
Implementing the *ALC* in the 84th Chemical Battalion: Investing in Our Cadre, Students, and Trainees

By Lieutenant Colonel Thomas A. Duncan II

The mission of the 84th Chemical Battalion is to produce warrior leaders who are proud, confident, disciplined, ready, relevant, and resilient. According to *The U.S. Army Training Concept—2012–2020 (ATC)*, “The key to success in this endeavor is the quality of the commanders, cadre, instructors, and the outstanding noncommissioned officers . . .”¹ The 84th Chemical Battalion, the 3d Chemical Brigade, and the U.S. Army Chemical, Biological, Radiological, and Nuclear School (USACBRNS) are investing in cadre and overhauling programs of instruction (POIs) to achieve the mission and to create a “bright spot” in the implementation of the *The U.S. Army Learning Concept for 2015 (ALC)*.²

In this era of persistent conflict and rapidly decreasing resources, we must improve efficiency and maximize training opportunities by overhauling our POIs and investing time and resources in the professional development of our cadre. Several new Army concepts provide a foundation for training Soldiers in today’s Army. *The Army Capstone Concept; Operational Adaptability: Operating Under Conditions of Uncertainty and Complexity in an Era of Persistent Conflict—2016–2028 (ACC)*, *ALC*, *ATC*, and *A Leader Development Strategy for a 21st Century Army (ALDS)* provide guidance for institutional training through the next fifteen years. We are applying these concepts to our POIs and lesson plans, while also investing in leader/facilitator development and certification.

The 84th Chemical Battalion, Fort Leonard Wood, Missouri, supplies the Army with graduates of Chemical, Biological, Radiological, and Nuclear (CBRN) Advanced Individual Training (AIT), the CBRN Basic Officer Leader’s Course (BOLC), the CBRN Captain’s Career Course, and several additional skill identifier courses. In conjunction with the Marine Corps Detachment at Fort Leonard Wood, the 84th will also begin conducting the Army’s first Joint Warrant Officer Basic Course in June 2011.

This article focuses on how the 84th Chemical Battalion is implementing the *ALC*. It contains a brief definition of applicable Army concepts (the Army Concept Framework), an overview of the operational environment, and a discussion about how we are updating POIs and developing instructors to achieve specific outcomes and develop capabilities described in the new Army concepts. It also briefly describes the support required from higher headquarters to effectively implement new learning and training methodologies.

Army Concept Framework

The February 2010 *Quadrennial Defense Review (QDR) Report*, which describes U.S. Department of Defense (DOD)

strategies and initiatives that link military operations to the national strategy, led to the development of the Army Concept Framework. Key components of the Army Concept Framework include the *ACC*, *The United States Army Operating Concept—2016–2028 (AOC)*, *ALC*, *ATC*, and *ALDS*, which were published to describe “. . . the vision for an integrated training and learning environment that builds leaders, Soldiers, civilians, and units that have the capability to achieve the Army force generation objectives and to execute full spectrum operations.”³

- **ACC:** Describes the “. . . broad capabilities the Army will require in 2016–2028.”⁴
- **AOC:** Describes how “. . . future Army forces conduct operations as part of the joint force to deter conflict, prevail in war, and succeed in a wide range of contingencies in the future operating environment.”⁵
- **ALC:** Describes “. . . the learning continuum for an individual Soldier and leader from initial military training through functional courses and professional military education.”⁶
- **ATC:** Serves as the “. . . Army’s vision for unit training that balances operational and institutional training requirements.”⁷
- **ALDS:** Discusses how we will adapt leader development for an “. . . operational environment [that] will be even more uncertain, complex, and competitive, as hybrid threats challenge us across the full spectrum of operations.”⁸

In addition, as we begin discussions on the Army as a professional institution, we are integrating “The Profession of Arms” white paper into professional development sessions for cadre, students, and trainees.

Together, these documents allow for a foundational understanding of the direction in which the Army is moving, the current operational environment, and the role of institutional training in the way ahead.

Summary of the Operational Environment (With CBRN Emphasis)

We are currently involved in conflicts in Afghanistan and Iraq; and at the time of this writing, we had just begun air operations against Libya. But we are looking beyond these current conflicts and preparing to execute full spectrum operations against adaptive enemies in complex environments. The current economic environment adds to this challenge.

The *ACC* states, “National security guidance requires the military to be prepared to defend the homeland, deter or prevent the use or proliferation of weapons of mass destruction (WMDs), win the Nation’s wars, deter potential enemies, protect the global commons (sea, air, cyber, and space), develop cooperative security, and respond to civil crises at home and abroad.”⁹ The *ACC* planning assumptions include our inability to achieve information superiority solely through the network, enemies who will combine conventional and unconventional tactics and fight in complex terrain, threat elements who will seek WMDs and ways to employ them, and enemies who will attempt to influence the will of the American people and key allies. It is also assumed that the United States will continue to employ an all-volunteer force.¹⁰ These key assumptions about the operating environment guide the training of Soldiers and the development of cadre.

Furthermore, the *QDR* contains a strategic vision for how DOD supports national security guidance and prepares to meet the challenges of this century. Relevant *QDR* guidance also shapes the Chemical Corps mission. The *QDR* states, “The proliferation of [WMDs] continues to undermine global security, further complicating efforts to sustain peace and prevent harmful arms races. The instability or collapse of a WMD-armed state is among our most troubling concerns. Such an occurrence could lead to rapid proliferation of WMD material, weapons, and technology and could quickly become a global crisis posing a direct physical threat to the United States and all other nations.”¹¹

In conjunction with the *ACC* and *QDR* foundational documents, the *AOC* states, “Future Army forces require the capability to operate in a [chemical, biological, radiological, nuclear, and high-yield explosives] environment and against nuclear armed enemies.”¹²

Given the very real threat that WMDs pose to the United States and our allies around the world, the Chemical Corps

is undergoing a period of transition to ensure that we are prepared to meet that threat. We must be ready to support combined arms maneuver and homeland defense missions, while continuing to support the Army force generation process and ongoing counterinsurgency operations. The Chemical Corps is the only organization with maneuver elements that are capable of addressing the WMD threat at home and abroad—a fact that guides our training as we look beyond current counterinsurgency operations and prepare to defend U.S. military forces, the Homeland, and our allies against a variety of WMD threats. The assumption is that all future operations will involve joint, interagency, intergovernmental, and multinational (JIIM) partners; therefore, building relationships with JIIM, CBRN enterprise, and academic partners is essential to the success of the Chemical Corps in this century.

Amid this change, there are several constants. For example, the Army will continue to rely on disciplined, values-based Soldiers who competently perform warrior tasks, battle drills, and technical core CBRN tasks. In addition, CBRN warrior leaders must continue to comfortably handle complex problems.

According to the *ACC*, there are two things that are certain about the future operational environment: There will be uncertainty, and there will be complexity. We expect to face a flexible and adaptive enemy in complex terrain. To accomplish our mission in this environment, we have developed systems that improve how we provide our Soldiers and leaders with institutional training through the implementation of the *ALC* and *ATC*. The assumptions and brief descriptions of possible threats contained in the *ACC* provide our battalions with a framework for designing field training exercises, situational training exercises, and warfighter scenarios.

Required Initial Military Training Outcomes

We place greater demands than ever before on our cadre in an initial military training environment. Our AIT platoon sergeants, CBRN BOLC small-group instructors (SGIs), instructors, and writers are required to produce Soldiers who—

- Live the Army values.
- Are resilient in the face of adversity.
- Possess a diverse set of technical and tactical skills.
- Are ready to immediately contribute to their first assigned unit.

The instability or collapse of a WMD-armed state is among our most troubling concerns. Such an occurrence could lead to rapid proliferation of WMD material, weapons, and technology and could quickly become a global crisis posing a direct physical threat to the United States and all other nations.¹¹

Soldiers must simultaneously—

- Provide responsive POI updates to maintain relevancy and present comprehensive skills.
- Develop training that is appealing to technologically savvy students.
- Maintain and train professional cadre and unit leaders who adhere to the Warrior Ethos. They must also be master instructors who fully understand training management and are proficient in the areas of training technology and methodology.¹³

In addition, 84th Chemical Battalion training addresses the building of Soldier confidence and communication skills as a foundation for future leaders. The 84th employs three primary lines of effort to improve training and achieve the desired trainee and student outcomes:

- Instructor Certification and Development Program.
- Leadership Development Program.
- POI review.
 - CBRN BOLC.
 - CBRN Captain’s Career Course.
 - 74D AIT.
 - L4 Biological Integrated Detection System.
 - L5 Fox Reconnaissance.
 - L6 Nuclear, Biological, and Chemical Reconnaissance for Brigade Combat Teams.
 - Radiological Safety.
 - Operational Radiation Safety.

Instructor Development Program

Discipline, values, resiliency, warrior tasks, battle drills, and CBRN technical training are the cornerstones of our courses. But there is no single class or program capable of successfully inculcating all Soldiers with each of these skills and attributes. Instead, this is achieved through the dedication of AIT platoon sergeants, CBRN BOLC SGIs, and facilitators who interact with students and trainees on a daily basis. The 84th Chemical Battalion and 3d Chemical Brigade have significantly invested in an Instructor Development Program to help leaders achieve the required outcomes specified in the *ATC*.

The 84th Chemical Battalion sends instructors to relevant conferences, such as the Army Learning Summit 2011 and the Intellectual Warrior Conference, to instill in them a sense of *ALC* implementation ownership and to encourage them to become actively involved in the implementation of new educational methodologies.

We also leverage internal and guest instructors to educate the cadre with regard to various teaching methodologies that can be applied in the classroom. Major Don Vandergriff (Retired), author of *Raising the Bar: Creating and Nurturing Adaptability to Deal with the Changing Face of War*,

has visited three times during the past eight months to instruct our cadre on his vision for implementing outcomes-based training and education.¹⁴ These instructor development courses have increased awareness about how the millennial generation learns and how today’s students can be better engaged through facilitated discussions as opposed to lectures. The intent is not to apply Vandergriff’s recommendations across the board, but to provide our instructors with a different approach to training.

Colonel David Wilcox and Lieutenant Colonel Randall Wickman, both of the 3d Chemical Brigade, have developed “Smart Training,” which has now been introduced to our cadre and is currently being introduced to the U.S. Army Training and Doctrine Command (TRADOC). Based on the way in which the millennial generation learns, the 3d Chemical Brigade is employing spiral learning methodology (using repetition and increasingly complex scenarios) to adjust and develop training for critical tasks such as warrior tasks, battle drills, and technical core CBRN tasks. We are also taking advantage of peer-enabled learning throughout AIT. Trainees go through several iterations of training on core CBRN tasks such as operational decontamination. Classroom instruction is followed by situational training exercise lanes, field training exercise rehearsals and, finally, execution. AIT instructor and platoon sergeant engagement is required to reinforce core training according to the POI and command guidance.

We are reaching out to our CBRN enterprise partners to enhance the professional development of our cadre and students. Ongoing partnerships with the Edgewood Chemical Biological Center, the Defense Threat Reduction Agency, and Dugway Proving Ground allow our cadre and students to interact with fellow subject matter experts. This cross training and sharing of information exposes our Soldiers to other DOD CBRN defense expertise and capabilities and provides our CBRN enterprise partners with information about Chemical Corps capabilities. As an investment in our leaders, we will be sending twenty-four instructors to the unique chemical and biological facilities at Dugway Proving Ground, Utah, to train with other experts this summer. This will enable our instructors to understand how each of our Skill Level 1 tasks fit into more complex scenarios and how our overall training fits into the larger context of the CBRN enterprise.

We are expanding the technical and teaching skills of our cadre. The Army Basic Instructor Course, SGI Training Course, and AIT Platoon Sergeant Course are aimed at developing the ability of our cadre to teach. Because institutional instructor and writer training regarding the submission of changes to lesson plans and POIs is minimal, we are teaching our cadre how to effectively submit changes to lesson plans. One of our unit-driven instructor development classes focused on lesson plan development. This training involved the use of actual lesson plans that required revision.

The lesson plans were reviewed by small groups, and the exercise culminated in the completion of documents that were turned in to the Directorate of Training, USACBRNS, for approval. Subject matter experts must work through the brigade and with the Directorate of Training to gain approval of updated lesson plans; otherwise, the review of POIs is pointless. We have already observed a return on the investment, as lesson plans are being updated more rapidly, thereby facilitating the implementation of the *ALC* in our courses.

Leader Professional Development

I am impressed with the competence and commitment of the officers and noncommissioned officers who train our USACBRNS students and trainees on a daily basis; they do superb work—in spite of the fact that they receive only minimal institutional training before assuming their duties. The assumption is that our officers and noncommissioned officers learned the leadership skills required to instill discipline, inculcate the Army values and Warrior Ethos, and train tactical and technical skills as they progressed through their years of military service. Because Soldiers actually receive very little formal training on these topics immediately before beginning work in the training battalion, our Leader Professional Development sessions focus on these critical areas. We use the book entitled *Black Hearts: One Platoon's Descent Into Madness in Iraq's Triangle of Death* to emphasize the importance of engaging leaders at all levels to build and maintain discipline, values, and resilience in our Soldiers—during training and while forward-deployed. We also use the white paper entitled “The Profession of Arms” to lead into a discussion of our role as leaders in a professional Army and an explanation of how we can instill values in students and trainees. In recognition of the fact that no single class can replace competent, first-line leaders (AIT platoon sergeants and CBRN BOLC SGIs) who are persistently engaged over a period of time, we invest time in training our cadre. After all, our first-line leaders are the primary positive influence on our students and trainees. Therefore, we must ensure that our cadre return to the force as “top 10 percent” leaders.

POI Review

The USACBRNS established a team to review the lesson plans for eight POIs, with a focus on two foundational courses—CBRN (74D) AIT and CBRN BOLC. This POI review working group (which is comprised of battalion subject matter experts, the brigade Department of Education and Training Evaluation, and the USACBRNS Directorate of Training) is concentrating on core tasks and technical aspects of training covered by the POIs, as well as on the “Four Rs”—maintaining Relevance, eliminating Redundancy, efficiently Resourcing, and Reducing PowerPoint. A significant amount of time has also been spent updating

the way in which our training is evaluated so that we might add rigor to our courses. The POI review working group is driven by consideration of the operational environment, consideration of how the millennial generation processes information, an expansion of training to cover the full spectrum of operations, and an increase in experiential-based learning.

The team continues to prioritize and update lesson plans to ensure continued compliance with TRADOC accreditation standards. At the same time, team members are working to build the USACBRNS Commandant's out-brief on the AIT and CBRN BOLC POI review to the TRADOC Deputy Commanding General for Initial Military Training, scheduled for July 2011. This vertical and horizontal integration of experts extends our staff capacity and leverages a variety of capabilities.

Recommendations for TRADOC Support

Long-term success of the *ALC* requires an investment by our senior leaders. The application of scarce resources to facilitator development, AIT platoon sergeant development, and training will provide the tools required to prepare millennial-generation Soldiers who can conduct full spectrum operations in a complex environment.

The following changes are recommended for systems above the battalion level:

- Update the Army Basic Instructor Course, SGI Training Course, and AIT Platoon Sergeant Course to integrate new Army concepts.
- Refine the way in which the Army conducts quality assurance.
- Reinforce the capacity for subordinate elements to leverage distributed learning and information technology, gaming, and software design applications.
- Ensure that school assignments remain competitive with U.S. Army Forces Command positions.
- Ensure that the best candidates from the field are chosen to serve as instructors and AIT platoon sergeants.

Training battalion staffs have tremendous capability, but limited capacity. Gains in capacity and efficiencies are realized by TRADOC-wide programs aimed at reinforcing *ALC* implementation. The main responsibility of the battalion is to define how the *ALC* will be implemented and to request specific resources in support of the program.

Conclusion

Preparing flexible and adaptive Soldiers who are proud, confident, disciplined, ready, relevant, and resilient will continue to be the mission of the 84th Chemical Battalion, the 3d Chemical Brigade, and the USACBRNS. But we must realize that many of our millennial-generation students and trainees learn differently and have different expectations than students and trainees of previous generations.

*Preparing flexible and adaptive Soldiers who are proud, confident, disciplined,
ready, relevant, and resilient will continue to be the mission . . .*

Given our understanding of the demanding operational environment facing our Soldiers and of the Army direction outlined in the *ACC*, we must implement the *ALC* to ensure that our Soldiers departing from institutional training are ready for unit training that will enable them to support full spectrum operations. And the best way to improve institutional training is through an investment in our people and a focused review of our POIs. In this era of reduced resources, it is now more important than ever to prioritize our training resource requirements. The implementation of the *ALC* requires that commanders invest in foundational courses and cadre development programs. I am certain that this investment will continue to pay off in the form of higher-quality training for our Soldiers. 

Endnotes:

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⁵TRADOC Pam 525-3-1, *The United States Army Operating Concept—2016–2028*, 19 August 2010.

⁶Richard C. Longo and Paul E. Funk II, “Concept: Developing Adaptable Soldiers, Leaders, and Units to Meet the Challenge of Persistent Conflict,” *ARMY Magazine*, Vol. 61, No. 3, March 2011.

⁷Longo and Funk, 2011.

⁸*A Leader Development Strategy for a 21st Century Army*, 25 November 2009.

⁹TRADOC Pam 525-3-0, 2009.

¹⁰Ibid.

¹¹*Quadrennial Defense Review (QDR) Report*, Department of Defense, February 2010.

¹²TRADOC Pam 525-3-1, 2010.

¹³TRADOC Pam 525-8-3, 2011.

¹⁴Major Vandergriff (Retired) is a former Army Reserve Officer Training Corps instructor and teacher at the McDonough School of Business, Georgetown University, Washington, D.C., and is presently an Army Capabilities Integration Center Forward contractor.

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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.

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