Module K: Phase V FTX

The key to adult learning is repetition in increasingly complex environments. CBRN AIT instruction often begins with an introduction in a classroom environment, continues with a hands-on practical exercise or a situational training exercise in a garrison environment, and culminates in an FTX. The FTX, which is a crucial element of the Army Learning Model, serves as a capstone training event in which student leaders have the freedom to plan and rehearse for missions in a field environment. The FTX is essential in preparing students to be flexible and adaptive Soldiers in an unpredictable operational environment.

Module L: Warrior Tasks and Battle Drills

AIT platoon sergeants and company leaders have the lead role in reinforcing the warrior tasks and battle drills presented to Soldiers during basic combat training. Warrior tasks such as "Move Under Fire," "Perform Voice Communications," and "React to Chemical and Biological Attack" are covered throughout the CBRN AIT class. Battle drills such as "React to Contact," "Establish Security," and "Evaluate a Casualty" are also reinforced. The FTX provides an opportunity to combine warrior tasks and battle drills with CBRN operational tasks such as "Conduct Chemical Survey."

Conclusion

The CBRN AIT Class 05-12 pilot course is a good-news story! In combining the intent of the USACBRNS commandant with input from the field and from a team of USACBRNS course developers and subject matter experts, we have created a vastly improved CBRN AIT class. We are now on track to achieve the vision that the commandant has set for our Corps. Of course, there is still work to be done. As we continue to gain resources such as new facilities, improved training areas, and additional instructors and compliance and maintenance personnel, we will continue to improve the quality of USACBRNS instruction. We also continue to solicit input from the field; the demand for training is generated by operational CBRN brigades.

(Continued on page 42)



U.S. Army Chemical Corps Regimental Week and JIIM-IA CBRN Conference Schedule



The 2012 U.S. Army Chemical Corps Regimental Week and Joint, Interagency, Intergovernmental, Multinational, Industry, and Academia (JIIM-IA) Chemical, Biological, Radiological, and Nuclear (CBRN) Conference will be conducted at Fort Leonard Wood, Missouri, 26–28 June 2012. The theme for this year’s conference is “The CBRN Profession—2020 and Beyond.” This theme focuses on the CBRN capabilities, units, Soldiers, and technology required to enable the future force as described in the current or developing Army Capstone Concept and Army Operating Concept. We will engage our CBRN strategic thinkers of today and discuss preparations for our next set of challenges. The following schedule is provided for planning purposes, but is subject to change due to operational commitments. For additional information and last-minute changes, please visit the U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS) public Web site at <http://www.wood.army.mil/cbrns/>.

Time	Event	Location
Monday, 18 June 2012		
0430–1200	Best Joint CBRN Warrior Competition (Army Physical Fitness Test, Physical Endurance Combat Skills)	Gerlach Field/ Training Area (TA) 97
Tuesday, 19 June 2012		
0700–1700	Best Joint CBRN Warrior Competition (Incident Response Training Department [IRTD], Chemical Decontamination Training Facility [CDTF])	Lieutenant Terry Facility/CDTF
Wednesday, 20 June 2012		
0700–1700	Best Joint CBRN Warrior Competition (IRTD, CDTF)	Lieutenant Terry Facility/CDTF
Thursday, 21 June 2012		
0530–?	Best Joint CBRN Warrior Competition (Land Navigation/Dragon Warrior Tasks)	TA 401
Friday, 22 June 2012		
0530–?	Best Joint CBRN Warrior Competition (Reflexive Fire/Combatives)	TA 401/Shea Gym
Saturday, 23 June 2012		
1100–1300	Best Joint CBRN Warrior Competition (After Action Review and Barbecue)	Dragoon Park
1730–2400	Green Dragon Ball	Nutter Field House
Tuesday, 26 June 2012		
0530–0700	Regimental Run	Gammon Field
0730–1730	Exhibits/Vendor Displays Open	Nutter Field House
0800–1130	JIIM-IA CBRN Conference	Abrams Theater
1500–1630	Hall of Fame/Distinguished Members of the Corps Induction Ceremony and Reception	Regimental Room
1830–2100	General Officer/VIP Dinner	By Invitation Only
1830–2100	Regimental Command Sergeant Major Icebreaker	Regimental Room

Time	Event	Location
Wednesday, 27 June 2012		
0600–7000	“Honor to Our Fallen” Sunrise Service	Memorial Grove
0730–1730	Exhibits/Vendor Displays Open	Nutter Field House
0800–0900	Chemical Corps Regimental Association (CCRA) Corporate Breakfast	Pershing Community Club
0800–1400	Spouse’s CBRN Training Tour	Various
0900–1600	JIIM-IA CBRN Conference	Abrams Theater
1830–2200	CCRA Barbecue	Lieutenant Terry Facility
Thursday, 28 June 2012		
0600–0730	Warfighter Seminar Registration	Lincoln Hall Auditorium
0735–0800	Sibert Award Presentation	Lincoln Hall Auditorium
0800–1100	Joint Program Manager Update	Lincoln Hall Auditorium
1130–1500	Warfighter Seminar	Lincoln Hall Auditorium



Do you need up-to-date information about chemical, biological, radiological, and nuclear (CBRN) career management, courses, equipment, doctrine, and training development? All of this information and more is available at the CBRN Knowledge Network (CKN) Web site. To visit the CKN, go to the U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS) Web site at <http://www.wood.army.mil/wood/cms/usacbrns.shtml> and select *CKN CBRN Knowledge Network Website* in the middle, right-hand column of the home page. Check out this great resource!

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Our mailing and e-mail addresses are—

Army Chemical Review
464 MANSCEN Loop, Building 3201, Suite 2661
Fort Leonard Wood, MO 65473-8926
 <leon.mdotacr@conus.army.mil>



Improve Our Motto

By Lieutenant Colonel John R. Kennedy (Retired), Ph.D.

The motto of the U.S. Army Chemical Corps, “*Elementis regamus proelium*,” is expressed in Latin—a dead language that is unknown to the vast majority of the U.S. population. The English translation of the motto is “Let us rule the battle through the elements.” In addition to the confusion caused by the use of a dead language for our motto, the Latin version of the motto has been routinely written as “*Elementis, Regamus, Proelium!*” for the past several years. This is incorrect. While the use of commas to separate the individual words in the motto of the U.S. Military Academy “Duty, Honor, Country” is appropriate, the motto of the Chemical Corps is a sentence and separating the words with commas is wrong. We would never write “Let, Us, Rule, The, Battle, Through, The, Elements.” We should not write, “*Elementis, Regamus, Proelium!*”

There is a simple fix to this confusion. Why use a dead language to express the Chemical Corps motto? Writing the motto in Latin does nothing to enhance it; it only makes the motto more difficult for the warfighter to comprehend. We should follow the advice commonly found in writing guides to “write in English.” English is the language of the U.S. Declaration of Independence and the

U.S. Constitution. It is the most widely spoken language in our country. Using English to express a motto does not in any way diminish the authority or impact of the motto. If English is acceptable for the motto of the U.S. Military Academy, it should also be acceptable for the Chemical Corps.

The use of Latin for our motto is artificial and pretentious. Neither of those characteristics describes the modern-day Chemical Corps. Let us change the motto of the Chemical Corps from “*Elementis regamus proelium*” to “We control the battle through the elements,” which is a much more modern motto that our warfighters can easily understand.



Lieutenant Colonel Kennedy (Retired) is a physical scientist at the Edgewood Chemical Biological Center, Aberdeen Proving Ground, Maryland. He holds a bachelor's degree in chemistry from New Mexico State University, a master's degree in physical chemistry from Texas Tech University, and a Ph.D. in physical chemistry from Texas A&M University. He is also a graduate of the U.S. Army Command and General Staff College and the U.S. Naval War College, College of Naval Command and Staff.

We control the battle through the elements.

CATS:

The Army's Unit Training Strategy

By Captain Todd R. Ruggles

What is CATS? Ninety percent of the U.S. Army's leaders who were surveyed answered this question in one of the following three ways:

- "I don't know."
- "It's another Army acronym."
- "It's a small, furry, four-legged mammal that chases mice."

CATS *is* another Army acronym; it stands for "Combined Arms Training Strategy." And CATS should be an instrumental component in the professional toolbox of every Army leader and trainer. This article serves as an introduction to CATS and explains how leaders can use CATS to simplify the development of unit training plans.

Types of CATSs

There are two types of CATSs:

- **Unit CATS.** A unit CATS, which is based on tables of organization and equipment, is unique to unit type.
- **Function CATS.** A function CATS addresses functional capabilities common to multiple units and echelons.

The development of a unit CATS takes several items (doctrine, the unit organizational structure, the specific unit task list of the higher headquarters, and the mission-essential task list [METL]) into account to organize the unit's collective tasks in an Army forces generation-supporting strategy that provides a crawl-walk-run training path for achieving task proficiency. A unit CATS contains a menu of task selections that provide unit commanders with a base strategy for the preparation of training plans. Functions required for readiness reporting are integrated, and resources required to support event-driven training and provide commanders with a methodology to train all tasks are estimated. A unit CATS provides commanders with the tools necessary to plan, prepare for, and evaluate unit training.

A function CATS, which supplements a unit CATS, may support functions that are not unique to a specific unit type—or it may support the training of warfighting functions or missions that support operational themes. It contains most of the same data elements as a unit CATS. Sustainment and

protection CATSs are examples of function CATSs. A group of collective tasks that are trained together in one or more events constitutes a task selection; a number of task selections, in turn, constitute the training strategy for a particular unit.

Importance of CATS

CATSs are proponent-developed, Army-approved strategies that effectively describe the ends, ways, and means of achieving and sustaining unit warfighting readiness. Commanders and trainers are provided with a task-based, event-driven training template designed to train the unit to execute its core capabilities and table of organization and equipment missions. Every CATS contains a menu of doctrinal events and recommendations for—

- Tasks to be trained.
- The training audience.
- Training gates.
- Training aids, devices, simulators, and simulations.
- Frequencies of events.
- Durations of events.
- Multiechelon training.
- The purpose.
- The outcome.
- Execution guidance.
- Resource requirements.

A CATS serves as a comprehensive, single-source training strategy. It acts as a training template that provides a starting point for the development of the unit training plan. CATSs contain unit-specific training strategies that can be easily modified to meet training requirements based on the unit mission and the commander's assessment. They effectively support the Army forces generation training model and METL-based training and readiness reporting. Unlike the old mission training plans which, once printed, were difficult and impractical to change, the digital CATS provides units with

the most current tasks in real time. The digital nature of the CATS offers tremendous flexibility, allowing units the ability to work with the Collective Training Division; Directorate of Training and Leader Development; U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS), to update tasks as new equipment or tactics, techniques, and procedures modify or invalidate existing CATSs. Furthermore, Headquarters, Department of the Army, has directed the use of CATSs and the Digital Training Management System (DTMS) via Army Regulation (AR) 350-1, *Army Training and Leader Development*. According to AR 350-1, "In the absence of a directed mission, the commander will use [full spectrum operations,] METL-based CATS . . . to prepare the unit to perform those core missions for which the unit was doctrinally designed to execute across the spectrum of operations."

Development of CATS

The first stage in the development of a CATS involves the verification of the unit table of organization and equipment, an analysis of the doctrinal mission, a determination of unit capabilities by warfighting function, and the establishment of a standardized METL for brigade level and above. Task selections are then made, and tasks that would logically be trained together are grouped. The resulting unit task list serves as the foundation of CATS construction. Upon the completion of this stage, a front-end analysis is sent to field units for input.

Upon the conclusion of the front-end analysis, a coordinating draft is developed. The draft outlines progressive training events for each task selected. The audience, frequency, and duration for these training events is determined and then synchronized with the Army forces generation training cycle. The unique requirements, resources, conditions, proficiency goals, and execution guidance are determined for each event. Information for all events is applied to a template training calendar that identifies the multiechelon training and critical

Legend:

AAR - after action review
 CATS - Combined Arms Training Strategy
 CB - chemical/biological
 CBRN - chemical, biological, radiological, and nuclear
 CBRNE - chemical, biological, radiological, nuclear, and high-yield explosives
 CRT - chemical, biological, radiological, nuclear, and high-yield explosives response team
 DOD - Department of Defense
 FP - force protection
 IED - improvised explosive device
 LIN - line item number
 LMTV - light-medium tactical vehicle
 LTX - lane training exercise
 MILES - Multiple, Integrated, Laser Engagement System
 MTRS - Man-Transportable Robotic System
 PDS - personal decontamination site
 SAW - squad automatic weapon
 STX - situational training exercise
 STT - sergeant's training time
 TADDS - training aids, devices, simulators, and simulations
 TE - technical escort
 UXO - unexploded ordnance

Task selection: The title for the task selection. This title best identifies the group of supporting tasks. Task selections include a number of supporting tasks.

Frequency: The recommended number of times the task selection should be trained during one training year.

Event: The title of the event for the short-range unit training strategy.

Training audience: All units, elements, and individuals necessary to perform the task selection and ensure that training achieves the commander's desired end state and proficiency.

TADSS: Information about one of the events selected as appropriate for training this task selection. This identifies the name of the event, relevant TADSS, and the recommended number of iterations for the event in a given year. (The absence of a number indicates that there is not a recommended number of iterations.)

Multiechelon training: Other task selections recommended to be performed by subordinate elements during this training.

Training gates: Training gates that should be achieved before training the task selection.

Action gates: Suggested prerequisites.

Facilities: The recommended type of facility to be used.

Purpose: Explanation of why this particular event was selected to train this task selection.

Outcome: The end state of training by the unit as a result of training the task selection in the specified event.

Execution guidance: Information to assist the commander in determining the appropriate event for training a task selection. This also includes information to assist in the execution of the training.

Resources: Approximate resource requirements to support the event. The commander may adjust the levels based on specific training objectives and local training conditions.

This is a sample task selection from a CBRNE battalion (TE) CATS. A task selection is defined as a grouping of collective tasks trained together in one or more events. A number of task selections constitute a training strategy for a particular unit.

Following are key points regarding task selections and event data:

- Task selections are used in CATS to identify a group of collective tasks normally trained together in an event.
- Task selections that encompass a unit's requirements to sustain training readiness are collected in the CATS for that type of unit.
- Event data identifies who to train, the training methods, the duration of training, the conditions, and the resources required.
- Event data also identifies recommended multiechelon training and training gates and provides the purpose, intended outcome, and information about conducting the event.



Task Selection: Conduct Chemical/Biological (CB) Analytical Missions (CRT) (03-TS-9003)

Active frequency: Quarterly (4.0)
 Reserve frequency: None
 Collective task(s):
 03-5-0013 Conduct a CB analytical mission 09-2-2000 React to UXO
 03-5-0018 Establish a PDS 63-2-4017 Maintain communications
 03-5-0021 Conduct a transload mission 63-2-4040 Provide communications
 07-2-5081 Conduct troop leading procedures (platoon-company) 63-2-4326 Perform composite risk management procedures
 08-2-0003 Treat casualties
 Types of events: Class, LTX, STT, and STX.

Event: STX for Conduct CB Analytical Missions (CRT)
 Condition: Run
 Training audience: Company headquarters (03537RA00); CRT (03537RB00)
 TADSS: 71-TD-1903 TADSS to support live/hands-on FP training; MILES; required ammunition (live/blank); IED simulations; CBRN training aids.
 Multitechelon training:
 Training gates:
 Action gates: STT for Conduct CB Analytical Missions (CRT)
 Facilities: Local training area
 Purpose: To gain and maintain TE battalion team proficiency in the tasks associated with conducting CB analytical operations under "walk" conditions.
 Outcome: The TE battalion team/analytical section personnel can plan, prepare for, and conduct day/night CB analytical operations in tactical and nontactical environments.
 Execution guidance: This exercise trains TE battalion team/analytical section personnel to a "walk" level of proficiency in the tasks associated with conducting CB analytical operations in tactical or nontactical environments. The team leader provides and/or coordinates for necessary external resources including observers/trainers. The estimated duration for this STX includes time to prepare, execute, and perform an AAR and to repeat training as necessary. (Planning can be done in garrison before movement to the STX site). This is not intended to be a separate exercise conducted solely to train these tasks and should be incorporated with other tasks (STXs) to form a more complex and challenging exercise. This training should focus on team and section operations; MILES equipment could be introduced during this training if it takes place under tactical conditions. The company commander and/or observers/trainers will conduct AARs at the appropriate intervals.
 Resources:

Company Headquarters (03537RA00)

LIN	Quantity	Nomenclature	Operational tempo	Class 3 – Petroleum, oil, and lubricants	Class 5 – Ammunition		
			Distance	Gallons	DOD Identification Code	Quantity	Nomenclature
L44595	1	Launcher, grenade, 40-millimeter, single-shot rifle, mounted, detachable, with equipment					
M09009	1	Machine gun, 5.56-millimeter M249			A075	200	Cartridge, 5.56-millimeter, blank with M27 links (SAW)
P88152	1	Pistol, 9-millimeter automatic, M9					
R95035	5	Rifle, 5.56-millimeter, M16A2			A080	200	5.56-millimeter blank F M16A1A2
T60081	1	Truck cargo, 4x4 LMTV with equipment	20 miles	4.0			
T61494	2	Truck utility cargo/troop carrier 1 1/4-ton, 4x4 with equipment (Humvee)	20 miles	4.0			

CBRNE Response Team (03537RB00)

LIN	Quantity	Nomenclature	Operational tempo	Class 3 – Petroleum, oil, and lubricants	Class 5 – Ammunition		
			Distance	Gallons	DOD Identification Code	Quantity	Nomenclature
L44595	1	Launcher, grenade, 40-millimeter, single-shot rifle, mounted, detachable, with equipment					
M09009	1	Machine gun, 5.56-millimeter M249			A075	200	Cartridge, 5.56-millimeter, blank with M27 links (SAW)
M74226	3	Mine-resistant vehicle	20 miles	24.0			
P88152	15	Pistol, 9-millimeter automatic, M9					
R45351	1	Rifle, sniper, 50-caliber M107					
R95035	14	Rifle, 5.56-millimeter, M16A2			A080	560	5.56-millimeter blank F M16A1A2
T61494	3	Truck utility cargo/troop carrier 1 1/4-ton, 4x4, with equipment (Humvee)	20 miles	6.0			
Z0045	1	MTRS, MK I					

Sample task selection from a CBRNE battalion (TE) CATS

training gates required and the application of strategy based on the Regular Army or Reserve Component Army forces generation cycle.

The final stage before delivering the CATS to the field via the DTMS and the Army Training Network (ATN) involves vetting the coordinating draft with the units and obtaining approval from the proponent.

Locations of CATSs and Tasks

CATSs can be found in two locations—the DTMS and the ATN. Task selections from the unit task list—the major component of a CATS—can be found at the Chemical, Biological, Radiological, and Nuclear Knowledge Network (CKN).

DTMS

DTMS, which can be accessed at <https://dtms.army.mil>, is a Web-based, commercial, off-the-shelf software product tied to a relational database and customized according to Field Manual (FM) 7-0, *Training Units and Developing Leaders for Full Spectrum Operations*. Optimized for use at brigade level and below, DTMS allows for the planning, resourcing, and management of unit and individual training at all levels. Collective and individual tasks, weapons qualification information, Army physical fitness test results, and AR 350-1 mandatory training and deployment tasks from “enlistment to retirement” are compiled within the DTMS. Relevant training products are available through DTMS due to frequent updates of approved collective and individual tasks, CATSs, the Army Universal Task List, and the Universal Joint Task List. The primary advantage of accessing CATSs through DTMS is that it allows the user to perform evaluations. However, users must have a DTMS account to access CATSs in this manner.

ATN

The ATN, which can be accessed at <https://atn.army.mil>, is a single, Web-based portal for Army training resources. It is securely located behind Army Knowledge Online (AKO) single, sign-on protocols. The ATN contains many unique tools that provide users with an easy, intuitive means to comment on any of its features. Some of the major features of the ATN include—

- **FM 7-0.** This data-based version of FM 7-0 contains links to additional resources that can be used to clarify and expand the content of the manual in an easy-to-navigate format. Future versions will contain direct links to the Training Management feature, which is also available through the ATN.
- **Training Management.** Training Management is the successor to FM 7-1, *Battle Focused Training*. It provides step-by-step guidance on how to plan, prepare, execute, and assess Army training. The content of Training Management and FM 7-0 are inextricably linked.
- **Training Enablers.** Training enablers include a METL viewer, CATSs, the DTMS, the Training Event Planning Tool, Army Warrior Tasks, and FM 7-15, *The Army Universal Task List*.
- **Collaboration.** There are many collaborative tools built into the ATN site, providing Soldiers with a quick and easy way to supply input to the ATN team and share ideas across Army training communities of practice.
- **Army Training Network To Go (ATN2GO).** ATN2GO is a downloadable iPhone/iPad and Android application (app) that transfers useful Training Management features from the ATN to Soldiers’ mobile devices. It supplies Training Management to Soldiers when and where they need it.

An advantage of the ATN over the DTMS is that an individual account is not necessary; all Soldiers can access ATN using their common access cards (CACs) or AKO logins and passwords. A disadvantage of the ATN is the user’s inability to perform evaluations of training events.

CKN

Although CATSs cannot be accessed via the CKN, the CKN—which can be accessed at <https://www.us.army.mil/suite/designer>—provides chemical, biological, radiological, and nuclear (CBRN) leaders with the ability to easily select and print unit task lists, which are the building blocks of CATSs. The CKN Web site requires a CAC login or AKO login and password.

CATSs are living documents that are capable of quickly and readily adapting as the needs of the Army and the unit change. All Army leaders and trainers should be knowledgeable about CATSs and their value to a unit’s Training Management. CATSs assist unit training managers with the development, conduct, and evaluation of training, thus reducing planning time and assisting warfighters in achieving their missions.

Endnote:

¹AR 350-1, *Army Training and Leader Development*, 18 December 2009.

References:

FM 7-0, *Training Units and Developing Leaders for Full Spectrum Operations*, 23 February 2011.

FM 7-1, *Battle Focused Training*, 15 September 2003 (rescinded 1 October 2009).

FM 7-15, *The Army Universal Task List*, 27 February 2009.

Captain Ruggles is a collective training developer/writer with Headquarters and Headquarters Company, 3d Chemical Brigade, Fort Leonard Wood, Missouri. He has a bachelor’s degree from the U.S. Military Academy, West Point, New York, and is working toward a master’s of divinity degree from Liberty University, Lynchburg, Virginia.



THE 48TH CHEMICAL BRIGADE DEPLOYS TO KOREA FOR WARPATH III EXERCISE

By Major Kimberly A. Bates-Wallace

At 4 a.m. on Sunday, 25 June 1950, North Korean forces crossed the 38th Parallel (known as the “Military Demarcation Line” in that part of the world) and launched a full-scale invasion of South Korea. Four days later, Seoul (the capital of South Korea) fell. After 3 years of combat operations in places such as the Chosin Reservoir and Heart-break Ridge, an armistice was signed in July 1953.

Nearly 60 years later, the 48th Chemical Brigade “Spartans” from Fort Hood, Texas—along with elements of the 23d Chemical Battalion “Lions” and the 110th Chemical Battalion (Technical Escort) “Iron Dragons” from Joint Base Lewis-McChord, Washington—deployed to the Republic of Korea (ROK) to join the 2d Infantry Division (2ID), the 20th Support Command (Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives [CBRNE]), and the ROK Armed Forces in Warpath III—the first-ever, division level, weapons of mass destruction–elimination (WMD-E), full spectrum exercise.

The 48th Chemical Brigade Warpath III mission set included deploying to the ROK in support of 2ID to combat weapons of mass destruction (WMD) and to counter improvised explosive device fusion cell operations. The brigade also executed

mission command of its subordinate battalions in support of efforts to eliminate North Korea’s WMD.

Not only did the Spartans complete their mission, they conducted the largest strategic movement, deployment, and operation since their inception—and they did it without incident or injury. In addition, they conducted mission command across the entire Korean theater of operations. The leaders and Soldiers demonstrated that, when resourced, the 48th Chemical Brigade is capable of adapting to the diverse needs of full spectrum operations and unified land operations, integrating various required enablers—including explosive ordnance disposal and ROK forces as well as other technical WMD operations experts—and employing units within an austere operational environment. The exercise underscored the importance of training units to be proficient in their technical core competencies and tactical warrior tasks and reinforced the necessity of exercising units in unfamiliar environments to rapidly improve their readiness for combat and other contingency missions. It also highlighted the need to establish a common operational picture to effectively integrate U.S. forces, our ROK partners, and interagency personnel involved in WMD operations. The staff of III Corps and the support of the 20th Support

Command were key and essential elements that contributed to the success of the brigade in meeting its training objectives, which included—

- Deploying the brigade and two battalion headquarters in support of WMD-E and counter improvised explosive device operations.
- Synchronizing WMD-E and counter improvised explosive device operations through the division WMD fusion cell.
- Training brigade staff in WMD-E operations.
- Conducting collaborative and parallel staff planning with 2ID staff.
- Refining tactics, techniques, and procedures for conducting WMD-E operations and maintaining partnerships with ROK forces.
- Reestablishing partnerships with CBRNE ROK forces.
- Supporting and synchronizing WMD-E and counter improvised explosive device operations through the division WMD fusion cell.

Execution

The purpose of the Warpath III exercise was to evaluate the ability of the division and subordinate brigades to support the ROK by controlling and preventing the proliferation of WMD material. A fusion cell was created within the brigade tactical operations center (TOC) for the purpose

of analyzing information, providing recommendations, and synchronizing and synergizing efforts. The fusion cell was comprised of key members of division, chemical brigade, and ROK staffs as well as theater experts. During each hypothetical exercise scenario, U.S. forces demonstrated resolve in supporting the ROK while also improving interoperability and sharpening readiness.

All Warpath III participants (including the brigade) conducted 24-hour battle staff operations in a field level environment. The command post exercise portion of the operation concentrated on specific aspects of combined and joint war-fighting according to Combined Forces Command operations plans. Once the full spectrum of reception, staging, onward movement, and integration had been crossed, the Hazardous Response Platoon (HRP), 61st Chemical Company; CBRNE Response Team 2C, 110th Chemical Battalion; and the 4th Squadron, 7th Cavalry Regiment, performed the decisive air-insertion mission and cleared an underground facility, allowing chemical, biological, radiological, and nuclear (CBRN) assets to assess and exploit the facility. The HRP initially established an emergency personnel decontamination station alongside the hasty ROK decontamination station. The platoon also made use of unarmed ground equipment that was outfitted with a mounted camera, which allowed command post personnel to view any dangers existing in the target area. As the assault element cleared the facility, the HRP conducted initial-entry operations. CBRNE Response Team 2C and a team from the ROK CBRN Defense Command served as follow-on forces.



A 23d Chemical Battalion Soldier helps conduct a sensitive-site assessment of a tunnel complex.



ROK soldiers discuss the capabilities of the 48th Chemical Brigade and current 2ID full spectrum operations.

These elements conducted assessment, sampling, detection, verification, and render-safe operations. Detailed troop decontamination was jointly performed by the 4th and 61st Chemical Companies.

The maneuver commander's ability to provide the commander of the 2ID with a complete picture of the CBRNE threat was inherent throughout the mission. The goal was to neutralize the enemy, rendering the adversaries unable to interdict any follow-on friendly operations. The 48th Chemical Brigade served as the primary advisor on all CBRNE matters, integrating with the 2ID TOC and the division CBRN cell. The brigade received CBRN attack and intelligence reports via the Combined Information Data Network Exchange and 2ID situational reports and updates from organic units that were under the operational control of 2ID maneuver elements. In addition to the fusion cell, brigade assets included experts from the Nuclear Disablement Team, 20th Support Command, and three explosive ordnance disposal experts from the 3d Ordnance Battalion. By the end of the operation, the unity of effort among all cells produced actionable intelligence that allowed the 2ID to accomplish its objective of preventing the proliferation of CBRNE weapons.

U.S. Soldiers and Korean liaison officers in the brigade TOC exchanged ideas and questions about individual roles, reporting procedures, and information processing within the TOC. A number of U.S. and ROK senior leaders and dignitaries visited the TOC and the fusion cell to obtain operational updates. The resulting cross-talk and joint dialogue collectively improved the leadership by revealing methods for processing information and intelligence; but more importantly, the collaboration strengthened the bond and partnership between the United

States and the ROK. At times, the operational tempo restricted the lengths of the conversations; however, situational awareness and education continued through observations and mere presence.

Observations

The Warpath III exercise was successful in many ways; however, several challenges were also experienced.

Successes

Areas in which the Warpath III exercise was successful include the—

- **U.S./ROK training relationship.** While the brigade and ground units honed their tactics, techniques, and procedures, the Warpath III exercise also served as an excellent opportunity for U.S. and ROK forces to establish camaraderie and rapport. The brigade operations officer stated that “sometimes our only exposure to, or knowledge about, our counterparts is through information disseminated at the strategic level. It was an amazing experience being able to work with our counterparts at the operational and tactical level[s] and to experience and watch the plans [that were] developed materialize.”
- **Staff fusion and collaboration.** The brigade staff's synchronized information was shared quickly and efficiently, allowing for accurate analyses to be provided to the commander and the 2ID in a timely manner.
- **WMD-E awareness.** After 10 years of battling insurgencies without the threat of CBRN warfare, the Warpath III exercise enhanced and tested the Soldier skills required to



110th Chemical Battalion Soldiers prepare to conduct sampling.

protect against CBRN hazards. Soldiers are expected to face a diverse and complex problem set that will require basic and specialized CBRN skills to survive and be successful in hostile environments.

Challenges

The brigade faced several internal and external challenges during its largest strategic movement, deployment, and operation since brigade inception. These challenges included the—

- **Standardized reporting of WMD sites.** During various stages of the Warpath III exercise, individual units submitted assessment and exploitation reports for their specific sub-portions of the overall target; each of these reports differed from the others. **Recommendation:** Higher-level units should develop a standardized assessment and exploitation report format for use across the Korean theater of operations.
- **Tactical integration of U.S. CBRN assets into ROK maneuver force operations.** There has been no integration of U.S. CBRN assets (HRPs, CBRNE response teams, chemical reconnaissance detachments) into ROK maneuver force operations during actual collective and combined arms training in recent history; therefore, the challenges associated with such integration have not been experienced. **Recommendation:** ROK forces should include U.S. CBRN assets in their next live collective training event.

Conclusion

Considering North Korea's existing chemical and biological weapons programs and the advent of their nuclear testing program, the reality of a CBRN threat has been elevated to a whole new level of precedence. The

Warpath III exercise proved to be a valuable step toward enhancing the capability of counter WMD operations. Although there were extensive training tactics, techniques, and procedures across several levels, only through continuous, fully combined and integrated training can the security of the Korean peninsula be ensured. The Chemical Corps—and the U.S. Army as a whole—will build upon the lessons learned during this training exercise to achieve mission readiness when faced with any WMD threat. The 48th Chemical Brigade is looking forward to reinforcing the successes of the Warpath III exercise and continuing to improve overall readiness during this year's upcoming exercise.

Acknowledgement: The 23d and 110th Chemical Battalions and the Headquarters and Headquarters Detachment, 48th Chemical Brigade, contributed to this article.

Major Bates-Wallace is the executive officer, 48th Chemical Brigade. She holds a bachelor's degree from Central Michigan University and a master's degree in business administration from Webster University.





4TH MEB COMPLETES CCMRF MISSION

By Major Todd W. Heintzelman and Major Rodney D. McCutcheon

One of the elements of unified land operations is stability operations, or civil support operations. There are four primary Army civil support tasks:

- Provide support for domestic disasters.
- Provide support for domestic chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE) incidents.
- Provide support for domestic civilian law enforcement agencies.
- Provide other designated support (such as wildfire response).

As part of civil support operations, the 4th Maneuver Enhancement Brigade (MEB), Fort Leonard Wood, Missouri, was assigned as the Task Force Operations headquarters for the chemical, biological, radiological, nuclear, and high-yield explosives consequence management response force (CCMRF) from 2009 to 2011. The 4th MEB demonstrated that MEBs are uniquely organized to meet the mission requirements of Task Force Operations headquarters. This article contains a discussion of the history and importance of CCMRFs, a description of the challenges that the 4th MEB overcame, and an explanation of why the MEB is the organization optimally suited for the CCMRF Task Force Operations headquarters.

The CCMRF began with the 2007 release of the “National Strategy for Homeland Security.”¹ The report emphasized the continuing threat that terrorist organizations posed to the United States through their potential use of weapons of mass destruction, which the Department of Defense (DOD) characterizes in terms of CBRNE materials.² Many well-developed plans to prevent such horrible attacks were in place, but the ability to mitigate the traumatic results of a weapons of mass destruction attack were insufficient. While local agencies could respond to some CBRNE incidents (such as low-level chemical spills), catastrophic incidents (such as nuclear attacks accompanied by major human casualties and infrastructure damage) would require an extraordinary level of predetermined organizational structure.

A unified national response (which includes DOD) is required to properly address a catastrophic CBRNE incident within the United States. As a result of the 11 September 2001 terrorist attacks, the U.S. Department of Homeland Security has been designated as the overall federal coordinating agency for disaster response planning. The Federal Emergency Management Agency, which falls under the Department of Homeland Security, serves as the primary federal agency responsible for coordinating interagency responses to CBRNE incidents. As a supporting organization, DOD provides assets requested by local, state, or other federal government agencies.

The DOD-required assets prompted the establishment of National Guard CBRNE response units such as civil support teams and CCMRFs.

In his testimony to the House Armed Services Committee (Subcommittee on Terrorism and Unconventional Threats and Capabilities) on 28 July 2009, General Victor E. Renuart stated, “CCMRF is a task force (approximately 4,700 people) that operates under the authority of Title 10.³ CCMRFs are self-sustaining and may be tailored to any CBRNE event. A CCMRF is composed of Army, Marine, Navy, and Air Force units with unique CBRNE training and equipment and general-purpose units trained to operate in proximity to a hazardous or contaminated environment. CCMRF capabilities include event assessment, robust command and control, comprehensive decontamination of personnel and equipment, hazmat handling, air and land transportation, aerial evacuation, mortuary affairs, and general logistical support to sustain extended operations.”²⁴ In addition, the task organization of a CCMRF (now known as a defense chemical, biological, radiological, and nuclear response force [DCRF] for CCMRF 1 or as a command and control chemical, biological, radiological, and nuclear response element [C2CRE] for CCMRFs 2 and 3) allows for scalability in response to CBRNE disasters.

A CCMRF (DCRF or C2CRE) is composed of a conglomerate of DOD assets. A further breakdown of the organizational structure is necessary to illustrate the importance of the 4th

MEB in the CCMRF force structure. The CCMRF is composed of three task forces—Operations, Aviation, and Medical. The 4th MEB was involved in Task Force Operations; and even though the organization was well-suited for the role, issues existed.

During the planning phase (before CCMRF Title 10 forces arrive), local, state, and regional Title 32 forces (civil support teams; chemical, biological, radiological, nuclear, and high-yield explosives enhanced response force packages [CERFPs]; homeland response forces; and disaster assistance response teams)⁵ move into the joint operating area and begin to exhaust basic loads. Under the concept of support for these forces, the responsibility for resupply support is assigned to the Consequence Management Support Center—a National Guard Bureau asset. Some of the Title 32 forces, such as the civil support teams and CERFPs, have specialized, technical-forces resupply requirements. Should shortfalls in the Consequence Management Support Center’s abilities or timelines exist, the Title 32 forces that initially responded may relay additional resupply requirements to the CCMRF. Because these additional resupply requirements are often not included in the CCMRF concept of support, Title 10 forces and the Consequence Management Support Center work together to capture the requirements and amend the concept of support and logistics estimates accordingly.

The preparation phase also allowed the 4th MEB to identify challenges. Task Force Operations is comprised of



CCMRF responders



Command post

companies and battalions from various installations throughout the United States. The complexity of force projection across the country complicates the task of the assigned brigade level task force to validate the abilities of the assigned unit(s) to deploy from their respective installations. Due to weather and other factors, the complexity of force projection is very challenging, even for Regular Army units—and much more so for Reserve Component units, which routinely struggle to get enough dedicated enablers to assist with their rapid deployment from their assigned/mobilized installations. The sourcing of future units should take into account the abilities of the installations to rapidly deploy the assigned units and also the geographic locations of those units in relation to the assigned brigade level task force.

The final challenge—providing the lifesaving capability of water—was identified during the execution phase. The 4th MEB used a tactical water purification system to generate more than 70,000 gallons of purified water for internal sustainment, to augment Federal Emergency Management Agency points-of-distribution deliveries, and to support decontamination operations as necessary. According to the modified table of organization and equipment, in addition to the tactical water purification system, the 4th MEB is authorized two lightweight water purification units and several containerized water distribution platforms. The fiscal year 2012 modified table of organization and equipment calls for a reduction in these capabilities. To continue to successfully produce adequate water, the retention of all existing water production capabilities and the augmentation of these capabilities with another tactical water purification system are vital. Due to its critical nature, the water supply should not be dependent upon a single purification system.

The organization of an MEB allows it to effectively provide mission command in defense support of civil authorities,

making it the ideal DOD unit for commanding CCMRF Task Force Operations. The MEB consists of—

- Organic units.
 - A brigade support battalion.
 - A signal company.
 - A headquarters company.
- Headquarters staff.
 - Personnel (S-1) staff.
 - Military intelligence (S-2) staff.
 - Operations (S-3) staff (including operations; chemical, biological, radiological, and nuclear [CBRN]; military police; fires; airspace management; and engineer cells).
 - Logistics (S-4) staff.
 - Plans (S-5) staff.
 - Signal (S-6) staff.
 - Special staff (including public affairs, legal, surgeon and medical, and unit ministry teams).

The MEB, which is designed as a modular brigade headquarters, is capable of providing mission command to any number of attached battalions. Units attached to Task Force Operations headquarters include a chemical battalion, an engineer battalion, and a military police battalion.

As the Task Force Operations headquarters, the MEB's greatest asset is its functional cells. These cells provide depth and technical expertise not possessed by a brigade combat team. While the MEB boasts an entire CBRNE staff that is trained in CBRNE defense, brigade combat teams

“According to the officer in charge, ‘The MEB has all the subject matter experts that not only develop situational awareness for the commander, but also make rapid decisions to evaluate the hazard area to evacuate casualties, while keeping troops and civilian response teams out of harm’s way.’”

include only a captain and a noncommissioned officer. The 4th MEB CBRNE cell officer in charge believes that, due to the functional cells, the MEB makes the perfect headquarters for Task Force Operations. According to the officer in charge, “The MEB has all the subject matter experts that not only develop situational awareness for the commander, but also make rapid decisions to evaluate the hazard area to evacuate casualties, while keeping troops and civilian response teams out of harm’s way.”

One of the major strengths of the MEB is its robust current operations cell, which consists of CBRN, engineer, and military police personnel who serve as subject matter experts for all battalions attached to Task Force Operations. Because the MEB is designed to be an owner of an operational environment, its current operations cell is larger than that of other functional brigades.

The MEB fires cell also plays a crucial role in Task Force Operations. Because there is no need to coordinate fires during

a CCMRF mission, the fires cell is organized as the liaison cell, which coordinates with the incident commander—the lead civilian agency for the incident response. For civil support operations, the military works for civilian agencies. The military mission begins as a request for assistance from the supported civilian authority.⁶ Civilian incident commanders do not have a complete knowledge or understanding of the Army’s capabilities or legal restraints regarding CCMRF missions. Therefore, the MEB liaison cell performs the important function of explaining Task Force Operations capabilities to the incident commander so that available assets can be properly managed.

U.S. law defines nearly every aspect of civil support operations. As a result, domestic operational environments are quite different from environments outside of the United States. Many Soldiers are prohibited from undertaking certain missions, particularly those associated with law enforcement. The disregard for the laws governing civil support can cause military units to enter legal minefields that will cripple mission



A CCMRF rescues the victim of a collapsed building.

accomplishment.⁷ For this reason, the brigade legal team is an essential element of Task Force Operations. The legal team is incorporated into the planning process to ensure the legality of all missions. The team also relays legal knowledge and advice to all leaders within the brigade. If the law is broken and the brigade is unable to conduct further operations, lives could be lost.

A CBRNE incident could result in thousands of casualties. In addition, there could be people who are not physically sick but believe that they are, as well as those who are “worried sick.” The MEB brigade surgeon and medical team is available to help plan, coordinate, and synchronize the medical operational response requirements with Task Force Medical. To save the maximum number of lives, Task Force Operations and Task Force Medical must work together. The brigade surgeon and medical team provides the necessary link.

The airspace management cell is yet another reason that the MEB is the ideal organization for Task Force Operations. Large numbers of personnel and supplies must be moved throughout an area during a CBRNE response. When road networks are damaged, air may become the only means by which isolated individuals can receive supplies or medical treatment; therefore, airspace is crucial. The airspace management cell is the essential link that synchronizes Task Force Aviation and Task Force Operations air operations.

A CBRNE incident could demolish buildings and devastate the infrastructure. This would require a huge amount of engineer support. According to the office in charge of the 4th MEB Engineer Cell, an MEB possesses all possible aspects of engineering within its organization. It encompasses the areas of bridging, debris removal, construction, asphalt, concrete, plumbing, electrical, survey and design, and firefighting. While the number of MEB personnel is limited relative to a true engineer brigade, the military occupational specialty abilities of the MEB exceed those of an engineer brigade.

The civilian communication system will probably be overloaded during a CBRNE response, with thousands of people attempting to call friends and family to request help or to notify them of their status. And many civilian agencies also rely on the communication system, adding to the strain on the system. The communication infrastructure itself could be damaged—especially if the incident were to involve a nuclear bomb with an electromagnetic pulse (EMP). The signal company assigned to the MEB can provide the necessary communication for all Task Force Operations units.

A CBRNE attack on the Homeland would create more terror and confusion among Americans than any other type of attack, which is why terrorists continue to acquire and attempt to use weapons of mass destruction. And the CBRNE threat will remain as long as individuals and organizations that are willing to use terrorism as a means of achieving political goals are in existence. The United States must remain vigilant in protecting the Homeland and must stand ready to provide a swift, synchronized response to any CBRNE attack. The MEB

is the military unit best-suited to assist civilian authorities in responding to a CBRNE attack. Due to the robust, specialized MEB staff and the ability of the MEB to command and control any number of CBRN, engineer, and military police units, DOD should continue to assign the Task Force Operations mission to the MEB.

Endnotes:

¹“National Strategy for Homeland Security,” Homeland Security Council, October 2007.

²U.S. Government Accountability Office (GAO)-10-123, *Planning, Resourcing, and Training Issues Challenge DOD’s Response to Domestic Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive Incidents*, 7 October 2009.

³“Title 10” refers to U.S. Code (USC), Title 10, *Armed Forces*, which governs forces under the control of the federal government.

⁴“Statement of General Victor E. Renuart, Jr., USAF Commander, United States Northern Command Before the House Armed Services Committee, Subcommittee on Terrorism and Unconventional Threats and Capabilities,” 28 July 2009,” <http://democrats.armedservices.house.gov/index.cfm/files/serve?File_id=ebd839c6-ec27-4354-8d74-08eaa9418b7b>, accessed on 12 March 2012.

⁵In addition to Title 10 forces, CCMRFs also include Title 32 forces, which are National Guard forces that—with the President’s permission—are activated under the command of the state governor, but are paid by the federal government. Title 32 forces are governed under USC Title 32, *National Guard*.

⁶Field Manual (FM) 3-28, *Civil Support Operations*, 20 August 2010.

⁷*Ibid.*

Major Heintzelman is the plans officer for the 4th MEB. He holds a bachelor’s degree in history and political science from Grove City College, Pennsylvania, and a master’s degree in environmental management from Webster University. He is also an Intermediate-Level Education (Homeland Defense Track) graduate.

Major McCutcheon is the operations officer for the 4th MEB. He holds a bachelor’s degree in criminal justice from South Carolina State University and a master’s degree in environmental management from Webster University.



CBRN Doctrine and Doctrine 2015

By Mrs. Mary Gill

Doctrine 2015 is a Department of the Army initiative that will allow our Regiment to reflect on the hard lessons we have learned throughout more than 10 years of war and will serve to guide us into our future. Under the Doctrine 2015 strategy, our chemical, biological, radiological, and nuclear (CBRN) manuals will be categorized differently; their length and number will be reduced; and they will be made more collaborative and accessible by leveraging emerging technology. Four levels of doctrine are encompassed under Doctrine 2015.

Army Doctrine Publications

Army doctrine publications (ADPs), which are to be limited to about 10 pages, contain only absolutely fundamental principles. The projected ADP inventory is 16. ADP 1, *The Army* (which will replace FM 1, *The Army*¹), and ADP 3-0, *Unified Land Operations* (which has replaced FM 3-0, *Operations*²), are the only two publications considered to be Army “capstone” manuals. All other ADPs will describe the fundamental principles of the subject and explain how they support ADP 3-0.

Army Doctrine Reference Publications

Army doctrine reference publications (ADRP), comprised of 75–100 pages, provide a more detailed explanation of the principles contained in the ADPs. They contain detailed explanations of the doctrinal principles so that all Army personnel can interpret the information in the same way. There should be no more than one ADRP for each ADP.

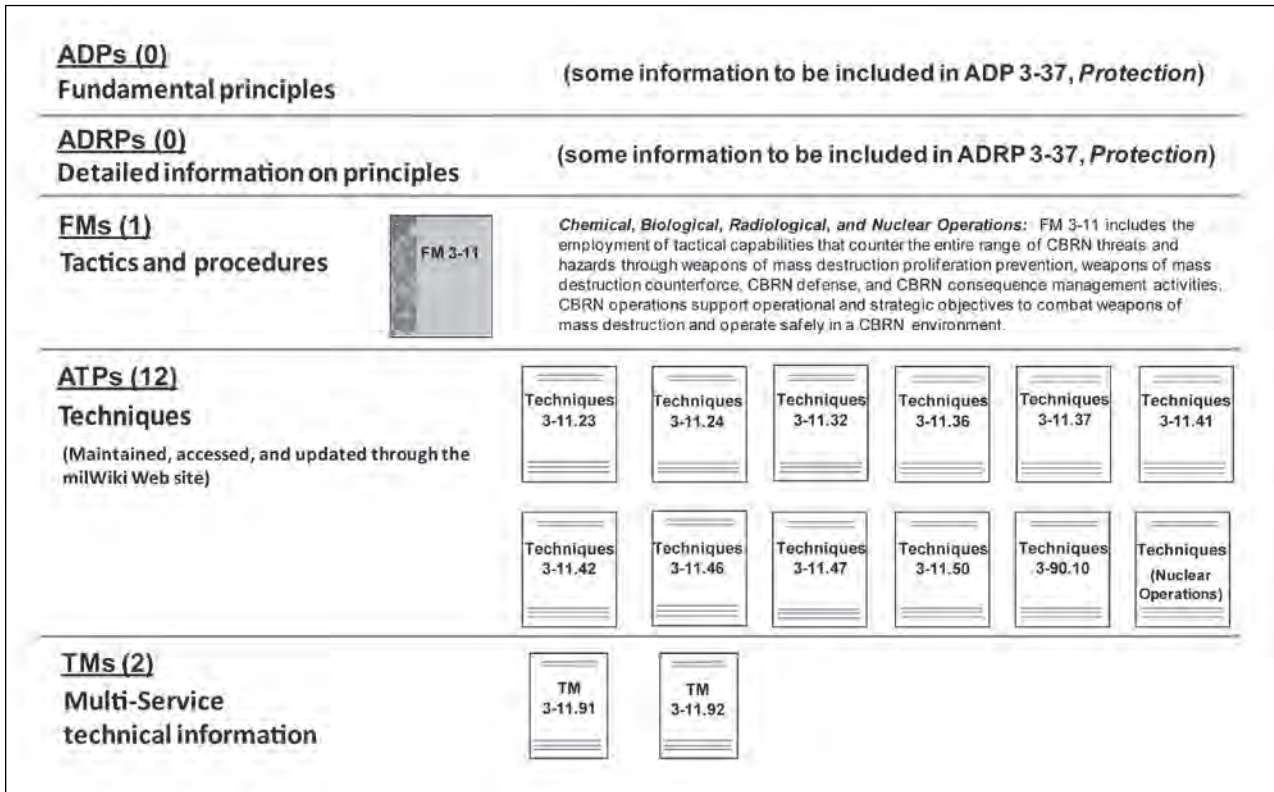
FMs

FMs contain information about tactics and procedures. Under Doctrine 2015, the inventory of FMs will be reduced from more than 600 to a total of 50. One of the 50 is FM 3-11, *Multiservice Doctrine for Chemical, Biological, Radiological, and Nuclear Operations*.

Army Techniques Publications

Army techniques publications (ATPs) describe non-prescriptive techniques used to perform missions, functions, or tasks. The Chemical Regiment serves as the proponent for 12 ATPs:

- ATP 3-11.23, *Multiservice Tactics, Techniques, and Procedures for Weapons of Mass Destruction Elimination Operations*.
- ATP 3-11.24, *Technical Escort Battalion Operations*.
- ATP 3-11.32, *Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Passive Defense*, which will consist of a two-volume compilation of the following existing doctrine:
 - FM 3-11.3, *Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Contamination Avoidance*.
 - FM 3-11.4, *Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection*.
 - FM 3-11.5, *Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination*.
- ATP 3-11.36, *Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Aspects of Command and Control*.
- ATP 3-11.37, *Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Reconnaissance and Surveillance*, which will consist of a compilation of the following existing doctrine:
 - FM 3-11.19, *Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Reconnaissance*.
 - FM 3-11.86, *Multiservice Tactics, Techniques, and Procedures for Biological Surveillance*.
- ATP 3-11.41, *Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Consequence Management Operations*.
- ATP 3-11.42, *Multiservice Tactics, Techniques, and Procedures for Installation Emergency Management*.
- ATP 3-11.46, *Weapons of Mass Destruction–Civil Support Team Operations*.



CBRN Doctrine 2015

- ATP 3-11.47, *Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Enhanced Response Force Package (CERFP) and Homeland Response Force (HRF) Operations*.
- ATP 3-11.50, *Battlefield Obscuration*.
- ATP 3-90.10, *Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Operational Headquarters*.
- ATP numeric designation currently undetermined, *Nuclear Operations*.

The only publications that are authenticated doctrine and may be referenced and used for execution are those found on the following Web sites:

- General Dennis J. Reimer Training and Doctrine Digital Library (RDL) at <<http://www.adtdl.army.mil>>.
- Army Publishing Directorate (APD) at <<http://www.apd.army.mil/default.asp>>.
- Chemical Knowledge Network (CKN) at <<http://www.wood.army.mil/wood/cms/usacbrns.shtml>>.

However, U.S. Army personnel may provide relevant feedback via the milWiki Web site at <https://www.milsuite.mil/wiki/Portal:Army_Doctrine>. Unauthenticated ATPs, which should only be used for making comments and recommended changes, will be posted on milWiki. The comments will be consolidated, reviewed, and adjudicated via U.S. Army and multi-Service working groups.

Technical Manuals

In addition to the four levels of doctrine, there are also departmentally approved, general-subject technical manuals (TMs), which are not authenticated as doctrine. There will be two Chemical Corps TMs:

- TM 3-11.91, *Potential Military Chemical/Biological Agents and Compounds*.
- TM 3-11.92, *Flame, Riot Control Agent, and Herbicide Operations*.

Based on Doctrine 2015, the Chemical Regiment is responsible for 13 doctrinal manuals (one FM and 12 ATPs). Your active participation via requested publication reviews and doctrine subject matter expert working groups will allow for the capture of pertinent lessons learned throughout the past decade so that the Chemical Regiment can remain trained and ready for tomorrow.

Endnotes:

¹FM 1, *The Army*, 14 June 2005.

²ADP 3-0, *Unified Land Operations*, 10 October 2011.

Mrs. Gill is the senior CBRN doctrine analyst with the Doctrine Development Division; Concepts, Organization, and Doctrine Development Division; U.S. Army Maneuver Support Center of Excellence; Fort Leonard Wood, Missouri.

DOCTRINE UPDATE

U.S. Army Maneuver Support Center of Excellence Capabilities Development Integration Directorate Concepts, Organization, and Doctrine Development Division

Publication Number	Title	Date	Description
Current Publications			
FM 3-11 MCWP 3-37.1 NWP 3-11 AFTTP(I) 3-2.42	Multiservice Doctrine for Chemical, Biological, Radiological, and Nuclear Operations	1 Jul 11	This is the overarching chemical, biological, radiological, and nuclear (CBRN) doctrine manual. This revision represents a critical doctrinal shift from nuclear, biological, and chemical (reactive mode covering weapons of mass destruction [WMD] only) to CBRN operations (proactive mode covering the full range of CBRN threats and hazards). It implements the three strategic pillars of the <i>National Strategy to Combat Weapons of Mass Destruction</i> —nonproliferation, counterproliferation, and consequence management. Status: Current.
ATTP 3-11.23	Multiservice Tactics, Techniques, and Procedures for Weapons of Mass Destruction Elimination Operations	10 Dec 10	A multi-Service tactics, techniques, and procedures (MTTP) manual that provides the tactical doctrine and associated tactics, techniques, and procedures (TTP) that each Service provides in support of the joint weapons of mass destruction–elimination (WMD-E) mission area in an effort to operate systematically to locate, secure, disable, and/or destroy a state or nonstate actor's WMD programs and related capabilities. Status: Current. Will be redesignated as Army Techniques Publication (ATP) 3-11.23.
ATTP 3-11.36 MCRP 3-37B NTTP 3-11.34 AFTTP 3-2.70	Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Aspects of Command and Control	12 Jul 10 C1 28 Feb 11	An MTTP manual that provides commanders, staffs, key agencies, and Service members with a key reference for understanding, characterizing, and managing CBRN threats and hazards in a particular operational environment. Status: Current. Will be redesignated as ATP 3-11.36.
FM 3-11.3 MCRP 3-37.2A NTTP 3-11.25 AFTTP(I) 3-2.56	Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Contamination Avoidance	2 Feb 06 C1 20 Apr 09	An MTTP manual for CBRN contamination avoidance. It provides commanders, staffs, key agencies, and Service members with a key reference for planning and conducting CBRN avoidance and contains the tools that CBRN defense personnel need to implement active and passive CBRN avoidance measures. It also supports decisionmaking. Status: Under revision fiscal year (FY) 2012. Will be redesignated as ATP 3-11.32, Volumes I and II.
FM 3-11.4 MCWP 3-37.2 NTTP 3-11.27 AFTTP(I) 3-2.46	Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection	2 Jun 03 C1 31 Dec 09	An MTTP manual that establishes principles for CBRN protection and addresses individual and collective protection considerations for the protection of the force and civilian personnel. Status: Under revision FY 12. Will be consolidated with ATP 3-11.32.
FM 3-11.5 MCWP 3-37.3 NTTP 3-1.26 AFTTP(I) 3-2.60	Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination	4 Apr 06	An MTTP manual that defines the roles of military units and staffs involved in the preparation, planning, and execution of decontamination operations. It addresses the requirement for different decontamination techniques. The manual focuses on the need for all U.S. forces to be prepared to fight and win in a CBRN-contaminated environment. It also addresses homeland security support required from the Department of Defense (DOD). Status: Under revision FY 12. Will be consolidated with ATP 3-11.32.
FM 3-11.9 MCRP 3-37.1B NTRP 3-11.32 AFTTP(I) 3-2.55	Potential Military Chemical/Biological Agents and Compounds	10 Jan 05	A manual that provides commanders and staffs with general information and technical data concerning chemical and biological agents and other compounds of military interest, such as toxic industrial chemicals. Status: Under revision FY 12. Will be redesignated as TM 3-11.91.
FM 3-11.11 MCRP 3-3.7.2	Flame, Riot Control Agent, and Herbicide Operations	19 Aug 96 C1 10 Mar 03	A manual that describes the TTP for employing flame weapons, riot control agents, and herbicides during peacetime and combat. The distribution of this manual is restricted due to the sensitive nature of the information contained in it. Status: Current. Will be redesignated as TM 3-11.92.
FM 3-11.19 MCWP 3-37.4 NTTP 3-11.29 AFTTP(I) 3-2.44	Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical Reconnaissance	30 Jul 04 C1 31 Dec 08	An MTTP that provides tactical-level guidance and consideration for multi-Service forces that are conducting CBRN reconnaissance and surveillance in all operational environments. It covers the full range of CBRN hazards by better addressing toxic industrial materials. It also expands TTP for dismounted CBRN reconnaissance and addresses CBRN sampling and sample management. The new name will be <i>Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Reconnaissance and Surveillance</i> . Status: Under revision FY 12. Will be combined with and supersede FM 3-11.86. Will be redesignated as ATP 3-11.37.

DOCTRINE UPDATE

U.S. Army Maneuver Support Center of Excellence Capabilities Development Integration Directorate Concepts, Organization, and Doctrine Development Division

Publication Number	Title	Date	Description
Current Publications (Continued)			
FM 3-11.20	Technical Escort Battalion Operations	29 Aug 07	An Army-only manual that provides the TTP for the employment of technical escort battalions. The distribution of this manual is restricted due to the sensitive nature of the information contained in it. Status: Under revision FY 12. Will be redesignated as ATP 3-11.24.
FM 3-11.21 MCRP 3-37.2C NTTP 3-11.24 AFTTP(I) 3-2.37	Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Consequence Management Operations	1 Apr 08	An MTTP designed for CBRN responders who plan and conduct domestic, foreign, or DOD-led consequence management operations. DOD personnel who respond to a CBRN incident may be responsible for CBRN consequence management planning and may be required to execute plans during full spectrum operations. Status: Current. Will be redesignated as ATP 3-11.41.
FM 3-11.22 AFTTP 3-2.81	Weapons of Mass Destruction–Civil Support Team Operations	10 Dec 07 C1 31 Mar 09	A dual-Service (Army and Air Force) manual that provides suggested doctrinal TTP for use by WMD–civil support teams. The revision updates the manual to incorporate the expanded mission of WMD–civil support teams, including responses to toxic industrial materials releases and natural or man-made disasters that could result in the loss of life or destruction of property in the United States. It also addresses expanded response areas in which the teams are required to conduct their missions, including maritime and urban areas and confined spaces. Status: Under revision FY 12. Will be redesignated as ATP 3-11.46.
FM 3-11.34 MCWP 3-37.5 NTTP 3-11.23 AFTTP(I) 3-2.33	Multiservice Tactics, Techniques, and Procedures for Installation CBRN Defense	6 Nov 07	An MTTP that focuses on installation emergency management rather than CBRN installation defense. It will address all hazards—not just CBRN hazards. The revision is the result of newly published DOD policy and instruction and a front-end analysis of the DOD CBRN Defense Program led by the J-8/Joint Requirements Office. The new name will be <i>Multiservice Tactics, Techniques, and Procedures for Installation Emergency Management</i> . Status: Under revision FY 12. Will be redesignated as ATP 3-11.42.
FM 3-11.50	Battlefield Obscuration	31 Dec 08	An Army-only manual that provides TTP to plan obscuration operations and employ obscurants during or in support of full spectrum military operations at the tactical through operational levels of war. Status: Current. Will be redesignated as ATP 3-11.50.
FM 3-11.86 MCWP 3.37.1C NTTP 3-11.31 AFTTP(I) 3-2.52	Multiservice Tactics, Techniques, and Procedures for Biological Surveillance	4 Oct 04	An MTTP manual for planning and conducting biological surveillance operations to monitor, detect, sample, identify, report, package, and evacuate samples of biological warfare agents. Status: Under revision FY 12. Will be consolidated with ATP 3-11.37.
FMI 3-90.10	Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Operational Headquarters	24 Jan 08	An Army-only manual that provides the basic doctrine for the employment of a chemical, biological, radiological, nuclear, and high-yield explosives operational headquarters to conduct tactical-level, WMD-E operations or transition to a joint task force-capable headquarters for WMD-E operations to support campaigns and civil authorities. Status: Under revision FY 12. This is a Maneuver Support Center of Excellence manual, which will be redesignated as ATP 3-90.10.
Note: Current CBRN publications can be accessed and downloaded in electronic format from the General Dennis J. Reimer Training and Doctrine Digital Library at <http://www.adtdl.army.mil/>, CBRN Knowledge Network (CKN) at <http://www.us.army.mil/suite/portal.do?p=409522>, or Maneuver Support Knowledge Network (MSKN) at <http://www.us.army.mil/suite/page/275589>.			
Emerging Publications			
ATP 3-11.47 AFTTP 3-2.79	Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Enhanced Response Force Package (CERFP) and Homeland Response Force (HRF) Operations	TBD	A dual-Service ATP that provides the tactical doctrine and associated TTP for conducting CERFP and HRF operations. This manual contains TTP associated with consequence management operations that involve State Active Duty, Title 32, and Title 10 response. A recommendation has been made to the U.S. Army Training and Doctrine Command to encompass CERFP and HRF missions in this manual. Status: Under development 4th quarter, FY 12.
Note: CBRN draft publications can be accessed and downloaded in electronic format from CKN at <https://www.us.army.mil/suite/portal.do?sp=409522> or MSKN at <https://www.us.army.mil/suite/page/275589>.			



RESERVE COMPONENT UPDATE

Professional Military Education

Qualification training courses are listed and described in Table 1.

Table 1. Qualification training courses

Enlisted/Noncommissioned Officer (NCO) Qualification Training Courses	
74D10 Chemical, Biological, Radiological, and Nuclear (CBRN) Specialist Course (School Code 031)	
Phase I (Course 031-74D10 [R] [dL])	Students who have a reservation for Phase II are automatically enrolled in Phase I. They receive e-mail instructions from the Army Distributed Learning Program via Army Knowledge Online (AKO). Students must complete Phase I before reporting for Phase II training. An Army Correspondence Course Program (ACCP) certificate of completion (e-mailed) or other documentation must be presented as proof of Phase I completion during Phase II in-processing. Soldiers who experience problems with Phase I should telephone the ACCP at (800) 275-2872 (Option 3) or (757) 878-3322/3335. If no ACCP representative is available, they should contact Master Sergeant Gary Leamons, 3d Brigade (Chemical), at (860) 570-7114 or <gary.leamons@usar.army.mil>.
Phases II and III (Course 031-74D10 [R1])	These phases consist of resident training conducted at Fort Leonard Wood, Missouri. Soldiers must have an e-mail printout indicating that they have completed Phase I. Soldiers who fail to provide the printout are returned to their units. Phase II is waived for civil support team members who have already completed the Civil Support Skills Course (CSSC).
CBRN Transition Course (School Code R031)	
This is a three-phase resident course. Soldiers attending the CBRN Transition Course (031-74D2/3/4) must be graduates of a military occupational specialty (MOS) Advanced Leader Course (ALC) or Basic Noncommissioned Officer Course (BNCOC). Soldiers who have not attended ALC or BNCOC must attend the CBRN Specialist Course (031-74D10) to become 74D10 MOS-qualified. Soldiers must complete the online Hazmat Awareness Training (< https://afcesa.csd.disa.mil/kc/login/login.asp >) prior to attending the CBRN Transition Course; certificates must be presented during in-processing.	
ALC—Common Core (CC) Distributed Learning (dL) (School Code G400, Course 600-C45)	
This is a 90-day, 60.4-hour, highly facilitated, Web-based, non-MOS-specific course that has replaced only the CC portion of the previous BNCOC. Unit trainers enroll Soldiers through the Army Training Requirements System (ATTRS). Students receive e-mail registration instructions. Soldiers who fail to register within 15 days prior to the start date are automatically cancelled and considered “No Shows.” The next Soldier on the waiting list is granted a confirmed reservation. Soldiers who are classified as “No Shows” or who have been cancelled may be required to wait 24 months to be rescheduled for any phase of ALC. Soldiers must complete the ALC-CC and the three-phase CBRN ALC technical course to be considered an ALC graduate. Soldiers who previously completed BNCOC-CC will receive constructive credit for ALC-CC.	
74D30 CBRN ALC (School Code R031, Course 031-74D30-C45)	
CBRN ALC is a three-phase resident course. Phase I is waived for Soldiers who possess a certificate indicating that they have completed Department of Defense (DOD)-certified hazmat training at the technical level.	
74D40 Senior Leader Course (SLC) (School Code R031, Course 031-74D30-C46)	
This is a three-phase resident course conducted at Fort Leonard Wood.	
Officer Qualification Training Courses	
CBRN Captain's Career Course (C3) (School Code 031)	
Phase I (Course 4-3-C23 [dL])	This branch-specific dL phase (formerly Phase II) consists of 108 hours of dL instruction, which must be completed within 60 days before attending Phase II. Unit trainers enroll Soldiers through ATTRS. Students receive e-mail instructions from the Army Distributed Learning Program. Hazmat awareness training can be accessed at < https://afcesa.csd.disa.mil/kc/login/login.asp > and completed by students prior to attending Phase II. Students who encounter problems should contact the U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS), CBRN C3 Course Manager, Major John Feero at (573) 563-7397 or < john.ferro@us.army.mil >. The successful completion of Phase I (and the CBRN Defense Course [branch transfers]) is a prerequisite for Phase II attendance.
Phase II (Course 4-3-C23)	This branch-specific resident phase (formerly Phase III) consists of 2 weeks of training conducted at the USACBRNS. The focus is on radiological operations, live-agent training, hazmat awareness and operations level training and certification, and the basics of the Joint Warning and Reporting Network used within the Maneuver Control System. The successful completion of Phase II is a prerequisite for enrollment in Phase III.
Phase III (Course 4-3-C23 [dL])	This CC phase (formerly Phase IV) consists of 59.2 hours of dL instruction. Unit trainers enroll Soldiers through ATTRS. Students receive e-mail instructions from the Army Distributed Learning Program. Students must complete Phase III within 60 days of attending Phase IV. Those who encounter problems should contact Major Feero at (573) 563-7397 or < john.ferro@us.army.mil >. The successful completion of Phase III is a prerequisite for Phase IV attendance.
Phase IV (Course 4-3-C23)	This resident phase (formerly Phase V) consists of 2 weeks of training conducted at the USACBRNS. The focus is on a computer-aided exercise that includes additional Joint Warning and Reporting Network and Maneuver Control System training, culminating in a military decisionmaking process exercise using state-of-the-art battle simulation equipment.

RESERVE COMPONENT UPDATE



Joint SLC (Course 4K-74A/494-F18)
This is a 4-day course in which senior leaders are presented with critical CBRN subject matter such as operational- and strategic-level aspects of CBRN defense. Participants also receive toxic-agent training at the Chemical Defense Training Facility. In addition, the Joint SLC forum offers a unique opportunity for senior military leaders, civilian government agency leaders, and leaders representing allied and coalition partners to exchange ideas.
CBRN Precommand Course (Course 4K0F4)
This is a 5-day course that prepares Regular Army and Reserve Component (RC) officers who have been selected for command of a CBRN battalion or brigade or a CBRN position in a division. Each student receives instruction in the application of Field Manual (FM) 7-0, <i>Training Units and Developing Leaders for Full Spectrum Operations</i> , concepts to the battalion training management process.
Note: Additional information is available at < https://www.atrrs.army.mil/ >.

The courses shown in Table 2 are required by CBRN consequence management response force; chemical, biological, radiological, nuclear, and high-yield explosives (CBRNE) enhanced response force package; and civil support team units and for MOS qualification.

Table 2. Functional training courses

Mass Casualty Decontamination Course (School Code 031, Course 4K-F25/494-F-30)
This 9-day course is appropriate for CBRNE enhanced response force package and domestic-response casualty decontamination team members. Students who successfully complete the course receive certification at the hazmat awareness and operations levels.
CBRN Responder Course (School Code 031, Course 4K-F24/494-F29)
This 10-day course is appropriate for CBRN consequence management response force members. Students who successfully complete the course receive certification at the hazmat awareness, operations, and technician levels.
Civil Support Skills Course (CSSC) (School Code 031, Course 4K-F20/494-28)
This 8-week course is appropriate for Army National Guard civil support team members. Students receive advanced training in hazmat technician and incident command and CBRN survey, point reconnaissance, sampling operations, personal protective equipment selection and certification, decontamination, and specialized training on a variety of military and commercial CBRN detection equipment.
Note: All students who successfully complete hazmat training are awarded certificates issued by the International Fire Service Accreditation Congress and DOD. Additional copies of certificates can be obtained at < http://www.dodffcert.com >.

Soldiers who arrive for any resident courses without having first completed all appropriate dL requirements will be returned to their units without action.

USACBRNS RC Personnel

Officers (O-3 through O-5) and NCOs (E-7 through E-9) who are interested in available drilling individual mobilization augmentee positions throughout USACBRNS should contact the U.S. Army Reserve (USAR) Proponency NCO.

Field grade USAR officers who would like to transfer into the Chemical Corps should contact the USACBRNS Deputy Assistant Commandant—Army Reserve (DAC-AR) for specific branch qualification information.

The 3d Brigade (Chemical), 102d Division (Maneuver Support), is currently seeking instructors for various locations. Applicants should be an E-6 or E-7, be qualified (or able to be trained) as Army basic instructors, and have completed the appropriate NCO Education System coursework. Interested Soldiers should contact Master Sergeant Leamons at (860) 570-7114 or <gary.leamons@usar.army.mil>.

Contact Information
Sergeant Major Richard Lamy (DAC-AR), (573) 563-4026 or < richard.lamy@us.army.mil >.
Major Javid Heravi (DAC-NG), (573) 563-7676 or < javid.heravi@us.army.mil >.
Master Sergeant Richard Kennon (USAR Proponency NCO), (573) 563-7757 or < richard.kennon@us.army.mil >.
Sergeant First Class Joseph Bahr (Army National Guard Proponency NCO), (573) 563-7667 or < joseph.bahr@us.army.mil >.

Reference:

FM 7-0, *Training Units and Developing Leaders for Full Spectrum Operations*, 23 February 2011.

Who Was Simon Jacobson?

By Colonel John M. Riley

Simon Jacobson just happened to be one of the first. He was not the first to answer the call to arms at the outset of World War I; but as fate would have it, he was one of the first U.S. Army Soldiers to wear the crossed retorts—the branch insignia of the Chemical Corps. Jacobson was an Army engineer who proudly served in the unit that eventually became the 1st Gas Regiment. In the context of the Army profession, Sergeant First Class Jacobson is a stellar example of what it means to serve our Nation. As a young, educated, professional engineer involved in a technical line of work, he twice volunteered to serve his country while America was engaging in hostilities with belligerent aggressors.

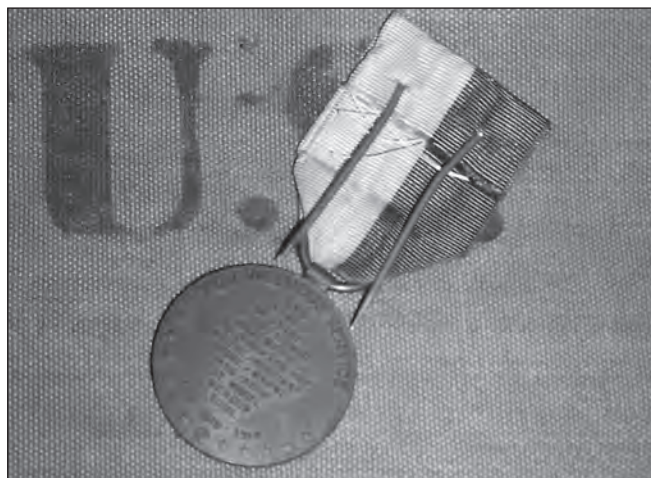
Simon Jacobson was born in South Carolina in 1888. He received a degree in chemistry from the College of Charleston in 1910 and then continued his education at Columbia University in New York and, later, at The School of Industrial Arts in New Jersey (now Mercer County Community College), completing his formal education in 1914. While studying professional engineering during a time when tensions with Mexico were at their height, Jacobson felt compelled to enlist in the New York National Guard. Although he did not serve on active duty along the border, he completed 2 years of National Guard service (1912–1914) and attained the rank of corporal.

In 1914, as a civilian, Jacobson moved to Utah, where he worked as a research chemist at the International Smelting Company in Tooele. The International Smelting Company annually processed thousands of tons of copper and lead ore that had been mined from the rugged hills of the western United States. The metals were needed to fill the demand for refined materials and to fuel industrial growth in America. Ironically, just a few years later, the same company provided much of its material in support of the U.S. war effort against the Central Powers in Europe.

With war raging in France (along with the U.S. declaration of war against Germany just a few months earlier), Jacobson once again enlisted in the Army in September 1917—this time as an infantryman in the 362d Infantry Regiment, which was part of the 91st “Pine Tree” Division that was forming in the western United States. Probably due to his background and education as a professional engineer, Private Jacobson was transferred to the 30th Engineer Regiment in December 1917 following an Army-wide call for volunteers from within the ranks who possessed certain specialized skills. After the Germans had “violated all the laws of war and humanity with their introduction of searing flames and poisonous gases into the trenches of the Allies,”⁷¹ General John J. Pershing directed the 30th Engineers to form a new unit to “beat the Hun at his own



The front of the 1st Gas Regiment commemorative medal bears the shield and the numeral 1 worn by many of the Soldiers of the regiment. A scarce memento of the Army's earliest chemical unit, members of the regiment apparently had them minted in France at the end of the conflict.



The reverse of the commemorative medal contains a list of the 12 engagements in which elements of the regiment took action. Providing fire with heavy mortars and projectiles, the Hell Fire Boys supported operations in nearly every sector where members of the American Expeditionary Forces were engaged.



The World War I chevrons worn by Simon Jacobson identified him as a sergeant first class of engineers. While the 30th Engineer Regiment became the 1st Gas Regiment, many of the Soldiers retained the insignia of the Corps of Engineers throughout their service during World War I.

game.” Consequently, since October 1917, Major E.J. Atkisson had been working on forming a “gas and flame” battalion of “Hell Fire Boys.”

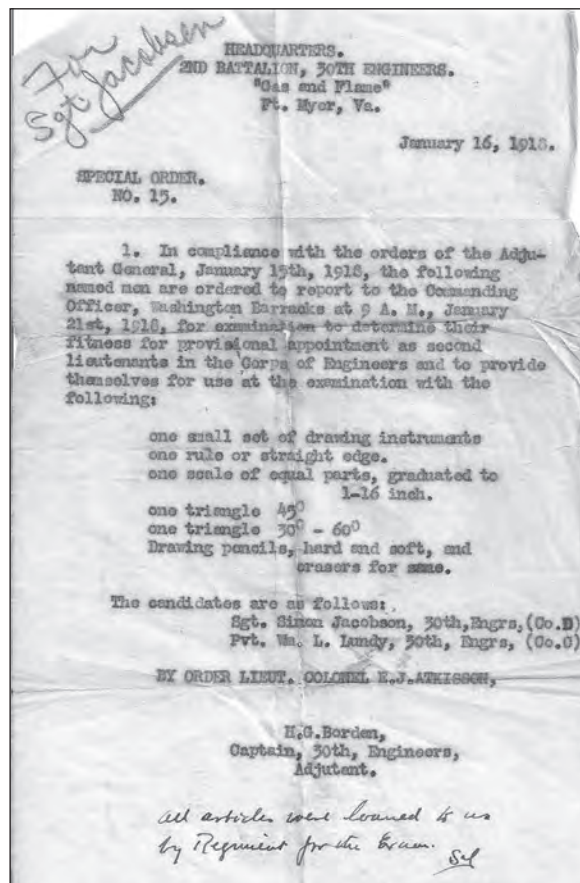
As the regiment began to take shape and the 2d Battalion was activated in December 1917, Private Jacobson joined D Company. A month later, as the battalion trained for its new mission at Fort Meyer, Virginia, Jacobson was promoted to sergeant. On 31 January 1918, the regimental commander selected Sergeant Jacobson and another experienced engineer to take an academic evaluation for possible promotion to engineer officer. The results of Sergeant Jacobson’s examination are unknown, but he was never commissioned. Instead, he was promoted to sergeant first class of engineers just before sailing for France in February 1918—a promotion that placed him in charge of a mortar section.

Not long after their arrival in France, Sergeant First Class Jacobson and the rest of the Hell Fire Boys became heavily engaged in their mission of delivering gas and high-explosive shells to enemy trenches. According to his personal and archival records, Jacobson saw action at Fère-en-Tardenois along the Marne line, at Vesle River (a tributary of the Aisne), at the Second Battle of the Marne, at St. Mihiel, and during the Meuse-Argonne Offensive—where both sides used gas in an attempt to dislodge the other from their trenches and break the stalemate in one last push to end the war. Although Sergeant First Class Jacobson became the victim of a gas attack in October 1918, he counted himself as one of the lucky ones. While many others suffered debilitating injuries or death as a result of gas exposure, Jacobson remarked that he “remained in the field hospital but 2 days for treatment [and] returned to

[the] outfit to complete [the] drive!”² He went on to fight in his final engagement of the war at the brutal Battle of Verdun.

Sergeant First Class Jacobson returned from France with the 2d Battalion, 1st Gas Regiment, in February 1919. He was promoted a final time to master engineer, senior grade, before being mustered out of service at Camp Kendrick, Lakehurst, New Jersey, by the end of February.

As Americans put the war behind them, Mr. Jacobson returned to Utah and resumed his work at the International Smelting Company, eventually attaining the position of smelting supervisor. He remained active in local veterans’ organizations throughout his life. He also kept with him a small collection of war mementos, including his noncommissioned officer stripes, his 1st Gas Regiment commemorative medal, and a piece of shrapnel from the gas round that landed near his position and injured him in 1918. In 1933, in recognition of his wounds from the gas attack, Jacobson received the Purple Heart award from the War Department. Simon Jacobson passed away in 1949, but he will forever be part of the history and legacy of the Dragon Soldiers who serve in our Army.



Paper ordering Sergeant First Class Jacobson and another Soldier to take an examination to demonstrate their skills in general engineering, with the potential to be appointed as lieutenants. Shortly after the exam, the regiment sailed for France; Simon Jacobson served out the war as a noncommissioned officer.



While he continued to wear the stripes of an engineer sergeant, Sergeant First Class Jacobson adopted the collar disk of the Chemical Warfare Service (the precursor to the Chemical Corps) and the common cobalt blue and golden yellow shoulder insignia worn by early Dragon Soldiers.

Today's Dragon Soldiers should take the time to reach back into the past and learn about the stories of the Hell Fire Boys who started it all. As members of the chemical, biological, radiological, and nuclear (CBRN) profession, we must remember that it is our responsibility to uphold the reputation and honor the sacrifices of those trendsetters from long ago. As we begin yet another period of dramatic transition, Soldiers like Simon Jacobson can serve as great examples of flexibility, professionalism, and selfless service.

Endnotes:

¹James Thayer Addison, *The Story of the First Gas Regiment*, The Riverside Press, Boston and New York, 1919.

²State Historical Society World War I Service Questionnaires, Division of Archives & Records Service, State of Utah, 1914–1918, <<http://archives.utah.gov/research/inventories/85298.html>>, accessed on 22 March 2012.

References:

Don Strack (compiler), "International Smelter at Tooele," 27 May 2011, <<http://utahrails.net/mining/smelters-tooele.php>>, accessed on 22 March 2012.

"Utah, Military Records, 1861–1970," <<http://search.ancestry.com/search/db.aspx?dbid=2228>>, accessed on 22 March 2012.

Colonel Riley is a CBRN officer currently serving as the Deputy Chief of Staff for Operations, Plans, and Training (G-3); Maneuver Support Center of Excellence, Fort Leonard Wood, Missouri. He holds a bachelor's degree in English from The Citadel, South Carolina, and master's degrees in international relations from Troy State University (now Troy University), Alabama, and strategic studies from the U.S. Army War College, Carlisle Barracks, Pennsylvania.

(*"Training and Developing"* continued from page 17)

We will also conduct a second CBRN AIT pilot course (AIT Class 12-12)—which will focus on hazmat operations and MCD certification—in June 2012. For this class, we will employ new techniques (a slower pace of instruction, instructor-facilitated study halls, and more hands-on training) and improve the organization of the hazmat operations block of instruction to increase student success rates. In addition, the USACBRNS Personnel Development Office will continue to examine the possibility of raising GT and ST scores required for entry into the Chemical Corps.

The improvements that were made to the CBRN AIT class were the result of 18 months of teamwork across the Chemical Corps. Input was obtained from the field and combined with the expertise of course developers from the Directorate of Training and Leader Development and the Directorate of Education and Training Execution and subject matter experts from the 84th Chemical Battalion, as well as guidance and oversight from leaders of the USACBRNS and the 3d Chemical Brigade. This joint effort served to modernize the CBRN AIT class and provide our Soldiers with the foundational training necessary to set the conditions for unit training across the Chemical Corps.

Endnotes:

¹Chemical Corps Regimental Campaign Plan, U.S. Army Chemical Corps, December 2010.

²Ibid.

³Information regarding the fiscal year 2012 Chemical Corps force structure was provided by the Personnel Development Office, USA-CBRNS.

⁴For all types of hazmat certification, a score of 80 percent or greater is required to meet national certification standards for conducting hazmat operations within the United States. Such certifications are not required for Soldiers operating outside the United States. Students with scores of 70–79 percent meet the USACBRNS commandant's current guidance for AIT graduation, as well as current Maneuver Support Center of Excellence Noncommissioned Officer Academy CBRN Advanced and Senior Leader's Course graduation standards. Students in this category are classified as "successfully trained," but are not "certified." However, the possibility of establishing the 80 percent certification standard as a graduation requirement is currently under consideration by USACBRNS staff.

⁵An enlisted Soldier's entry into the Chemical Corps currently requires an ASVAB ST score of 91; however, some of the Soldiers accepted into AIT Class 05-12 had ST scores of less than 91.

Lieutenant Colonel Duncan is the commander of the 84th Chemical Battalion. He holds a bachelor's degree in general studies with an emphasis in business and communications from the University of Northern Iowa and master's degrees in environmental management from Webster University and security studies from Kansas State University.



Army Chemical Review Writer's Guide



Army Chemical Review is a professional-development bulletin designed to provide a forum for exchanging information and ideas within the Army chemical, biological, radiological, and nuclear (CBRN) community. We include articles by and about officers, enlisted Soldiers, warrant officers, Department of the Army civilian employees, and others. Writers may discuss training, current operations and exercises, doctrine, equipment, history, personal viewpoints, or other areas of general interest to CBRN Soldiers. Articles may share good ideas and lessons learned or explore better ways of doing things.

Articles should be concise, straightforward, and in the active voice. If they contain attributable information or quotations not referenced in the text, provide appropriate endnotes. The text length should not exceed 2,000 words (about eight double-spaced pages). Shorter, after-action type articles and reviews of books on CBRN topics are also welcome.

Include photographs (with captions) and/or line diagrams that illustrate information in the article. Please do not insert illustrations or photographs in the text; instead, send each of them as a separate file. Do not embed photographs in Microsoft® PowerPoint or Word. If illustrations are in PowerPoint, avoid using excessive color and shading. Save digital images in a TIF or JPG format at a resolution no lower than 200 dpi. Images copied from a Web site must be accompanied by copyright permission.

Provide a short paragraph that summarizes the content of the article. Also include a short biography (full name, rank, current unit, job title, and education), your mailing address, a fax number, and a commercial daytime telephone number.

Articles submitted to *Army Chemical Review* must include a statement from your local security office stating that the information contained in the article is unclassified, nonsensitive, and releasable to the public. *Army Chemical Review* is distributed to military units worldwide, is offered online at <http://www.wood.army.mil/chmdsd/default.htm>, and is available for sale by the Government Printing Office. As such, it is readily accessible to nongovernment and foreign individuals and organizations.

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U.S. Army Chemical Corps

Vision

The Chemical Regiment is a unique, professional corps of chemical, biological, radiological, and nuclear (CBRN) warriors, world renowned in countering the entire range of CBRN threats and hazards.

Our versatile Soldiers and leaders are fully networked in the CBRN enterprise and operate in full spectrum, capable formations to protect the Nation.

Values

The Chemical Regiment is an innovative and adaptable force that is dedicated to meeting the CBRN hazmat needs of our Nation. We accomplish this by focusing on three priorities—taking care of our Soldiers, Civilians, and their Families; training as we fight; and maintaining our Regiment.

We are an enduring CBRN team that is committed to the profession of arms, Army values, Warrior Ethos, and the well-being of U.S. citizens.

We instill confidence in our national and international partners by providing credible CBRN technical expertise and remaining responsive and accountable to their needs.

We empower our people to do the right thing by encouraging candor and rewarding initiative. Although our professional CBRN family members are located in different organizations, we work together to accomplish the Chemical Corps mission.

Mission

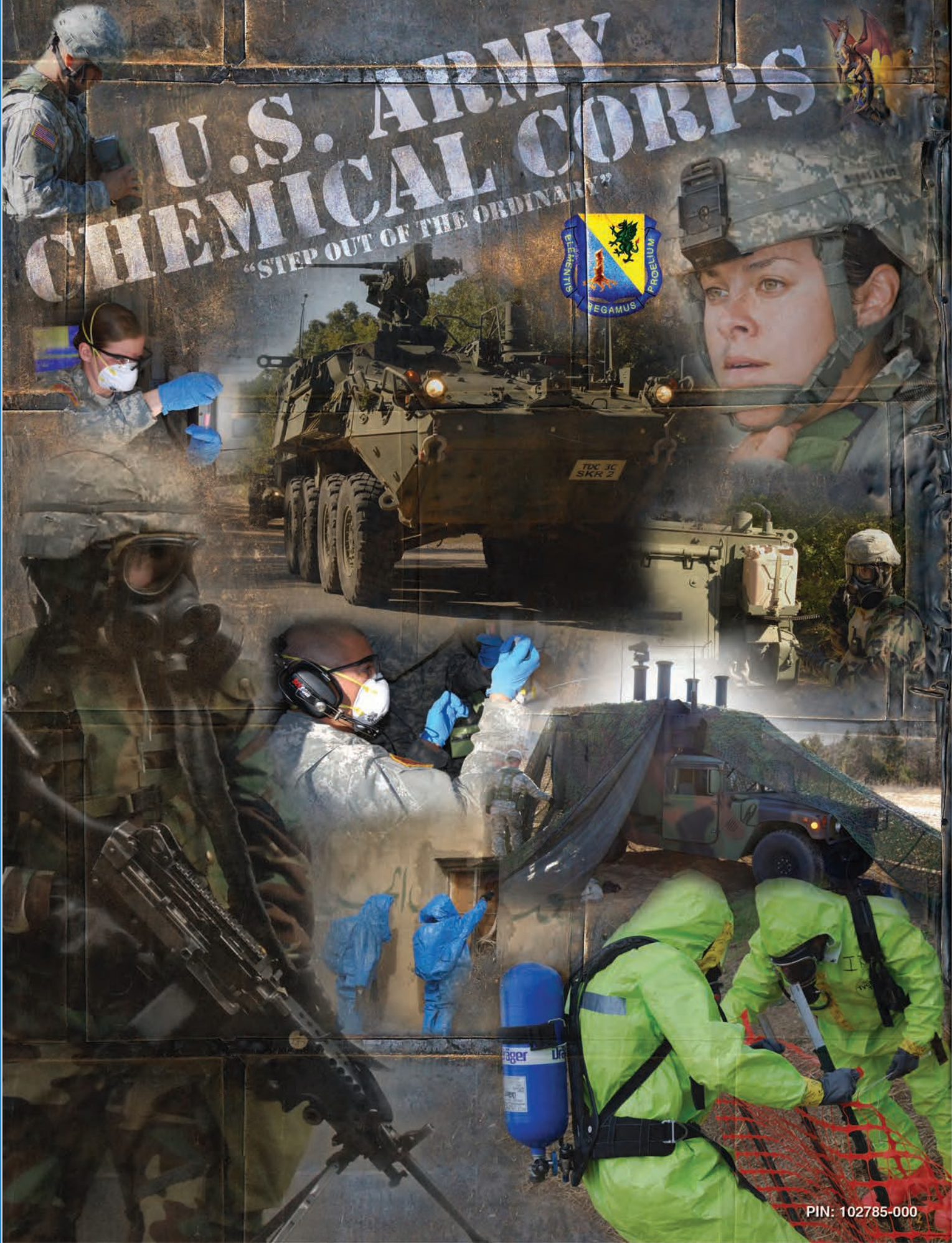
The Chemical Regiment conducts CBRN operations to protect national interests at home and abroad.

End State

The Chemical Regiment is a professional corps of CBRN warriors—the world leader for CBRN and hazmat operations. It is capable of countering the entire range of CBRN threats and hazards, is equipped with enhanced CBRN capabilities to operate across the full spectrum of conflict, and is fully networked and integrated with the CBRN enterprise to protect the Nation and meet the challenges addressed in national strategies and guidance.

U.S. ARMY CHEMICAL CORPS

"STEP OUT OF THE ORDINARY"



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