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20th CBRNE Command Transformation – Regionally Aligned CBRNE Task Forces

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As the U.S. transitions from combat operations in Afghanistan and publishes new strategic defense priorities, the overarching theme is balancing capabilities, capacity, and readiness, while operating with fewer resources.^{1,2} This drives a need for solutions to maintaining and increasing capacity to the greatest extent possible, with little to no growth, and in some cases, with a reduction in organizational structures. The global landscape has fundamentally changed with increasingly hostile, fragile, or failed states posing a continued threat of transnational, non-state organizations, and alliances seeking to expand their influence. The complexity and uncertainty of this rapidly changing strategic environment demands timely and mission-focused decisions about future capability and capacity needed within our Army to address the increasing momentum of human interaction, threats emanating from dense and weakly governed urban areas, the availability of lethal weapon systems, and the proliferation of CBRNE threats.³ The risk of Weapons of Mass Destruction (WMD), the continued threat and expanded use of the IED, and the acquisition, proliferation, or use, and prevalence of asymmetrical CBRNE threats has intensified, creating a range of potential futures that suggest the employment of complex CBRNE hazards against US interests and allies is an increasing risk. The cost of insufficient preparation against these hazards is substantial.

This paper describes the 20th CBRNE Command transformation efforts in terms of the operational environment, the Command's functional organization and mission sets, the CBRNE task

force construct, the regional alignment of forces concept, and the way forward. Ultimately it defines the CBRNE forces concept with regionally aligned focus, and the CBRNE planning and operational capabilities that will improve the Army's and the Nation's CBRNE Capabilities. In this paper, the term CBRNE includes all Chemical, Biological, Radiological, Nuclear, and Explosive threats. Expanding on the scope of the Joint WMD/CBRNE definition, and consistent with the Army's definition, the "E" represents the full range of Explosive threats, from low to high yield, and captures the subset of critical tasks that our EOD Soldiers perform from unexploded ordnance, to improvised explosive device (IED) defeat.^{4,5}

Operational Environment

Adversaries will continue to look to the use of CBRNE capabilities as a way to maintain an asymmetric advantage over U.S. forces, and our allied and coalition partners. Adversaries will use CBRNE capabilities to shape the operating environment to inflict casualties, create conditions to deter or defeat entry operations, and erode public support and the basic will to fight. While difficulty in the acquisition, development, and delivery of threats increases from Chemical to Biological to Radiological to Nuclear, with low-yield explosives remaining cheap and easy, accelerating technological advancement and communication will enable greater ease in development and employment. This includes not only single threat types, but also more complex hybrid CBRNE threats delivered in parallel or serial within a given area of operations.⁶ In the same manner in which the 9/11 terrorists were able

to couple innovative delivery means with a combustible fuel, we must anticipate unique and coupled delivery of multiple elements of the CBRNE threat spectrum, as well as the continued use of improvised explosive devices as a persistent tactical threat. Within this context, the simultaneous presentation of hybrid CBRNE threats within an area of operations requires unity of command of special purpose, highly technical forces, commanded by trained leaders with the knowledge of how best to employ them and to appropriately synchronize an effective response. Inefficient, ad hoc solutions, or "pick up" games resulting from a last minute assembly of forces, is unacceptable.⁷

In operational environments, CBRNE threats and hazards are not limited to military sources. CBRNE threats also manifest from industrial, energy, medical, pharmaceutical and academic research sectors, and may include an explosive component for dispersal. These threats and hazards present an integrated and complex threat environment by themselves. When these threats are linked with increasingly available technology, materiel and coupled to motivations contrary to US interests, they result in a threat profile that demands an integrated, multi-functional, CBRNE force to appropriately identify, characterize, assess, disable/render safe, exploit, eliminate and ultimately destroy these hazards.^{8,9}

The 2014 Quadrennial Defense Review (QDR) highlights the need to adjust contingency planning to more clearly reflect the changing strategic environment by "employing regionally-focused forces to provide tailored packages that

achieve critical global and regional objectives.”¹⁰ The Army Strategic Planning Guidance (ASPG) – 2014 states that, “Agile, adaptive, and integrated conventional forces, special-operations forces (SOF), specialized explosive ordnance disposal (EOD) and CBRN forces, and missile defense provide a unique mix of scalable and tailorable capabilities across the total Army.”¹¹ The 2013 Army Strategic Planning Guidance (ASPG) also states the “Army will implement a regionally aligned force concept that leverages scalable capabilities to provide mission tailored forces to combatant commanders.”^{12,13}

Training and Doctrine Command (TRADOC) recently published “Force 2025 and Beyond” which outlines the Army Warfighting Challenges. Army Warfighting Challenge #5 clearly identifies that the Army provides the preponderance of forces and capabilities to counter WMD threats and CBRNE hazards in the land domain.¹⁴ Further, Warfighting Challenge #6 identifies the role of the 20th CBRNE Command in the defense of the Homeland, and Warfighting Challenge #20 describes the need to develop formations capable of rapid deployment to achieve mission success across the range of military operations. These, along with the remainder of the Army’s 20 Warfighting Challenges provide a framework which informs the organization, resourcing, training and employment of the 20th CBRNE Command. The equities shared in each of the warfighting challenges must not be approached independently, but integrally to ensure that the 20th CBRNE Command can fulfill its vital role in delivering ready, reliable and globally responsive CBRNE capabilities to meet the challenges of an increasingly complex operational environment.

20th CBRNE Command Overview

The 20th Chemical, Biological, Radiological, Nuclear, Explosives (CBRNE) Command is a highly-technical, special purpose, expeditionary formation that represents 85% of the Army’s active component CBRNE capability with the mission to deploy and execute CBRNE operations worldwide. The command consists of more than 5,000 Soldiers and 225 civilians assigned across two

Explosive Ordnance Disposal Groups, one Chemical Brigade, and a Civilian CBRNE Analytical and Remediation Activity. The 20th CBRNE Command is the Army’s only formation with the specialized CBRNE capabilities and expertise required to operate effectively across the full range of CBRNE threats and hazards.

To better reflect the complete current and anticipated set of missions, orders, and taskings of the Command, Forces Command (FORSCOM) approved the following mission in July 2014: The 20th CBRNE Command deploys to support unified land operations and performs mission command for Army and/or Joint CBRN and EOD Forces to achieve National CWMD, Homeland Defense, and Defense Support to Civil Authorities (DSCA) objectives, while providing globally responsive CBRN and EOD forces to combatant commands. The corresponding Mission Essential Task List is: Conduct Mission Command; Command and Control a Joint Force Headquarters; Execute Combating Weapons of Mass Destruction Operations in Joint Operational Area; Provide Explosive Ordnance Disposal (EOD) Protection Support; and Conduct Chemical, Biological, Radiological, and Nuclear (CBRN) Operations.

In the homeland, the Command routinely engages and operates with and in support of Joint, Special Operations, Interagency, and International CBRNE organizations and entities, and:

- Performs daily EOD emergency response and Very Important Person Protection Support Activity (VIPPSA) missions (2200 and 750 respectively annually).
- Maintains forces on Prepare To Deploy Orders (PTDO) for the U.S. Northern Command Defense CBRN Response Force (DCRF)
- Provides CBRNE forces to Defense Support to Civilian Law Enforcement Agencies (DSC-LEA) ranging from bomb disposal in civilian communities to packaging and movement of Recovered Chemical Warfare Materiel (RCWM)
- Provides the Ground Collection Task Force for the FBI-led Na-

tional Technical Nuclear Forensics (NTNF) mission Executes other special missions with recall windows ranging from 4 hours to 2 weeks

Concurrently, the Command also has:

- Forces deployed in support of U.S. Africa (AFRICOM), Southern (SOUTHCOM), Pacific (PACOM), and European (EUCOM) Commands
- Forces deployed in support of U.S. Central (CENTCOM) and Special Operations (SOCOM) Commands, primarily in Afghanistan supporting CIED efforts with EOD forces
- The CBRNE Analytical and Remediation Activity (CARA) typically engaged with three on-going RCWM remediation missions at Formerly Used Defense Sites (FUDS) and stands ready to support RCWM Emergency Response, Technical Escorts, and Analytical Laboratory Operations at any given time both CONUS and OCONUS
- Forces deployed in support of theater level exercises and in support of Combatant Commands Theater Security Cooperation Strategies and building Partnership Capacity initiatives

Ultimately, the vision of the Command is to provide the Army with ready, reliable and globally responsive CBRNE forces capable of leading and executing CBRNE related operations, anytime, anywhere.

CBRNE Brigade Task Force Organization

The Command recognizes that to respond to the changing strategic landscape and to operate effectively across the CBRNE spectrum, the historically singular view of the Command as focused only on CWMD and CIED must be broadened to one that is available for employment across the full range of CBRNE threats and hazards and across the full range of military operations. Rather than viewing the operational environment through a narrow CWMD lens, analyzing problems through a wider CBRNE perspective better illuminates challenges, and opportunities,

and leverages the full capability of the Command.

Currently, 20th CBRNE Command EOD and CBRN units are organized functionally under three O-6 Commands, and one Department of the Army Civilian CBRNE Analytical and Remediation Activity. This construct does not capitalize on overlapping CBRN and EOD mission areas or core capabilities. The purely functional construct reduces flexibility and responsiveness in meeting global requirements. The geographically distributed nature of the Command with a response area that covers all of the Continental United States, creates inefficiencies in the execution of mission command, impacts negatively on readiness, and leads to ad hoc solutions when considering how to best resource emergent contingencies that call for the employment of both EOD and CBRN forces. Whether for training, contingency operations, or as an enduring organization, a multi-functional CBRNE formation delivers more flexible and capable regionally focused CBRNE forces; mitigates the challenges of historical ad hoc solutions to similar and anticipated future mission sets, and overcomes the Command's current unity of command and unity of effort challenges resulting from our widely distributed basing construct and complex mission profiles.

Task organizing into three, multi-functional CBRNE Brigade-sized Task Forces ensures our forces are properly organized, focused, positioned and prepared to respond globally to ever-evolving CBRNE threats (Figure 1). The Task Organization requires no MTOE change, and upon implementation:

- Immediately improves and enables Unity of Command by reducing disparate command relationships, while increasing efficiencies in mission readiness and administrative functions across our dispersed formation
- Provides unity of effort and increases our ability to organize, train and project integrated CBRNE capability

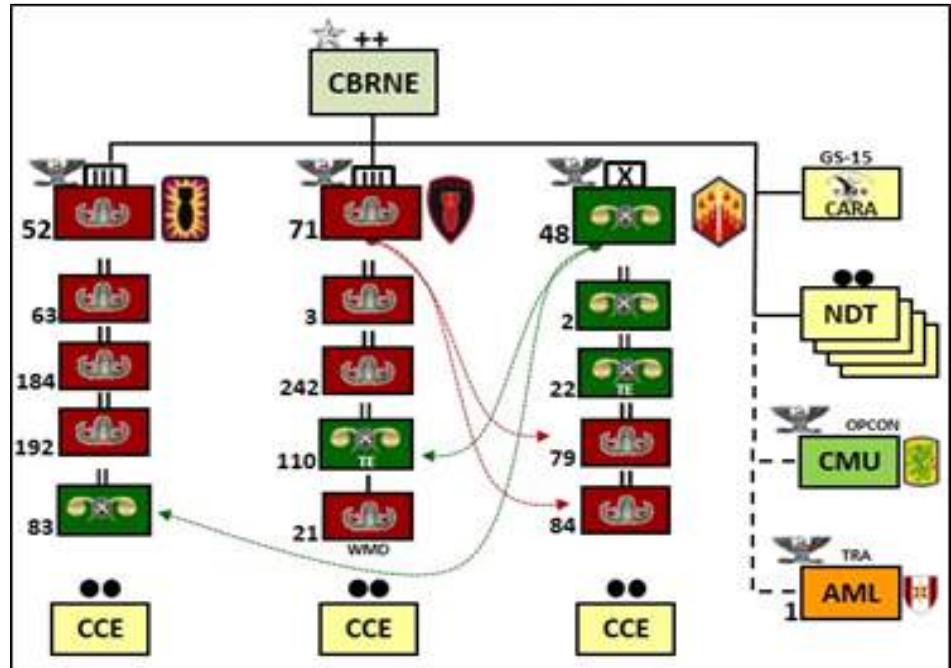


Figure 1. CBRNE Brigade Task Force Organization.

- Enables the projection of mission command capabilities by echelon to better assure integration and proper employment of CBRNE forces, further enabled by technical reachback
- Does not impact on-going DSCA, DSC-LEA, or SOF support missions
- Positions the force to best support the Regional Alignment Force Concept and Army Contingency Force Package, consistent with Army and FORSCOM directives
- Maintains and ensures necessary technical oversight requirements
- Is completely reversible.

The 20th CBRNE Command must be appropriately integrated, at echelon, to provide deployable, expeditionary, and unified exploitation capability which enables decisive action across the range of military operations and the range of CBRNE threats and hazards.¹⁵ This tactically and technically proficient Command must be sustainable with dedicated logistics solutions. The Command must be further enabled with expeditionary mobility solutions, and must be resourced with effective mission command capabilities, including robust technical reachback and mission command on the move capabilities to

ensure our ability to meet our tailorable, scalable, globally responsive endstate. The formation must be proficient at Counter WMD operations to include WMD Elimination, Counter IED operations, Render Safe and Disposal of all CBRNE munitions or improvised devices, exploitation and analysis of CBRNE threats, decontamination of personnel, equipment and fixed sites, and capable of conducting large-scale CBRNE consequence management, Defense Support to Civil Authorities (DSCA), Defense Support to Civil Law Enforcement Agencies (DSC-LEA), and field analysis. Anticipated mission sets require both integrated multi-functional and purely functional forces.

Regional Alignment – Formations Organized for Execution

Each CBRNE Brigade Task Force (TF) is regionally aligned with the OCONUS Army Service Component Commands (ASCC) (Figure 2), and in support of the three CONUS-based Corps. TF 71 (CBRNE) is positioned in the Western U.S., and is aligned in support of I Corps with a focus on the PACOM AOR. TF 48 (CBRNE) is positioned in the central U.S. in support of III Corps and is focused on the CENTCOM, AFRICOM, and EUCOM areas of responsibility (AOR). TF 52 (CBRNE) is positioned in the Eastern U.S. and aligned with XVIII Airborne Corps in support of their Glob.

al Response Force mission, as well as NORTHCOM and SOUTHCOM.

In short, task organizing and regionally focusing the 20th CBRNE Command's subordinate formations improves readiness through unity of command, unity of effort, and increased "train as you intend to fight" familiarity between 20th CBRNE and supported forces. By focusing our efforts regionally and aligning in support of the Army Service Component Commands, through the three CONUS-based Corps, we are better prepared to fulfill both our homeland defense, and our expeditionary mission requirements without relying on traditional ad hoc solutions. Task Organization facilitates our leaders, Soldiers, and Civilians increased understanding about their potential primary operational environment. Task Organizing the Command enables our Soldiers to better train habitually with their partner CBRNE formations, and their supported maneuver formations, improving interoperability, while collaboratively examining specific regional threats, from current combat operations, to the range of threats found across the combatant commands.

Mission Tailored Task Forces

The CBRNE Brigade Task Forces depicted in Figure 1 represent a baseline organization to facilitate team familiarity through training and exercises, as well as a regional area focus. For contingency operations, task forces at the brigade and battalion level will be tailored to specific mission sets using the baseline task organization as a starting point. Figure 3 depicts tailored notional CBRNE battalion task forces across a range of representative mission sets. These task forces may be integrated, weighted for EOD, CBRN or lab capability, or functionally pure.

Echelonment of the CBRNE Force

Essential to the effective employment of the integrated CBRNE formation is unity of command and unity of effort. As such, it is imperative that a command and control element be identified and employed with CBRN and EOD forces, whether integrated or functionally organized, to ensure the appropriate integration and employment of these

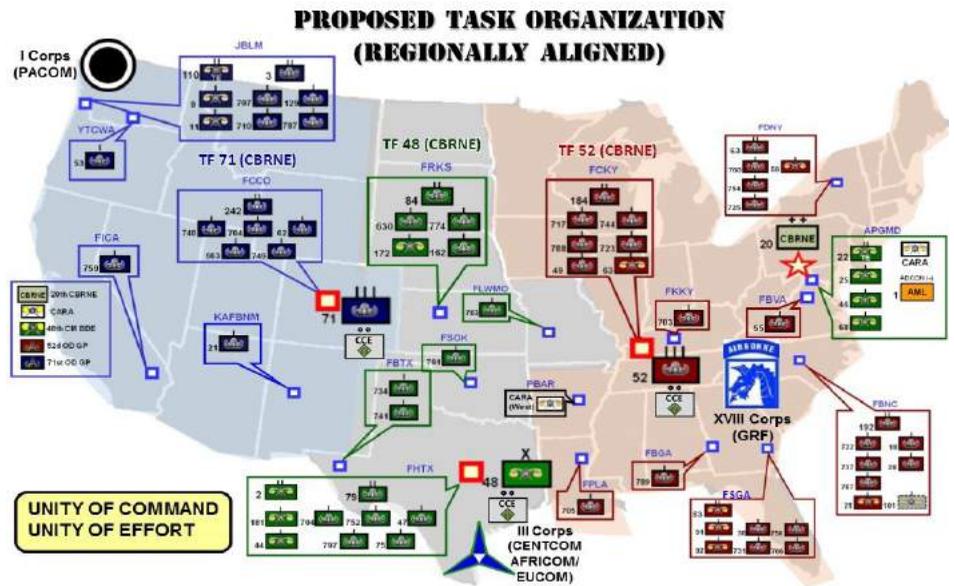


Figure 2. CBRNE Brigade Task Force Regional Alignment.

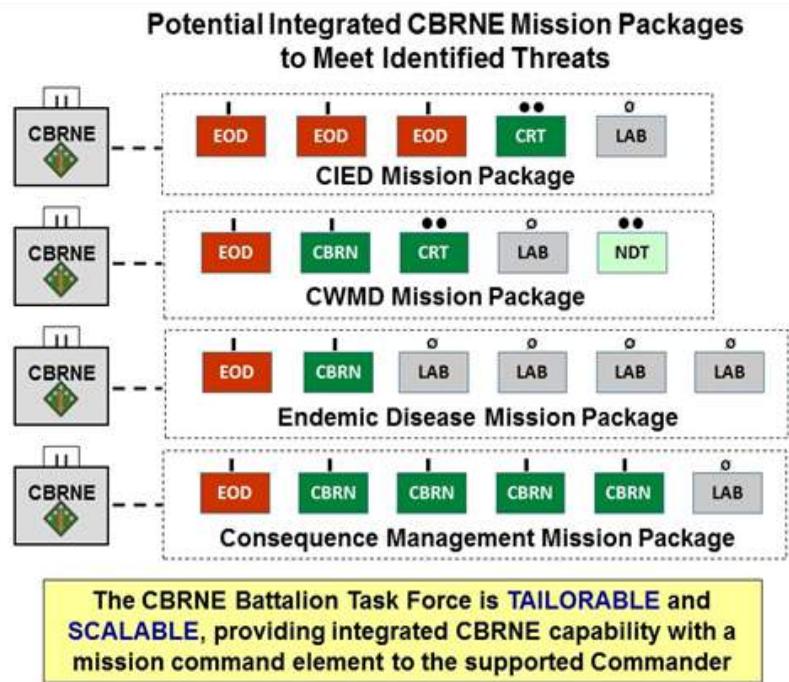


Figure 3. Potential Mission tailored CBRNE Battalion Task Forces.

specialized forces with the supported unit (Figure 4). The employment of a CBRNE command and control element to synchronize the employment of CBRN and EOD forces, reflects a continued demand signal from supported Army and unified action partners.

Connection to the CBRNE Enterprise. Each CBRNE Brigade Task Force is enabled with an OPCON CBRNE Coordination Element (CCE), comprised of EOD, CBRN, Nuclear counter-pro-

liferation, intelligence, and communications subject matter experts. Each CCE provides a planning, coordination, and synchronization extension of the 20th CBRNE Headquarters to regionally aligned CBRNE Brigades, as well as to the supported Corps Headquarters, and Army Service Component Command(s). Each CCE is enabled through robust technical reachback support to the 20th CBRNE Command HQ, and regionally focused on providing integrated CBRNE support across the

specific Geographic Combatant Command Area of Responsibility (AOR).

The 20th CBRNE Command's unique technical reachback capabilities enable deployed CBRNE formations with a robust network, involving the subject matter experts from across the CBRNE communities of purpose, which empowers the lowest tactical elements with the expertise of the entire CBRNE enterprise through the collaborative power of information available to the joint, inter-agency, intergovernmental and multi-national partners. During operations, the 20th CBRNE Command's Operational Command Post (OCP) serves as the critical node between higher strategic level headquarters, the broader CBRNE enterprise/community of purpose, and the brigade and below CBRNE forces during tactical employment. Collaborative interaction between CBRNE echelons and reporting along the CBRNE chain in parallel to the supported units allows the 20th CBRNE OCP to maintain an authoritative, holistic, and integrated CBRNE Common Operational Picture.

Operational Employment. During contingency operations, CCE's are rapidly deployable and can readily integrate into a GCC, ASCC, and/or corps or division-level staff to assist with initial CBRNE planning and execution. A CBRNE Brigade Task Force Tactical Command Post (TAC) is available to rapidly follow to provide support to a corps/JTF echelon with the CBRNE Brigade TAC co-locating and integrating with the supported corps/JTF's headquarters. All CBRNE forces are enabled with technical reachback up and through the deployed CBRNE Command Posts, and ultimately back to the 20th CBRNE's Main Command Post (MCP).

If required, the 20th CBRNE Command's Tactical Command Post (TAC) can be deployed to provide the foundation of CBRNE planning and coordinating expertise provided by earlier deployed command posts, in order to provide tactical to operational level support as required. Ultimately, the Command's full Operational Command Post (OCP) can be deployed to integrate with a GCC or ASCC headquarters, and is available to exercise mission command over larger scaled CBRNE operations,

EMPLOYMENT OF CBRNE FORCES

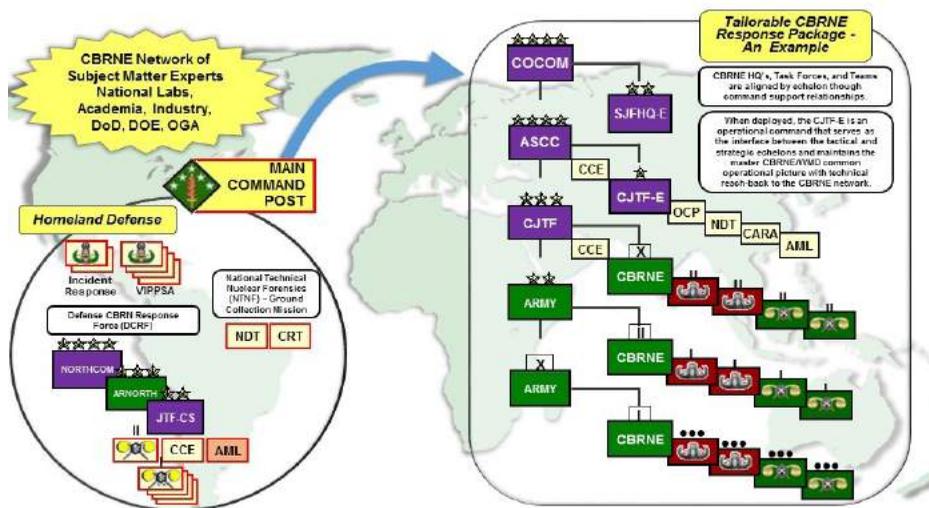


Figure 4. Echelment of CBRNE forces.

as required. This tailorable and scalable echeloned concept of employment and integration allows for the rapid employment of CBRNE elements with their supported units and phased deployment into a theater of operations, while sustaining the enabling technical reachback to the CBRNE community of purpose.

Gaps and Challenges

However, integrated CBRNE formations are not available through a standard request for forces (RFF) construct. When analyzing standing OPLANs and Contingency plans, and when participating in Joint and interagency exercises, it is evident that a gap exists when considering how to best provide mission command of CBRN and EOD formations when deployed within a common operating environment. Recent experience in planning contingency and deliberate operations with the Global Response Force (GRF), CENTCOM, AFRICOM, and U.S. Forces Korea (USFK) emphasize the need for integrated CBRNE capabilities, subordinated to an integrating CBRNE mission command element. Changes to the current RFF and Joint Planning and Execution System (JOPES) are required to enable the requisition of tailored, multi-functional CBRNE formations.

Discussions and exercises with supported Army Divisions and Corps

demonstrate both an acceptance, and an expectation that integrated, multi-functional CBRNE capabilities will be delivered to the supported command, complete with an integrating CBRNE mission command capability that can further augment the planning and coordination efforts of the supported force. Through Combat Training Center (CTC) rotations in Fiscal Years '14-15, we continue to shape our supported maneuver partners' understanding of our capabilities, while better informing this Command of how best to resource expeditionary and campaign activities.

These CTC rotations have enabled a thorough examination of required capabilities, and enduring capability gaps, particularly in the areas of communications, sustainment, mobility and protection. These rotations have also provided the environment to establish the doctrinal foundation for tactics, techniques, and procedures (TTPs) related to the execution of CBRNE operations.. Other enduring capability gaps include technical intelligence and fusion capability, organizational logistics, mission command, communications, and our subordinate forces' inability to provide readily available multi-functional, and modular CBRNE capabilities, based on our current organizational structure.

To close the doctrinal gap, we are working in close collaboration with the Maneuver Support Center of Excellence in the development of ATP 3-37.11, CBRNE Task Force Operations, with projected publication in March 2016. Additionally, we are partnering with the Joint Program Executive Office – Chemical and Biological Defense (JPEO-CBD), TRADOC, and the Defense Threat Reduction Agency (DTRA) for the development and implementation of an Advanced Technology Demonstration to address CBRNE technology gaps across all DOTMLPF domains and linked to the Army's Warfighting Challenge #5 (Countering WMD), which will inform capability gaps across all the Army Warfighting Functions where 20th CBRNE Command is a stake holder. These efforts help capture our operational concepts and lessons learned from supporting Unified Land Operations, Joint exercises, Mission Readiness Exercises, and CTC rotations.

Modernization Support

As the Command moves forward to modernize our CBRNE forces, we will identify change requirements beyond the reach and responsibilities of Forces Command. These requirements will be submitted as recommendations for force modernization, re-stationing, and synchronization of proponents of subordinate formations and functions for NDTs, EOD, CBRN, and analytical laboratories. FORSCOM's advocacy and leadership as we forward these recommendations to HQDA and TRADOC for incorporation into future programmatic functions such as the POM and TAA.

Conclusion

The 20th CBRNE Command is expected to provide the Army, and the Nation with Ready, Reliable and Globally Responsive CBRNE forces capable of leading and executing CBRNE related operations and activities, anytime and anywhere. To these ends, it is imperative that the 20th CBRNE Command transform its current functional organization into one which delivers three, multi-functional, regionally aligned CBRNE Brigade Task Forces as an important step in meeting the Army's Strategic Planning Guidance for this one-of-a-

kind formation. Doing so provides our Army and our Nation an immediately improved solution for delivering integrated CBRNE capacity to meet expeditionary and campaign requirements.

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12. Army Strategic Planning Guidance, dated 2013.
13. Presidential Policy Directive/PPPD-17. June 14, 2012.
14. Force 2025 and Beyond: Unified Land Operations, Win in a Complex World. U.S. Army TRADOC, October 2014.
15. The range of CBRNE threats and hazards includes, but is not limited to: chemical warfare agents, toxic industrial chemicals/materials, weaponized biological agents, biotoxins, endemic disease, radiological dispersal devices,

medical/industrial radioactive sources, nuclear weapons, improvised nuclear devices, nuclear infrastructure, low to high yield explosives, conventional explosives, improvised explosive devices, and hybrid CBRNE threats and hazards.



Biographies

Brigadier General (Ret.) J.B. Burton is the former Commanding General of the 20th CBRNE Command. He has commanded at every echelon from Platoon to Brigade Combat Team. He commanded a mechanized combined-arms team during Operation Desert Shield and Desert Storm. He commanded the 2nd Battalion, 5th Cavalry in Kuwait during Operation Intrinsic Action. He commanded the 2nd Brigade Combat Team of the 1st Infantry Division in Baghdad, Iraq. Prior to his assumption of Command of the 20th CBRNE Command, he served as Deputy Commanding General for Maneuver of the 2nd Infantry Division. He received a MMAS in Military Science from the U.S. Army Command and General Staff College and a M.A. in National Security and Strategic Studies from the Naval War College.

Colonel F. John Burpo currently serves as the deputy department head for the Department of Chemistry and Life Science at the United States Military Academy, West Point. Previously he served as the Deputy Commander for Transformation in the 20th CBRNE Command at Aberdeen Proving Ground, Maryland. He received a Sc.D. in bioengineering from the Massachusetts Institute of Technology, a M.S. in chemical engineering from Stanford University, and a B.S. in mechanical-aerospace engineering from West Point. As an artillery officer, he has served in airborne, armor, and Stryker units with humanitarian, peace keeping, and combat operational deployments to Rwanda, Bosnia, and Iraq.