



支援作戰部隊：第9 化生放核爆連支援 1-2 史崔克旅戰鬥小組 聯合兵種實彈演習

By Captain Michael T. Lindsay¹ and First Sergeant Tecarlos Y. Williams²

著者： Michael T. Lindsay 上尉與 Tecarlos Y. Williams 二等士官長



From: Army Chemical Review (ACR), Summer 2018

出處：美國陸軍化學兵半年刊，2018 夏季號

譯者何書慧上尉，畢業於維吉尼亞軍校 2012 年班化學系，美化學軍官初級班 2013-1 期，歷任排長，現任化訓中心化學組教官。

Our foundational task and purpose as a Chemical Corps is to enable the warfighter in its chemical, biological, radiological, nuclear, and explosives (CBRNE)/countering weapons of mass destruction (CWMD) mission. As chemical, biological, radiological, and nuclear (CBRN) leaders, there are two questions that should drive our actions and decisions:

Question No.1: “Can I execute my mission?”

Question No.2: “Are my Soldiers ready for combat?”

我們身為化學兵的基本任務及目標，係協助國軍能在化學、生物、放射、核子及爆裂物(CBRNE，以下簡稱為化生放核爆)或反大規毀滅性武器環境下進行任務。身為化學、生物、放射及核子幹部(CBRN，以下簡稱為化生放核)，應使用下列兩個問題驅策我們所做的行動與決策：

問題一：「我能執行賦予我的任務嗎？」

-
- 1 Captain Lindsay is the commander of the 9th CBRNE Company, Joint Base Lewis–McChord. He holds a bachelor’s degree in biochemistry from Brigham Young University, Provo, Utah, and a master’s degree in environmental management from Webster University. Lindsay 上尉是路易斯-麥寇爾德聯合基地第9 化生放核爆連連長。他有猶他州普若佛市楊百翰大學生物化學學士學位與韋伯斯特大學環境管理的碩士學位。
 - 2 First Sergeant Williams is the first sergeant of the 9th CBRNE Company, Joint Base Lewis–McChord. He holds bachelor’s degrees in environmental management from the American Military University, Charles Town, West Virginia, and safety management from Concordia University, Portland, Oregon. Williams 二等士官長是路易斯麥克聯合基地第9 化生放核爆連士官長。他有西維吉尼亞州美國軍事大學環境管理學士學位與奧勒岡州康括迪亞大學安全管理學士學位。

問題二：「我的部隊是否已做好作戰準備？」

No more than 11 words together, these questions lie at the heart of the Army pursuit of readiness. Although personal assignments and responsibilities may differ, these questions seldom change for leaders. They drive everything that a commander and first sergeant do. There are often clear answers to these questions – and definite reasons why. The answers shape decisions, command priorities, and training, which are the cornerstones of readiness.³ So when the 1-2 Stryker Brigade Combat Team (SBCT), Joint Base Lewis-McChord, Washington, requested CBRNE/weapons of mass destruction (WMD) support for its company level combined arms live-first exercise (CALFEX), chemical, biological, radiological, nuclear, and explosives response teams (CRTs) from the 9th CBRNE Company (Technical Escort), 110th CBRN Battalion, were ready and first in line.

雖然僅有 11 個字，然而這些問題卻是陸軍追求完善整備之核心關鍵。因此即便每個人任務與職責不盡相同，幹部們仍傾向詢問同樣問題。這也是為什麼部隊連長及士官長通常會定義上述問題的緣由並尋求確切答案。而這些確切答案形塑了決策、指揮優先順序及訓練，並成為部隊戰備之基石³。所以，當位於華盛頓州路易斯-麥寇爾德聯合基地的 1-2 史崔克旅戰鬥小組(SBCT)要求 110 化生放核爆營第 9 化生放核爆連(技術護送)的化生放核爆應變小組們(CRTs)在聯合兵種實彈演習(CALFEX)連成效演練實施化生放核爆與大規模毀滅性武器支援任務時，該部隊早已完成整備並待命支援。

Defeating CBRNE/WMD Threats 戰勝化生放核爆/大規模毀滅性武器威脅

On 30 October 2017, the CRTs and additional personnel from the 110th CBRNE Battalion began a 167-mile ground convoy to the Yakima Training Center, Washington. The company mission was to deploy and establish a mission command node within the brigade combat team (BCT) area of operations, and the task and purpose were to integrate CBRNE enablers in support of two 1-2 SBCT infantry battalions, Task Force 5-20th Regulars and Task Force 1-23d Tomahawks. Through a 12-day field-training exercise, the company headquarters provided 24-hour operational and sustainment support to the CRTs and CRTs complete six 24-hour CBRNE missions during black-fire and live-fire exercises. The days were long, the training was tough, the terrain was challenging, and the weather was unforgiving. When mission support tasks were completed, the CRTs from Joint Base Lewis-McChord didn't stop; they continued with day and night situational training exercises developed to replicate a WMD network built from the CALFEX enemy situation

3. Field Manual 7-0, Train to Win In a Complex World, 5 October 2016, p. 1-1. (野戰手冊 7.0，
《於複雜環境中贏得勝利之訓練》(2016 年 10 月 5 日)，第 1-1 頁)。

template.

2017年10月30日，第9化生放核爆連(技術護送)的化生放核爆應變小組(CRTs，以下簡稱為應變小組)與110化生放核爆營部分人員實施167英哩地面戰術行軍前至華盛頓州亞齊瑪訓練中心。該連之任務係在旅戰鬥小組(BCT)作戰區內設立一個指揮節點，並整合其化生放核爆能量以支援1-2史崔克旅戰鬥小組(SBCT)的兩個步兵營、5-20正規特遣隊及1-23戰斧特遣隊。透過為期12天的野戰訓練演習，連指揮所提供應變小組 (CRTs)全天候持續作戰的支援。而小組於啞彈及實彈演練期間完成了六個全天候的化生放核爆任務。在訓練中心的演訓時間漫長，更伴隨著刻苦的訓練以及嚴峻的地形和天氣。然而，當支援任務完成時，從路易斯-麥寇爾德聯合基地返營的應變小組(CRTs)並沒有就此停擺。他們日以繼夜地實施狀況演練，並複製聯合兵種實彈演習(CALFEX)內敵軍狀況想定，以發展對抗大規模毀滅性武器之網絡。

The CRT direct-support relationship to a single infantry company was a great experience. Each CALFEX lane featured a series of urban seizure objectives, mine and wire obstacles (requiring engineer mine clearing and Bangalore torpedo breeches), a trench system and, lastly, a CBRN target nestled in a large urban city block. Due to the nature of lane training, each CRT responded to the same target multiple times over the field-training exercise. This was not a drawback, as one might first believe. Lane training is a vital approach to efficiently building training proficiency across multiple units without considerable resource requirements.⁴ Despite similar live-fire lane configurations, each mission was different, brining unique challenges to the rotating infantry company and the CRT. For many of the Soldiers, this was the first time they had maneuvered within an infantry formation. Defeating enemy units on likely CBRN targets and securing WMD materials found on site were critical to the ground commander's mission. As the CBRNE enabler, the CRT key tasks were to integrate with the maneuver units, execute troop leading procedures, advise the ground commander, conduct convoy and dismounted maneuver, and conduct CBRNE operations in a time-constrained and contested environment.

應變小組(CRT)對單一步兵連直接支援的關係是一個絕佳的經驗。每條聯合兵種實彈演習(CALFEX)的路線都有各自的特徵，如一系列的城鎮占領目標據點、地雷、鐵絲網障礙(須掃雷工程及邦加羅爾詭雷的突破)及戰壕系統等。甚至還有藏身於大型都市街區中的化生放核目標物。基於路線訓練的本質，每個應變小組(CRT)均在野戰訓練期間多次針對相同目標物進行任務。而這樣重覆面對相同目標物並非人員一開始所想的多餘，相反地，對單位訓練來說其實至關重要。因為其能橫跨多個單位且有效地建立各單位訓練專精度，而不須耗費大量的資源⁴。雖然實彈演練的地形相似，但每項任務不盡相同，故其實為步兵連及應變小組(CRT)輪番帶來不同的挑戰。對於許多士兵而言，這是他們第一次在步兵

4. 同註 3, p. E-1.

編隊中進行機動演習。而擊敗敵方潛在的化生放核目標物和確保能在現場找出大規模毀滅性武器，這兩者對於地面指揮官而言，皆為任務的重要目標。身為化生放核爆戰鬥支援的角色，應變小組(CRT)的關鍵任務在於：與戰鬥部隊整合、執行部隊指揮程序、提供地面指揮官建議、執行護衛與徒步機動，並在時間的限制及緊迫的環境下，執行化生放核爆相關任務。

圖 1 應變小組(CRT)於目標區搭設人員消除站



資料來源：圖片源自美軍化學兵期刊文章⁵。

Lessons Learned 所獲經驗

During each mission, the CRT executed on target thanks to a combination of the maneuver unit ability to operate in a CBRN environment and to isolate, seize, and secure a CBRNE threat (control tasks of CWMD operations) and the CRT capacity to understand, communicate, and maneuver within the ground plan. Rehearsals were crucial for the warfighters and the enablers. In the case of the Task force 1-23d Infantry Tomahawks, the earlier September CBRNE situational training exercise train-up with the CRTs proved invaluable. The unit's ability to maintain tempo in elevated mission-oriented protective posture (MOPP) and its fluid actions on a CBRN target were indicative of proper preparation and training. There are two important lessons to share from the experience in Yakima, and each lesson was derived from understanding how both elements must work together to be successful.

5. Captain Michael T. Lindsay and First Sergeant Tecarlos Y. Williams, "Enabling the Warfighter: 9th CBRNE Company Supports 1-2 SBCT CALFEX" Army Chemical Review, summer 2018 (U.S. Army Chemical, Biological, Radiological, and Nuclear School: 2018), P15-18.

多虧各戰鬥部隊力量的集中，並於化生放核的環境下執行隔離、占領及解除化生放核爆的威脅(反大規模毀滅性武器作戰的管制任務)，再加上應變小組(CRT)本身針對地面作戰計畫的理解、溝通與配合機動，該小組才能按目標完成各項任務的執行。演習對於戰鬥或戰鬥支援部隊皆非常重要。就 1-23 戰斧特遣隊而言，9 月上旬與應變小組(CRT)共同進行的化生放核爆狀況演練成為其無價的經驗。該單位在提升個人防護等級的情況下，仍可維持戰鬥節奏並流暢地針對化生放核目標完成任務，就是其訓練完備的指標。筆者在亞齊瑪訓練中心學到了兩個重要經驗分享如下，而這兩個經驗的成功，皆建立在各部隊相互合作基礎之上。

Lesson No.1 經驗一

BCTs need CBRN enablers for training support, early integration, technical capacity, and leader development. Each BCT is different in its design and warfighting capability. Because each BCT must approach its mission-essential tasks and combined arms training strategy based on available equipment and resources, it needs a tailored CBRN training experience, assisted by its CBRN leader, installation CBRN units, or combat training center rotational enablers. For a BCT to be successful in its train-up for a combat training center rotation or regional deployment, training with chemical enablers must be an early integrated part of its unit training plan.⁶ It is too late to learn how to don MOPP gear during reception, staging, onward movement, and integration operations. To build CBRN capacity within the BCT, integration at the individual, squad, and platoon level is critical. Early training with enablers, even to augment basic Soldier survival tasks such as masking procedures or the donning of MOPP gear, is preferred over a rushed train-up weeks before collective training.⁷ Early integration and support planning benefit the warfighter and the enabler, increasing success in combat training. The participation of the 9th CBRNE Company with 1-2 SBCT during collective training throughout fiscal year 2018 provides a good pattern to follow. Integration efforts began in early October 2017, during the BCT squad and platoon situational training exercise, and continued through National Training Center Rotation 18-06 at Fort Irwin, California.

旅戰鬥小組(BCT)需要擔任戰鬥支援角色的化生放核部隊協助，以完成自身支援訓練、前置整合、技術能量及幹部發展等任務。每個戰鬥小組的特性及戰鬥能力都不盡相同，而各小組須思考單位現有裝備資源如何達成其任務必不可少的工作與聯合兵種訓練戰略，故小組們需要化生放核幹部協助量身規劃相關化生放核訓練與單位化生放核設施，且找到相關化生放核支援部隊配合小組至

6. 同註 3, p. 2-1.

7. Soldier training Publication 21-1-SMCT, Soldier's Manual of Common Tasks Warrior Skills Level 1, 28 September 2017.(陸軍訓練準則 21-1-SMCT，《初級通識戰鬥技能士兵手冊》，2017 年 9 月 28 日)。

戰鬥訓練中心輪訓。為使旅戰鬥小組(BCT)能在進駐戰鬥訓練中心輪訓或戰區境外部署前成功完備訓練，小組與化學兵部隊必須把提前共同協訓的課目納入單位訓練計畫內⁶。若等到命令接獲、集結整備、前進調動或聯合任務時，才學會如何穿戴個人防護裝備的話就太遲了。因此，建立旅戰鬥小組(BCT)的化生放核能量，且在單兵、班與排的層級上相互整合就變得極為重要。就算只針對單兵基本求生技能如穿戴防護面具及個人防護裝備實施提前訓練，還是優於集訓前倉促的數週緊急訓練⁷。提前規劃戰鬥與戰鬥支援部隊之整合與支援應能提升戰訓的成效。第 9 化生放核爆連與 1-2 史崔克旅戰鬥小組(SBCT)於 2018 年的集訓提供了良好的期程範本。集體訓練期程始自 2017 年 10 月上旬的旅戰鬥小組(BCT)班、排狀況演練，直至 2018 年 6 月在加州艾爾文堡國家訓練中心的輪訓結束。

圖 2 應變小組(CRT)組長參與連作戰命令討論



資料來源：圖片源自美軍化學兵期刊文章⁸。

The warfighting brigades need CBRN Soldiers and leaders to be flexible, agile, technically proficient, and ready to go. There are a vast number of training venues, schools, and annual exercises that are uniquely designed to build individual and unit technical mission capacity. Two examples are the CBRN Defense Training Facility at Fort Leonard Wood, Missouri, and the annual North Atlantic Treaty Organization Exercise Precise Response in Alberta, Canada.⁹ At these venues, Soldiers can operate in live-agent

8. Captain Michael T. Lindsay and First Sergeant Tecarlos Y. Williams, “Enabling the Warfighter: 9th CBRNE Company Supports 1-2 SBCT CALFEX” Army Chemical Review, summer 2018 (U.S. Army Chemical, Biological, Radiological, and Nuclear School: 2018), P15-18.

9. CBRN Defense Training Facility Web site, <<http://www.wood.army.mil/CDTF/CDTF.html>>,

conditions (chemical, biological, radiological), gaining absolute confidence in their tactics, techniques, and procedures. These courses and training opportunities help CBRN units sustain a band of excellence within their technical skill sets and mission-essential tasks.

戰鬥旅級須要具彈性、敏捷、技術專精且準備充足的化生放核幹部及士兵。有多數的訓練場地、學校及年度演習都是特別為了建立單兵及單位的任務技術能力而設計的。舉例來說，官士兵均可在密蘇里州李奧納伍德堡的實毒訓練場，以及加拿大亞伯塔省北大西洋公約組織年度舉辦的準確應變演習中(North Atlantic Treaty Organization Exercise Precise Response)⁹，練習如何在真實的毒劑環境下執行任務。經歷實毒訓練後，絕對可強化官士兵針對自己戰技、戰術及程序的信心。這些課程和訓練機會得以幫助化生放核單位在技術層面與其核心任務中精益求精。

圖 3 應變小組於密蘇里州李奧納伍德堡接受化生放核技術護送課程(L3)訓練



資料來源：圖片源自美軍化學兵期刊文章¹⁰。

The common necessity between the warfighter and the enabler is for CBRN leaders who know their craft to teach their commanders that CBRN enablers do more than just decontaminate vehicles or assist in unit MOPP gear exchange. These are common tasks expected to be executed internally in the BCT. 11 That mentality continues to persist because CBRN leaders fail

accessed on 27 March 2017.(美國陸軍化生放核學校,〈化生放核防禦訓練設施(實毒訓練場)〉, <http://www.wood.army.mil/CDTF/CDTF.html>, accessed on 27 March 2017, 2017 年 3 月 27 日)。

10.Captain Michael T. Lindsay and First Sergeant Tecarlos Y. Williams, “Enabling the Warfighter: 9th CBRNE Company Supports 1-2 SBCT CALFEX” Army Chemical Review, summer 2018 (U.S. Army Chemical, Biological, Radiological, and Nuclear School: 2018), P15-18.

11.Michael T. Lindsay, “Decontaminating a Stryker Brigade Combat Team,” Army Chemical

to carry knowledge and quality training to their units. The relevancy of CBRN defense operations was all but forgotten during the Nation's counterinsurgency wars, misshaping our sense of purpose to a new generation of Army leaders. CBRN assets should not be considered a de facto decontamination solution each time chemical rounds are fired during combat training center rotations. While enablers could do that, they should be employed for the strategic mission for which they were designed --CWMD. This is a complex and difficult mission for maneuver commanders to understand, and CBRN leaders are expected to facilitate their understanding and demystify this technically intensive mission. This ties into the second lesson.

戰鬥及戰鬥支援部隊之間的共通基礎，係建立在熟識化生放核專業知能的化學兵幹部去教育部隊指揮官了解化生放核部隊並非只做車輛消除，或協助單位正確提升個人防護裝備而已¹¹。上述任務本應旅戰鬥小組(BCT)自行實施，然這樣的想法一直存在的原因，係化生放核幹部未能將識豐質精的訓練運用本身的單位。化生放核防衛作戰的關聯性總在國家反暴戰爭中被遺忘，以至於新世代陸軍幹部們的目標認知被扭曲了。化生放核資產不該被當成像是戰鬥訓練中心輪訓時的消除藥劑一樣，每次化學彈藥打出去被使用消耗掉就沒了。即便戰鬥支援部隊可以這樣做，他們也應在戰略性任務發揮功用，就像當初他們被定位的角色功能—執行反大規模毀滅性武器作戰。對於戰鬥部隊指揮官們而言，要理解反大規模毀滅性武器是一項複雜且困難的任務，所以化生放核幹部應促進他們的理解，並揭開這項技術密集型任務的神秘面紗。本段落之經驗與下段將描述的經驗息息相關。

Lesson No. 2 經驗二

CBRN enablers need subject matter expertise, the ability to conduct CBRN intelligence preparation of the battlefield with target analysis, and tactical proficiency. Maneuver commanders have no patience for CBRN officers and non-commissioned officers who try to learn their job-specific fundamentals in the midst early morning chemical strikes at combat training center. CBRN BCT personnel need to study CBRN doctrine, and CBRN units should likewise assist them in shaping leader development with regard to CWMD. The roles and tasks of maneuver and CBRN enablers within the combined arms mission are fully incorporated into the military decision-making process and are clearly outlined in Table 1-1 of Army Techniques Publication (ATP) 3-90.40, Combined Arms Countering Weapons of Mass Destruction. 12

Review, Winter2016, pp. 23-24. (Michael T. Lindsay ,〈消除史崔克旅級作戰小組〉《化學兵半年刊》，2016 年冬季，第 23-24 頁)。

12. ATP 3-90.40, Combined Arms Countering Weapons of Mass Destruction, 29 June 2017, 第 190 頁

Understanding combined arms CWMD operations is just as much a responsibility of CBRN leaders as it is maneuver leaders. Every CBRN leader should immediately make an effort to understand this doctrine and implement it into officer and leader professional development efforts. Remember, our Corps enables the warfighter.

化生放核部隊必須具備專業技術性，並於執行化生放核戰場情報整備作為時，運用目標分析與戰術熟練技能。戰鬥部隊指揮官們並沒有多餘的耐心讓化生放核軍士官們在一大清早遭化武攻擊之際，才去學習與練習他們的化生放核專業知能。旅戰鬥小組(BCT)的化生放核參謀需熟讀化生放核準則，而化生放核單位也應協助形塑他們領導大規模毀滅性武器任務的能力。在聯合兵種作戰中，戰鬥部隊與化生放核戰鬥支援部隊的角色及任務已完整地納入部隊指參作業程序，並在「陸軍技術準則 3-90.40 聯合軍種作戰—反大規模毀滅性武器(Army Techniques Publication 3-90.40，英文簡稱為 ATP 3-90.40)」的表 1-1 中明確列出¹²。瞭解聯合兵種反大規模毀滅性武器作戰任務，不僅是戰鬥部隊的幹部，更同樣是化生放核幹部的責任。每位化生放核幹部應立即努力理解 ATP3-90.40 這本準則，並將之運用在軍士官的專業專長發展上。畢竟化生放核部隊的目的即是支援戰鬥部隊的以強化其作戰能力。

圖4 應變小組(CRT)於後送前實施相關危害防制準備



資料來源：圖片源自美軍化學兵期刊文章¹³。

To conduct an appropriate response to a CBRN target, CBRN enablers (such as CRTs or hazard assessment platoons) rely on key pieces of

p. 1-5.(陸軍技術準則 3-90.40，《聯合軍種作戰—反大規模毀滅性武器》(2017 年 6 月 29 日)，第 1-5 頁)。

13.Captain Michael T. Lindsay and First Sergeant Tecarlos Y. Williams, “Enabling the Warfighter: 9th CBRNE Company Supports 1-2 SBCT CALFEX” Army Chemical Review, summer 2018 (U.S. Army Chemical, Biological, Radiological, and Nuclear School: 2018), P15-18.

intelligence. 14 Examples are site imagery, historical intelligence, building blueprints or schematics, patterns of life, suspected agents, weather analysis, target indicators, map graphics, and critical command guidance. Without key pieces of information, enablers are disadvantaged in their approach to support the warfighter. CBRN units must have an understanding of the developed enemy CBRN threat and should read up on targeting matrices and intelligence estimates. 15 This may require one-on-one coaching regarding what proper CBRN intelligence preparation of the battlefield is and what it is not. It is not simply memorizing doctrinal chemical weapon delivery systems and templating possible locations of CBRN targets on a map. Instead, it is tactical planning and analysis across each warfighting function, with a deliberate collection of human and geospatial intelligence focused on CBRNE/WMD targets. The decide, detect, deliver, and access (D3A) targeting method for CWMD operations is not just about providing a CRT or Nuclear Biological Chemical Reconnaissance Vehicle platoon with a robust mission packet. 16 A BCT commander needs his or her staff to answer the “What’s different? What’s next?” questions of CWMD operations. In this sense, the CBRN asset becomes an intelligence, surveillance, and reconnaissance asset, supporting the commander’s critical information requirements and attacking the WMD network.

要適切針對化生放核目標應變，化生放核部隊如應變小組(CRT)和危害辨識排須仰賴關鍵情資¹⁴。舉例來說，現場影像、過去情資、建築物藍圖或概圖、生活模式、可疑戰劑、天氣分析、目標徵兆、地圖圖資，以及關鍵指揮要項。若沒有這些關鍵情資，戰鬥支援部隊就無法有效地支援戰鬥單位。化生放核部隊一定要了解敵軍所帶來的化生放核威脅，並能看懂目標矩陣和情資評估報告¹⁵。何謂適切的化生放核戰場情報準備，可能須要一對一的指導才能讓部隊有一定程度的瞭解，而非單純地背誦準則上的化武投遞系統或在地圖上模擬可疑化生放核目標位置就好。橫跨各戰鬥部隊功能的戰術性規劃與分析，再加上化生放核爆/大規模毀滅性武器目標的人員與地域情資周密蒐集才是真正的化生放核戰場情報準備。反大規模毀滅性武器作戰的目標鎖定方法—決心、偵檢、運送與接觸(decide, detect, deliver, and access，英文簡稱為 D3A)不單純是應變小組(CRT)或使用核生化偵檢車(Nuclear Biological Chemical Reconnaissance Vehicle，英文簡稱為 NBCRV)的乘車偵檢排的堅實作業程序而已¹⁶。旅戰鬥小組(BCT)指揮官的所屬幕僚應針對每次的反大規模毀滅性武器作戰的問題「有何

14.同註 12, pp. 2-9-2-13.

15.同註 12, pp. 2-6-2-8.

16. ATP 3-90.40, Combined Arms Countering Weapons of Mass Destruction, 29 June 2017, p. C-1.(陸軍技術準則 3-90.40，《聯合軍種作戰—反大規模毀滅性武器》(2017 年 6 月 29 日)，第 C-1 頁)。

不同？下一步是什麼？」一一回答。以這層意義而言，化生放核部隊反而成為單位進行情報、監視和偵察(intelligence, surveillance, and reconnaissance，英文簡稱為 ISR，以下簡稱為情監偵)的資產，並支持著指揮官的關鍵情資需求與反大規模毀滅性武器網絡。

An unfortunate truth across our technical units is that there is general lack of tactical skills. Gains in one area seem to cause losses in another. This is the nature of balancing unit training proficiency, and it stresses the importance of officers and noncommissioned officers in battle-focused training. 17 As the company experienced during its field training exercise, to assist the maneuver unit in controlling the CBRNE/WMD threat, the CRTs had to first get to it. CBRN Soldiers and units must be proficient in convoy security procedures and trained in protect-and-defend tasks. These are critical skills within each CBRN unit training strategy. To be successful in a dynamic and complex environment, CBRN Soldiers must be better qualified on individual weapon systems and must experience hard field conditioning and challenging training to fight and win our Nation's future wars. Building the tactical capacity to shoot, move, communicate, and execute our wartime mission is our most important responsibility as CBRN leaders.

不幸的是，我們現行的技術單位普遍都缺乏戰術技能。魚與熊掌不可兼得，且這本是平衡各單位訓練熟練度所產生的正常現象。但這也凸顯了軍士官們在專精作戰訓練的重要性¹⁷。當一個化生放核爆連在野戰訓練時，為了要協助戰鬥部隊控制住化生放核爆/大規模毀滅性武器的威脅，應變小組(CRT)須最先到達現場了解現況，因此化生放核部隊須能熟練機動防禦程序及攻防任務。這些都是化生放核部隊訓練方針中列在至關重要的技能。要在動盪與複雜的環境中完成任務，化生放核部隊應能熟用個人武器系統，且具備困難野戰環境與具挑戰性的訓練經驗，以勝任未來國家可能面臨的戰爭中任務並獲得勝利。因此建立射擊、移防、通訊及執行戰時任務的戰術能量，是我們身為化生放核幹部最重要的責任。

Summary 總結

As the Army continues to pursue readiness across the force, our most critical mission as a Chemical Corps is to enable the warfighter. The CRTs gained clear insight on the challenges and scope that this mission presents during their support to the 1-2 SBCT in October 2017. The CMWD mission is unique, complex, and technical. Leader development and subject matter expertise are maneuver and CBRN unit necessities to achieve this mission. Successful BCT integration for the CWMD mission requires CBRN Soldiers and leaders who are technically and tactically skilled. This is best achieved by

17.Field Manual 7-0, p. 1-8.(野戰手冊 7.0，《於複雜環境中贏得勝利之訓練》(2016 年 10 月 5 日)，第 1-8 頁)。

leader development, deliberate training management, and battle-focused training. Disciplined training management is critical for building and sustaining combat readiness among CBRN units. Done right — with proper training, development, and resources — CBRN Soldiers will be prepared to execute their mission in combat.

隨著陸軍持續追求全軍作戰準備，我們身為化學兵最重要的任務就是支援戰鬥部隊以強化其作戰能力。應變小組(CRT)從 2017 年 10 月支援史崔克旅戰鬥小組(SBCT)的經驗當中，清楚瞭解任務的挑戰及規模。反大規模毀滅性武器任務既獨特、複雜且充滿技術性。領導統御和專精技術是戰鬥和化生放核部隊共同完成任務的必要條件。為使整個旅戰鬥小組(BCT)成功完成反大規模毀滅性武器任務，所有化生放核官士兵須具備專業技術和戰術能力，而這取決於領導統御、縝密訓練管理，以及著重作戰導向的訓練。具備紀律的訓練管理對於化生放核部隊的建立和維持作戰準備是極為重要的。有了適當的訓練、發展及資源，化生放核部隊便能隨時做好作戰任務整備。

Endnote 尾註：

1. Field Manual 7-0, Train to Win In a Complex World, 5 October 2016, p. 1-1.
2. Ibid., p. E-1.
3. Ibid., p. 2-1.
4. Soldier training Publication 21-1-SMCT, Soldier's Manual of Common Tasks Warrior Skills Level 1, 28 September 2017.
5. CBRN Defense Training Facility Web site, <<http://www.wood.army.mil/CDTF/CDTF.html>>, accessed on 27 March 2017.
6. Michael T. Lindsay, "Decontaminating a Stryker Brigade Combat Team," Army Chemical Review, Winter2016, pp. 23-24.
7. ATP 3-90.40, Combined Arms Countering Weapons of Mass Destruction, 29 June 2017, p. 1-5.
8. Ibid., pp. 2-9-2-13.
9. Ibid., pp. 2-6-2-8.
10. ATP 3-90.40, p. C-1.
11. Field Manual 7-0, p. 1-8.
12. Soldiers can access training and evaluation outlines and unit combined arms training strategies through the Army Training Network at <<https://atn.army.mil>>.