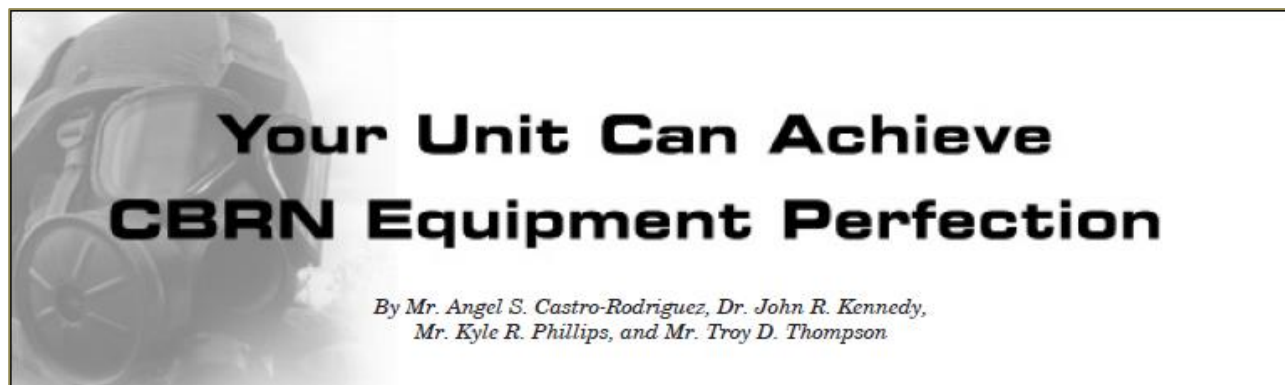




您的單位可達成化生放核(CBRN)裝備完善¹

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Did you know that there is a team of dedicated experts whose specific mission is to assist Army commanders in improving the overall readiness of their fielded chemical, biological, radiological, and nuclear (CBRN) equipment and ensuring serviceability and maintainability? There is. It is called the Equipment Assessment Unit (EAU). It is provided by the Engineering Directorate of the U.S. Army Edgewood Chemical Biological Center (ECBC) at Aberdeen Proving Ground, Maryland. The services are provided free of charge.

您是否知道有個專業團隊，其具體任務是協助陸軍指揮官提高現有部署的化生放核(CBRN)裝備整備狀態，並確保其可操作與維護。該專業團隊被稱為裝備評估小組(以下簡稱 EAU)。EAU 由位於馬里蘭州阿伯丁試驗場的美國陸軍埃奇伍德化學生物中心(Army Edgewood Chemical Biological Center, 以下簡稱 ECBC)的工程指揮部派遣，該服務是免費提供的。

ECBC EAU 埃奇伍德化學生物中心裝備評估小組

Just what does the EAU do if a unit decides to take advantage of its services? It makes an on-site visit to the unit. During the visit, the team can-

如果一個單位決定借助 EAU 服務，那麼 EAU 會做些什麼呢？他會對該單位進行現場參訪，在參訪期間，EAU 團隊可以：

-Conduct a hands-on assessment of the condition of unit CBRN equipment.

對單位化生放核裝備的狀況進行實際評估。

-Conduct an assessment of the condition of protective masks using EAU test equipment.

使用裝備評估小組測試設備評估防護面具的狀況。

-Provide hands-on refresher training on the use of CBRN equipment.

提供有關使用化生放核裝備的實做複習訓練。

The EAU is composed of personnel with extensive hands-on experience with the specific CBRN equipment that they are assessing (Table 1 shows CBRN equipment that the EAU can assess).

EAU 由對他們正在評估的特定化生放核裝備具有豐富實做經驗的人員組成，

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表 1 顯示裝備評估小組可評估的化生放核裝備。

Table 1. CBRN equipment that the EAU can assess

Protection Equipment	Detection Equipment	Decontamination Equipment
M-40 Series Protective Masks	M4 and M4A1 Joint Chemical Agent Detector	M26 Decontamination Apparatus
M-50 Series Protective Masks	M22 Automatic Chemical Agent Detector/Alarm	M12 Decontamination Apparatus
Joint Service Aircrew Mask, Apache Mask Protective Unit 6	Chemical Agent Monitor/Improved Chemical Agent Monitor	M295 Decontamination Kit
M41 Protection Assessment Test System	M21 Remote Sensing Chemical Agent Alarm	M100 Sorbent
M20A1 Simplified Collective Protection Equipment	M256A1 Chemical Agent Detector Kit	Reactive Skin Decontamination Lotion
	AN/PDR-77 RADIAC	
	AN/PDR-75 RADIAC/DT-236	
	AN/UDR-13 RADIAC	
	AN/VDR-2 RADIAC	
Legend: RADIAC-radiation detection, indication, and computation		

表 1. 裝備評估小組可評估的化生放核裝備

防護裝備	偵檢裝備	污染消除裝備
M-40 系列防護面具	M4 與 M4A1 聯合化學毒劑偵測器(JCAD)	M26 污染消除裝置
M-50 系列防護面具	M22 自動化學毒劑偵測/警報器(ACADA)	M12 污染消除裝置
聯軍空用面具、Apache 面具防護單元 6	化學毒劑監測器(CAM)/精進化學毒劑監測器(ICAM)	M295 污染消除包
M41 防護功能評估測試系統	M21 遙感式化學毒劑警報器	M100 吸附劑
M20A1 簡易集體防護裝備	M256A1 化學毒劑偵檢包	反應型皮膚污染消除乳液(RSDL)
	AN/PDR-77 RADIAC	
	AN/PDR-75 RADIAC/DT-236	

		AN/UDR-13 RADIAC	
		AN/VDR-2 RADIAC	
說明	RADIAC-輻射偵測、指示與計算		

Further, they are subject matter experts in numerous fields, to include chemistry, chemical engineering, electronics engineering, materials science, logistics, and acquisition. An EAU visit-

此外，他們還是眾多領域的專家，包括化學、化學工程、電子工程、材料科學、後勤和籌補。裝備評估小組參訪：

-Improves unit operational readiness and combat effectiveness.

提高單位作戰整備和戰鬥力。

-Enhances the unit readiness posture.

增強單位整備態勢。

-Assists commanders in determining the condition of on-hand CBRN equipment and areas for improvement.

協助指揮官確認現有化生放核裝備的狀況和須要改進的地方。

-Reinforces proper preventive maintenance checks and services (PMCS).

加強適當的預防性維護檢查和服務(PMCS)。

-Provides points of contact (POCs) for future CBRN equipment-related questions and issues.

為未來的化生放核裝備相關問題與議題提供聯繫點(POC)。

-Identifies trends for CBRN equipment and communicates with the program manager to improve CBRN equipment.

確認化生放核裝備的發展趨勢，並與計畫管理人員溝通，以改進化生放核裝備。

-Provides out-briefs of the assessment findings.

提供評估結果簡報。

-Provides refresher training to joint warfighters.

為聯合作戰人員提供複訓。

-Works closely with the U.S. Army TACOM logistic area representatives of the requesting unit.

與請求單位的美國陸軍戰術司令部(TACOM)後勤區域代表密切合作。

The assessment process is not difficult for the requesting unit. The unit should

provide a POC who will be responsible for the overall coordination of operations and assessment planning. A POC for each participating unit may also be designated. These POCs should be available throughout the assessment.

請求單位的評估過程並不困難。該單位應提供一名聯絡人(POC)，負責對作業和評估計畫的整體協調作回應。還可以指定每個參與單位的聯絡人，這些聯絡人應在整個評估過程中全程提供協調回應。

The EAU conducts hands-on, operator-level refresher training for the unit, if desired. A unit POC should coordinate the training space with an EAU representative. The unit POC is also responsible for the coordination of attendees.

視需要，裝備評估小組會對該單位進行實際操作員層級的複訓，單位聯絡人應該與裝備評估小組代表協調訓練空間及參加者。

The EAU team leader or representative conducts an out-brief at the end of the mission. Out-briefs include, but are not limited to, the following :

裝備評估小組領導人或代表在任務結束時須進行簡報。簡報包括(但不限於)以下內容：

-Summary of the results.

結果摘要。

-Detailed breakdown of common failure modes.

常見故障模式的詳細分類。

-Assessment of PMCS.

預防性維護檢查和服務(PMCS)評估。

-Information about maintenance or repair that is required.

有關維護或修理的資訊。

-Recommendations for future improvements in training and maintenance procedures.

關於未來改進訓練和維護程序的建議。

-Shelf-life data.

保質期(壽期)數據。

Once the assessment is complete, a written report is provided to the unit commander. The report identifies any discrepancies, items requiring unit action, or unserviceable items. Figures 1–8 show graphic examples of discrepancies the EAU has found during some of its assessments.

評估完成後，將向單位指揮官提供書面報告。該報告確認所有異常，單位需要的行動項目或無法使用的項目。圖 1 至圖 8 顯示了裝備評估小組在一些評

估中發現的異常的圖示。

Conclusion 結語

The Engineering Directorate, ECBC, has a team of dedicated experts whose specific mission is to assist joint war-fighters in improving the overall readiness of their fielded CBRN equipment to ensure serviceability and maintainability, enhancing unit operating readiness and combat effectiveness. The services supplied by the EAU provide long-term benefits to Regular Army, Army National Guard, and U.S. Army Reserve units in all areas of CBRN PMCS and build a network of contacts for future CBRN-related questions.

美國陸軍埃奇伍德化學生物中心(ECBC)的工程指揮部擁有一支專業團隊，其具體任務是協助聯合作戰人員，提高現役化生放核(CBRN)裝備整備狀態，以確保其操作與維護，增強部隊作戰整備和戰鬥力。裝備評估小組提供化生放核預防性維護檢查和服務(PMCS)各領域的服務，為正規陸軍、國民警衛隊和美國陸軍預備役部隊提供長期利益，並為未來的化生放核相關問題建立聯繫網絡。

The EAU assists the commander in improving the condition of on-hand CBRN equipment and the effectiveness of preventive maintenance programs through the results and recommendations supplied during the visit and through a unit-specific report. It also provides hands-on, operator-level refresher training to designated CBRN personnel upon request.

裝備評估小組藉由參訪期間提供的評估結果和建議事項向特定單位報告，協助單位指揮官改善現有化生放核裝備狀況和預防性維護計畫有效可行。裝備評估小組還根據要求為指定的化生放核人員提供操作員層級的實作複訓。

The ECBC EAU assessment is minimally obtrusive and is conducted by experienced people who aim to direct their services to fit the individual needs and time constraints of the unit. The results are briefed only to the command, and the service is free to the requesting unit.

ECBC 裝備評估小組(EAU)的評估極具特性，由經驗豐富的人員進行，以滿足單位的個人需求和時間限制為導向；所得結果僅向指揮階層簡報，對請求單位服務是不收取任何費用的。

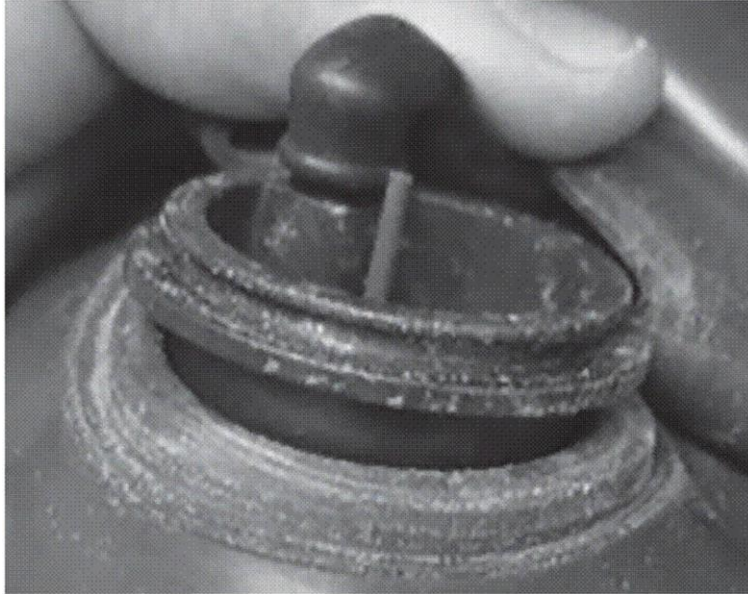


Figure 1. Disbonded M40 series protective mask outlet housing

圖 1. M40 系列防護面具出口外殼剝離



Figure 2. M40 series protective mask with a torn face blank

圖 2. M40 系列防護面具有面坯破裂



Figure 3. Torn M40 series protective mask external drink tube

圖 3. M40 系列防護面具外置飲水管撕裂



Figure 4. Damage to the front of the voicemitter on a M45 protective mask

圖 4. M45 防護面具上的揚聲器前部損壞



Figure 5. M26 decontamination apparatus O-ring failure

圖 5. M26 污染消除裝置 O 形圈故障

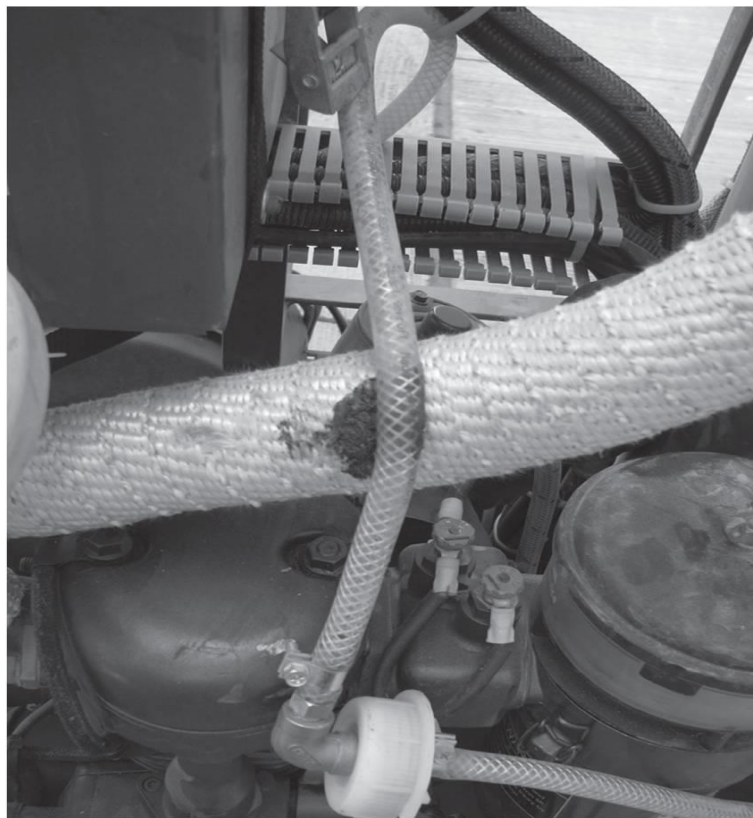


Figure 6. M26 decontamination apparatus calcium inhibitor suction line damage from exhaust pipe

圖 6. M26 污染消除裝置鈣抑制劑吸入管線的排放管損壞

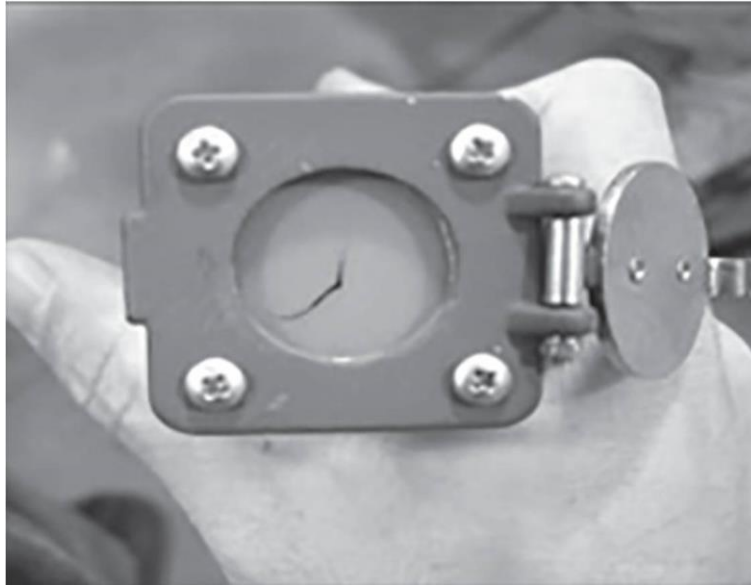


Figure 7. AN/VDR-2 RADIAC beta/gamma probe damage

圖 7. AN / VDR-2 RADIAC beta/gamma 探測器損傷



Figure 8. AN/PDR-75 cable damage from separation

圖 8. AN / PDR-75 電纜分離損壞