

GAO

Report to the Chairman, Subcommittee  
on National Security, Emerging Threats,  
and International Relations, Committee  
on Government Reform, House of  
Representatives

January 2005

# CHEMICAL AND BIOLOGICAL DEFENSE

## Army and Marine Corps Need to Establish Minimum Training Tasks and Improve Reporting for Combat Training Centers



G A O

Accountability \* Integrity \* Reliability



Highlights of [GAO-05-8](#), a report to the Chairman, Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform, House of Representatives

## Why GAO Did This Study

The Department of Defense (DOD) believes that it is increasingly likely that an adversary will use nuclear, biological, or chemical (NBC) weapons against U.S. forces. Consequently, DOD doctrine calls for U.S. forces to be sufficiently trained to continue their missions in an NBC-contaminated environment. Given longstanding concerns about the preparedness of DOD's servicemembers in this critical area, GAO has undertaken a body of work covering NBC protective equipment and training. For this review, GAO was asked to determine the following: (1) To what extent do Army and Marine Corps units and personnel attending combat training centers participate in NBC training, and to what extent do these units and personnel perform NBC tasks at the centers to service standards? (2) Do the Army and the Marine Corps report NBC training at the centers in a standardized format that allows the services to identify lessons learned and to do cross-unit and cross-center comparisons?

## What GAO Recommends

GAO is recommending that DOD direct the services to (1) establish minimum NBC tasks for units participating in training exercises at the centers and (2) standardize reporting formats on NBC training that occurs at the centers. DOD agreed with the report's findings and recommendations and is now taking the necessary actions for implementation when operating conditions permit.

[www.gao.gov/cgi-bin/getrpt?GAO-05-8](http://www.gao.gov/cgi-bin/getrpt?GAO-05-8).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Sharon Pickup at (202) 512-9619 or [pickups@gao.gov](mailto:pickups@gao.gov).

# CHEMICAL AND BIOLOGICAL DEFENSE

## Army and Marine Corps Need to Establish Minimum Training Tasks and Improve Reporting for Combat Training Centers

### What GAO Found

Army and Marine Corps combat training centers provide a unique opportunity for units to perform advanced training under conditions that approximate actual combat, thereby enabling units to assess and build upon skills learned at home stations. Although DOD and both services have stressed the importance of including NBC defense in all types of training, they have not established minimum NBC-related tasks for units attending the centers. Commanders sometimes reduce NBC training to focus on other priority areas. As a result, the extent of NBC training actually conducted at these centers varies widely, and some units receive little or none at all. For example, officials at two Army training centers estimated that during fiscal years 2002 and 2003, a typical unit training rotation for a brigade-sized unit—which may include up to 4,000 soldiers—experienced NBC events that required only about 5 percent of these troops to train in full NBC protective clothing for a total of 18 hours or more. For the Marine Corps, no NBC training was conducted during combined arms exercises at its training center for at least 5 years prior to January 2004. The Marine Corps began to introduce NBC training into its combined arms exercises in two rotations that occurred in January and February 2004 but suspended it because of other priorities related to preparing units for ongoing operations. Without minimum NBC tasks, the services often miss the opportunity to use the centers' unique environment to improve units' proficiency in NBC defense.

When Army units did undergo NBC training, observers noted that many units did not perform basic NBC tasks to Army standards. For example, during fiscal years 2002 and 2003, most brigades attending one center did not meet standards for basic NBC tasks such as donning protective gear, seeking overhead shelter, and conducting unmasking procedures. Observers at the Army centers often cited inadequate home-station training as the reason units were not performing basic NBC tasks to standards. Skills in these basic tasks are normally acquired during training at home stations and lay the foundation for acquiring more complex skills associated with large-unit NBC training. When units arrive at the centers with inadequate basic NBC skills, they may not be able to take full advantage of the unique and more complex large-unit NBC training opportunities offered at these centers.

The Army and the Marine Corps do not always report lessons learned on NBC training at the centers in a way that can be used to identify trends over time and allow for cross-unit and cross-center comparisons. Army and Marine Corps doctrine stresses the importance of identifying lessons learned during training to enable tailored training at home stations and elsewhere to reduce the likelihood that similar problems will occur during operations. Because service guidance does not require standardized reporting formats, the training centers submit different types of after-action reports that might or might not mention NBC training. This lack of standardized reporting represents opportunities lost to the services to collect comparable data to identify NBC training trends and lessons learned.

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**Figure****Figure 1: Soldiers at CMTC Undergoing NBC Training**

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**Abbreviations**

|        |                                   |
|--------|-----------------------------------|
| CALL   | Center for Army Lessons Learned   |
| CMTC   | Combat Maneuver Training Center   |
| CTC    | Combat Training Center            |
| DOD    | Department of Defense             |
| GAO    | Government Accountability Office  |
| JRTC   | Joint Readiness Training Center   |
| NBC    | nuclear, biological, and chemical |
| NTC    | National Training Center          |
| TRADOC | Training and Doctrine Command     |

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United States Government Accountability Office  
Washington, DC 20548

January 28, 2005

The Honorable Christopher Shays  
Chairman, Subcommittee on National Security,  
Emerging Threats, and International Relations  
Committee on Government Reform  
House of Representatives

Dear Mr. Chairman:

The Department of Defense (DOD) believes that it is increasingly likely that an adversary will use nuclear, biological, or chemical weapons (NBC) against U.S. forces as a means of offsetting superior conventional warfare capabilities, for gaining an asymmetrical advantage, or as an act of terrorism. Consequently, DOD policies require U.S. forces to be provided with NBC protective equipment and to be sufficiently trained not only to survive an NBC attack but also to continue to perform their missions in a contaminated environment. Given long-standing concerns about the preparedness of DOD's servicemembers in this critical area, you requested that we undertake a body of work covering DOD's management of its NBC protective equipment and training. This report is one of a series on this subject that we have issued at your request.

For this review, you asked that we examine the contribution of the Army's and Marine Corps' combat training centers (CTCs) in preparing servicemembers for surviving and accomplishing their missions under NBC conditions. For the Army, these centers include the National Training Center (NTC), the Joint Readiness Training Center (JRTC), and the Combat Maneuver Training Center (CMTC). The Marine Corps' combat training center is located at Twentynine Palms, California. These two military services introduce NBC training to their servicemembers in basic training and continue with formal and on-the-job training at NBC schools and home stations and during collective training field exercises, such as those offered at the CTCs. The CTCs are large ground-combat training sites where units can train collectively in a realistic battlefield environment, including live fire.<sup>1</sup> The centers represent an opportunity for units to train on their mission-essential tasks and to discover—through

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<sup>1</sup> At the NTC, brigades conduct live-fire offense and defense missions. At the JRTC and CMTC, live-fire training is focused at the company level.

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training lessons learned provided by expert observers/controllers—areas requiring additional training at their home stations or elsewhere that could improve their ability to perform on an actual battlefield. Specifically, you asked that we answer the following questions: (1) To what extent do Army and Marine Corps units and their personnel attending CTCs participate in NBC training, and to what extent do these units and personnel perform NBC tasks to service standards while at the CTCs? (2) Do the Army and the Marine Corps report NBC training at the CTCs in a standardized format that allows the services to identify trends and lessons learned and to do cross-unit and cross-center comparisons?

To obtain information on NBC training that occurred at the Army's and Marine Corps' CTCs during fiscal years 2002 and 2003, we interviewed officials and analyzed relevant documents at each of the centers and other Army and Marine Corps organizations related to NBC and CTC training. We determined that the data and documents we reviewed were sufficiently reliable for answering the above questions. We performed our review from March 2003 through October 2004 in accordance with generally accepted government auditing standards. A more thorough description of our scope and methodology is included in appendix I.

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## Results in Brief

The Army's and the Marine Corps' CTCs provide a unique opportunity for brigade-sized units to perform advanced training under a variety of conditions that are designed to approximate actual combat as closely as possible, thereby enabling units to assess and build upon skills learned at home station. Despite the unique opportunities offered by these centers, the amount of NBC training that Army and Marine Corps personnel and units experienced at the centers varied widely during fiscal years 2002 and 2003. When units did undergo NBC training at the centers, they often did not perform to the level of proficiency defined by the services as acceptable. Furthermore, neither service has identified the minimum NBC tasks for units attending CTCs. Neither do the services always report their lessons learned on NBC training in a useful manner.

Although DOD, the Army, and the Marine Corps have all stressed the importance of including NBC defense as a condition under which units must perform their missions in training exercises, they have not established minimum NBC-related tasks for units attending the centers. Commanders are given discretion to prioritize training needs, and sometimes they reduce NBC training to allow time for units to focus on other priority areas. As a result, the extent of NBC training actually conducted at Army and Marine Corps CTCs varies widely, and some units

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receive little or none at all. For example, officials at two Army CTCs estimated that during fiscal years 2002 and 2003, on average, a typical brigade-sized unit—which may include up to 4,000 soldiers—experienced NBC events that required only about 5 percent of these troops to train in the full NBC protective clothing for a total of 18 hours or more. For the Marine Corps, no NBC training was conducted during combined arms exercises at the Marine Corps’ training center for at least 5 years prior to January 2004. The Marine Corps began to introduce NBC training into its combined arms exercises in two training rotations that occurred in January and February 2004, but this training was then suspended because of other training priorities related to preparing units for ongoing operations. In the absence of minimum NBC tasks, the services often miss the opportunity to use the unique environment of the CTCs to improve the proficiency of units in NBC defense.

When Army units did undergo NBC training, observers/controllers at the CTCs noted that many units did not perform basic NBC tasks to Army standards. For example, during fiscal years 2002 and 2003, most brigades attending one center did not meet standards for basic NBC tasks, such as donning protective gear, seeking overhead shelter, and conducting unmasking procedures. Observers/controllers at the Army’s CTCs often cited inadequate home-station training as the reason that units did not perform basic NBC tasks to these standards. Skills in these basic tasks are normally maintained during training at home stations and lay the foundation for acquiring the more complex skills associated with large-unit NBC training. When units arrive at these CTCs with inadequate basic NBC skills, they may not be able to take full advantage of the unique and more complex large-unit NBC training opportunities available at these CTCs.

Army and Marine Corps policies and doctrine stress the importance of capturing lessons learned during training, which enable units to tailor training at home stations and elsewhere to reduce the likelihood that the same problems will occur during operations. However, the services do not always report lessons learned on NBC training at the CTCs in a way that can be used to identify trends over time and allow for cross-unit and cross-CTC comparisons. Because the services’ policies do not require standardized reporting formats to capture NBC training that occurs at the CTCs, the training centers submit different types of after-action reports and lessons learned that might or might not mention NBC training. For example, while Army CTC observers/controllers produce extensive written and recorded video material that is intended to help commanders identify needs for subsequent training to address their units’ training

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needs, including training in NBC tasks, there is little consistency in the Army's after-action reports in the structure, format, and content when NBC training is described. The Marine Corps' after-action reporting system for exercises at Twentynine Palms does not include any discussion of NBC training because NBC training has been included only twice in combined arms exercises during the last 5 years and because Marine Corps orders do not require the discussion of NBC training even when it does occur. NBC lessons learned during training rotations at the CTCs would be very useful for the services in their attempts to anticipate, train for, and minimize the occurrence of NBC problems during operations. Consequently, the lack of standardized reporting to capture NBC training lessons learned at CTCs represents opportunities lost to Army and Marine Corps units to benefit from other units' training experiences and to better identify needs for subsequent home-station and other NBC training to prepare units for missions.

We are making recommendations to establish minimum NBC training tasks for units attending training exercises at the CTCs and to standardize reporting formats to capture NBC training that occurs at the CTCs. Our recommendations are intended to help ensure that the NBC training opportunities offered to Army and Marine Corps units attending their combat training centers are maximized and that NBC lessons learned at these centers are uniformly recorded and archived. DOD agreed with the report's findings and recommendations and established programs to fully implement the recommendations when operating conditions permit.



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## Background

The Army has three large combat training centers that train brigade-sized units during exercises, referred to as “rotations,” that last for 13 to 25 days: the National Training Center, located at Fort Irwin, California; the Joint Readiness Training Center, located at Fort Polk, Louisiana; and the Combat Maneuver Training Center, located at Hohenfels, Germany.<sup>2</sup> Figure 1 illustrates NBC training being conducted at the Army’s Combat Maneuver Training Center in Hohenfels, Germany. The Marine Corps has an Air Ground Combat Center at Twentynine Palms, California, where it trains brigade-sized units in a combined arms exercise that similarly allows Marine Corps units to train to perform their missions in large maneuver areas and to fire their ground and air weapons.

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<sup>2</sup> The Army has a fourth primary CTC, called the Battle Command Training Program, located at Fort Leavenworth, Kansas. This report will concentrate on the NTC, the JRTC, and the CMTC because the training at these “maneuver” combat training centers consists principally of live training. The Battle Command Training Program, which is called the “traveling CTC,” conducts computer-assisted Command Post Exercises.

Figure 1: Soldiers at CMTC Undergoing NBC Training



Source: GAO.

Both the Army and the Marine Corps believe that it is important to leave to commanders' discretion, on the basis of the approved wartime mission-essential task list, the decisions on what particular missions require most of their units' time while at the CTCs and the extent to which units need to train to perform their missions under NBC conditions. At the same time, the Army and the Marine Corps also believe that the CTCs provide a unique opportunity for units to conduct realistic training that approximates actual combat and that complements units' home-station training. This opportunity includes, among many other things, the possibility for units to train to perform their mission-essential tasks under NBC defense conditions, with the benefit of real-time feedback from

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observers/controllers who are NBC training experts. In its regulation on the CTC program, the Army states that the CTCs provide the “capstone collective live training event in the combined arms training strategies.” The regulation stresses the importance of home-station training in preparing units for their CTC rotations: “Homestation training,” the regulation states, “should prepare units to gain the maximum benefit from their CTC experience.”<sup>3</sup> The Army’s CTC plan states that

“A CTC experience is the closest thing to combat the Army’s soldiers, leaders, staffs and units ever experience. It is a battlefield where soldiers can die, come back to life, correct their mistakes, and fight again. . . . the Army must look at harnessing the role of the CTCs in developing doctrine and collecting data so it can maximize their potential and draw the right conclusions from lessons learned in a training environment.”<sup>4</sup>

During fiscal years 2002 and 2003, 57 active and reserve component rotations took place at the three Army CTCs. Rotation costs are significant: In 1999 we reported that the Army spent about \$1 billion a year to provide training at the NTC, the JRTC, and the CMTC.<sup>5</sup> These centers are equipped with instrumentation and simulators that allow the units to have their battle effectiveness measured, recorded, and commented on by observers/controllers, who are Army subject-matter experts for NBC defense and other mission areas. During fiscal years 2002 and 2003, approximately 12 active and reserve battalion-sized Marine units underwent combined arms exercises at Twentynine Palms.

DOD, the Army, and the Marine Corps have all stressed the importance of fully integrating NBC scenarios into their training exercises, whether conducted at a unit’s home station, at a CTC, or elsewhere. *The U.S. National Strategy to Combat Weapons of Mass Destruction* acknowledges that NBC weapons in the possession of hostile states and terrorists represent one of the greatest security challenges facing the United States.<sup>6</sup> At the DOD level, Joint Publication 3-11, *Joint Doctrine for Operations in Nuclear, Biological, and Chemical (NBC) Environments*, states that “US

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<sup>3</sup> U.S. Army, “Combat Training Center Program,” Army Regulation 350-50 (Jan. 24, 2003).

<sup>4</sup> Department of the Army, *Combat Training Center Master Plan* (Aug. 30, 2003), p. 1-5.

<sup>5</sup> See GAO, *Military Readiness: Full Training Benefits from Army’s Combat Training Centers Are Not Being Realized*, GAO/NSIAD-99-210 (Washington, D.C.: Sept. 17, 1999). In fiscal year 2004 dollars, this amount would be \$1.1 billion.

<sup>6</sup> NSPD-17/HSPD-4 [unclassified version], *National Strategy to Combat Weapons of Mass Destruction* (Dec. 2002), p. 1.

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forces must be prepared to conduct and sustain operations in NBC environments with minimal degradation” and urges that individuals and organizations train often and realistically while wearing NBC protective clothing so that they are better prepared for the constraints it imposes on communication, vision, and movement.<sup>7</sup>

Army and Marine Corps regulations, orders, and doctrine similarly stress the importance of fully integrating NBC scenarios into training exercises. For example, Army Regulation 350-1, “Army Training and Education,” which establishes Army-wide baseline NBC defense training policy, requires that NBC defense tasks, such as contamination avoidance, protection, and decontamination, be fully integrated into units’ mission training, including field training exercises. Specifically, Army Regulation 350-1 states that “The NBC defense training must be fully integrated into unit exercises . . . for both offensive and defensive operations.”<sup>8</sup> This integration is intended to develop and test the capability of commanders, staffs, and units to perform their missions under extended NBC conditions. In other words, NBC skills are not seen as isolated tasks, but NBC defense is viewed as a condition under which units should be able to do their mission-essential tasks. Similarly, Marine Corps Order 3400.3F, paragraph 6, establishes Marine Corps-wide baseline NBC defense training requirements and states that “Every unit and commander will fully integrate NBCD [NBC defense] training into every combat, combat support, combat service support, and command and control exercise during offensive and defensive operations, to include live fire evolutions.”<sup>9</sup> Like the Army, the Marine Corps intends to integrate NBC training into its exercises in order to develop and test the ability of Marines at all levels not only to survive an NBC attack but to perform their missions under NBC conditions.

Army and Marine Corps regulations and orders also require after-action reporting for unit training exercises, including those that occur at the CTCs. The Army believes that it is important to capture lessons learned

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<sup>7</sup> DOD, *Joint Doctrine for Operations in Nuclear, Biological, and Chemical (NBC) Environments*, Joint Publication 3-11 (July 11, 2000), pp. III-6 and III-7.

<sup>8</sup> U.S. Army, “Army Training and Education,” Army Regulation 350-1 (Apr. 9, 2003), paragraph 4-11.

<sup>9</sup> U.S. Marine Corps, “Nuclear, Biological, and Chemical Defense (NBCD) Training,” Marine Corps Order 3400.3F (Mar. 1, 2004). See also U.S. Marine Corps, “Marine Corps Combined Arms Exercise (CAX) Program,” Marine Corps Order 3500.11E (Nov. 21, 2001).

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during training in order to identify combat-relevant lessons learned that will enhance the Army's ability to perform its missions and that will support tailored training for anticipated conditions of combat. Army regulations for the JRTC and the CMTC state that NBC defense training should be addressed in every training unit commander's after-action report, but guidance for the NTC and the overall Army lessons learned program does not. Like Army regulations, Marine Corps orders state that after-action reports should be prepared for all training exercises and maintained in a central lessons learned facility. The Marine Corps uses training lessons learned to identify unit strengths and weaknesses that must be addressed for the overall benefit of the Marine Corps.<sup>10</sup>

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## NBC Training at Army and Marine Corps CTCs Varies, and Units Often Do Not Perform to Acceptable Proficiency Standards

Although the Army and the Marine Corps stress in their doctrine, regulations, or orders the need to fully integrate NBC training into training exercises and both have defined what they consider to be essential NBC skills, neither has established minimum NBC tasks for units to perform while they are training at the CTCs. They believe that it is important to leave decisions on the amount and type of training that occur at the CTCs to commanders. Consequently, during fiscal years 2002 and 2003, Army and Marine Corps units and personnel attending the CTCs received widely varying amounts of NBC training, with some receiving little or none. Furthermore, Army units that do undergo NBC training at the CTCs often do not perform to the proficiency levels defined by the Army as acceptable. Based on commanders' discretion, both services' CTC exercises currently are oriented toward preparing units for operations in Iraq and Afghanistan and do not emphasize NBC defense training. Because of this variation in NBC training at the CTCs, the Army and the Marine Corps often miss the unique opportunity offered by the CTCs to be assured through objective observer/controller assessments that every servicemember who trains at a CTC has training in a minimum number of

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<sup>10</sup>Army regulations and Marine Corps orders containing provisions on preparing lessons learned at the CTCs include U.S. Army, "Army Lessons Learned Program: System Development and Application," Army Regulation 11-33 (Oct. 10, 1989); U.S. Army, "Training at the National Training Center," Forces Command Regulation 350-50-1 (July 1, 2002); U.S. Army, "Training at the Joint Readiness Training Center," Forces Command Regulation 350-50-2 (June 15, 1998); U.S. Army, "Training: Combat Maneuver Training Center," U.S. Army Europe Regulation 350-50 (Aug. 4, 1994); U.S. Marine Corps, "Marine Corps Lessons Learned System," Marine Corps Order 5000.17A (Apr. 25, 1994); and U.S. Marine Corps, "Marine Corps Combined Arms Exercise Program," Marine Corps Order 3500.11E (Nov. 21, 2001).

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NBC tasks essential to survive and perform in an NBC-contaminated environment.

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**Army and Marine Corps Have Defined Essential NBC Skills but Do Not Specify That Minimum Tasks Must Be Trained at the CTCs**

Both the Army and the Marine Corps have defined in various publications what they believe are the essential NBC skills that all soldiers and Marines should have. Also, as described in the background section of this report, both services stress in their doctrine, regulations, or orders the need to fully integrate NBC defense training into their exercises.

The Army has defined what it considers are the NBC skills essential for soldiers to know in its Army Universal Task List.<sup>11</sup> Army commanders select training tasks, including NBC training tasks, from this and other task lists. For each task, the Army provides an extended definition, along with suggested ways to measure a soldier's proficiency in doing the task. For example, for the task of using individual and collective NBC protective equipment, one measure a commander may select to evaluate a soldier's competence includes the time it takes a soldier to don chemical protective gear in response to enemy use of NBC weapons. In addition, the Army requires that units conduct weapons qualifications on individual and crew-served weapons with personnel wearing chemical protective equipment.<sup>12</sup> Neither the task list nor the regulation specifies where such training is to be conducted.

U.S. Forces Command, which oversees the training and readiness of U.S.-based Army operational forces, has issued a list of predeployment NBC tasks, but it also does not specify where training for these tasks must take place. Forces Command directs that soldiers spend approximately 8 hours per quarter under NBC defense conditions. These tasks are all in the Army's most basic NBC skill level category and include wearing and maintaining chemical protective equipment and identifying chemical agents.

Like the Army, the Marine Corps has defined what it considers to be NBC tasks essential for Marines to know, both to survive an NBC attack and to continue performing the unit's mission. In Marine Corps Order 3400.3F, "Nuclear, Biological, and Chemical Defense (NBCD) Training," the Marine Corps lists essential individual survival standards, such as maintaining and

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<sup>11</sup> U.S. Army, *The Army Universal Task List*, Field Manual 7-15, Section 5.3 (Oct. 4, 2002).

<sup>12</sup> Army Regulation 350-1, paragraph 4-11(c)5.

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wearing protective chemical equipment, detecting chemical agents, and decontaminating one's skin and equipment. It also lists essential "basic operating standards," such as using crew and personal weapons while wearing NBC protective gear, maintaining NBC equipment, avoiding contamination while continuing the mission, and decontaminating units if necessary.<sup>13</sup> The order does not state that any of these tasks must be included in exercises such as the combined arms exercise at Twentynine Palms.

Appendix II provides a listing of Army and Marine Corps definitions of essential NBC skills.

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### NBC Training at Army CTCs Varies Widely

NBC training at the Army's CTCs varies widely, and many Army subunits receive little NBC training at the CTCs. For example, in fiscal years 2002 and 2003, observers/controllers from the NTC and the JRTC estimated that only about 5 percent of soldiers underwent NBC training during a brigade rotation that required them to wear their full protective gear for at least 18 hours.<sup>14</sup> This is because Army regulations do not mandate that NBC training must occur at the CTCs, leaving commanders to decide what skills training to include in the unit's CTC rotation. For the NBC training that did occur at the CTCs, observers/controllers frequently reported that the units did not perform even basic NBC tasks to the level of proficiency defined as acceptable by the Army.

### Many Army Subunits Receive Little NBC Training at the CTCs

During our review of Army CTC training that occurred during fiscal years 2002 and 2003, we found that, while most units were exposed to some NBC training at the CTCs, the overall percentage of Army battalion- or brigade-sized units that received extensive NBC training during a rotation was small. One measure of intensive unit training under NBC defense conditions is the extent to which soldiers are required to dress and operate for extended periods of time in their individual protective clothing, including their masks and gloves. NTC training officials estimated that, on average since fiscal year 2002, a typical 20- to 25-day brigade rotation—which may include up to 4,000 soldiers—includes NBC events that cause the entire unit to don the full chemical protective suit for a total of 2 to 3 hours and about 150 to 200 soldiers to train in full

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<sup>13</sup> Marine Corps Order 3400.3F, enclosure 1.

<sup>14</sup> The rotation period is 24 hours per day times about 25 days, for a total of about 600 hours.

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Army Unit Commanders  
Determine Units' Training at  
the CTCs

protective gear for a total of 18 to 24 hours. In other words, only about 5 percent of the brigade is affected by NBC training that requires wearing full protective gear for more than 2 to 3 hours. Similarly, an Army JRTC training official reported that during a typical brigade rotation, an average of only 200 soldiers operate in full protective gear for a total of 16 to 20 hours. The number of personnel who receive this training at the JRTC ranges from as few as 50 soldiers up to 400 or more, depending on the type of contamination and the location of the attack, and the time that a soldier spends in protective gear can range from as little as 1 hour to as much as 48 hours.<sup>15</sup>

Because Army regulations do not state what NBC training must occur at the CTCs, the commander of the unit to be trained may choose not to emphasize it during the unit's CTC rotation. Typically, up to 180 days before the rotation is to start, the brigade commander, in coordination with the division or other senior commander, begins to coordinate with the CTC to specify what training objectives will be included in the unit's training rotation. A unit rotation traditionally emphasizes the warfighting skills a unit requires to perform its mission and combat operations. Because training to survive and operate under potential NBC conditions is generally treated as a condition of training for all mission-essential tasks for units, rather than as a separate mission task, the CTCs, which develop the training scenarios, generally propose some types of NBC conditions in all rotations. However, unit commanders may specify that a CTC include more or fewer NBC conditions in training scenarios.

During fiscal years 2002 and 2003, the Army's CTCs generally included three to seven chemical events in each standard rotation's training scenarios. A particular chemical attack by an "enemy" is generally targeted at a specific area of the simulated battlefield and thus involves those units that may be affected by a chemical attack in that area. Chemical events

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<sup>15</sup> In 2001 an Army-directed study conducted by the RAND Corporation found that a brigade's subunits did not always experience intensive NBC training while at the NTC in fiscal years 1999 to 2001. This study showed that, on average, units faced an NBC event on only about half of their training missions; almost 40 percent of the units never encountered NBC conditions during their entire rotation; and one-third of the battalions never conducted decontamination. The RAND study also showed that NBC events at the NTC varied widely in their scope and intensity, ranging from something as simple as avoiding a contaminated area to a full-scale attack with a persistent chemical agent that required a unit to decontaminate its equipment. (See the RAND Corporation article, "NBC at the NTC: Distraction or Necessity?" [2001]. This article is a summary of a longer RAND report that the Army has not yet released.)



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during fiscal years 2002 and 2003 included the simulated use of chemicals that were categorized as “persistent” (defined as lasting for 24 hours or more) and “nonpersistent” (defined as lasting for 24 hours or less) and that were delivered by “enemy” artillery, rockets, aircraft bombs, truck bombs, rucksack bombs, and spray. At the NTC and the CMTC, observers/controllers use CS (tear) gas to simulate chemical agents. Flares, ground-burst simulators, air-burst simulators, or spray tanks mounted on helicopters may also be used to simulate enemy chemical weapons. At the JRTC and the NTC, observers/controllers also frequently simulate a biological event by such means as simulating that the “enemy” has sabotaged the water supply by poisoning it with a biological contaminant.

The CTCs have increasingly emphasized training rotations specifically tailored to preparing units for expected deployments. These rotations might or might not include chemical or biological events. Many of the units completing the tailored rotations at the Army’s CTCs in fiscal years 2002 and 2003 later deployed for combat operations in Afghanistan or Iraq. NBC defense training at CTCs has been emphasized less for units training for Bosnia and Kosovo or for Afghanistan and Iraq after NBC weapons were not found there. Because the NBC defensive training for each soldier varies so widely at the CTCs, the Army continues to have no assurance that all servicemembers attending a CTC have trained on a minimum number of essential NBC tasks.

#### Units Often Did Not Perform NBC Tasks to Army Standards

Our review of after-action reports from the three Army CTCs for fiscal years 2002 and 2003 indicated that units frequently arrived at the CTCs at the beginning of their training periods without having mastered basic NBC skills. Observers/controllers frequently comment on units’ NBC skills when they first arrive at training at the NTC to assess the units’ needed level of NBC training and note that, often, units do not perform even basic NBC tasks to the level of proficiency that the Army defines as acceptable. Observers/controllers at all three CTCs noted that because units had not adequately prepared for basic NBC training at their home stations, they were not able to fully train on the more sophisticated collective and mission tasks under NBC conditions that could be practiced at the CTCs. Of the three CTCs, the NTC had the most complete information on the NBC skills of the units being trained during fiscal years 2002 and 2003. Unlike the other CTCs, the NTC often uses a standard format to assess incoming units on six basic NBC tasks while they are receiving their equipment and assembling to begin training. For example, one of these early NTC training scenarios subjects a brigade arriving at a deployment destination to an attack by a chemical weapon. Table 1 summarizes the

assessments made by NTC observers/controllers of the NBC skills of brigades that arrived for training during fiscal years 2002 and 2003. The table lists the six NBC tasks assessed at the NTC and shows whether the brigades did or did not perform the tasks to the level of proficiency defined as acceptable by the Army. Most brigades failed to perform to standard NBC tasks 3, 4, and 6, which are ranked at the most basic skill level, called skill level 1.

**Table 1: NTC’s Assessment of Brigades’ Performance of NBC Tasks during Fiscal Years 2002 and 2003**

| NBC task   | Performance standard  | Number of brigades that performed to standard | Number of brigades that did not perform to standard |
|--|---|---|---|
| 1. Employ NBC warning and reporting system.                            | Army tasks, skill levels 3 and 4: The unit must plot and disseminate appropriate NBC warnings. Higher-level headquarters staff must execute effective command and control.  | 0   | 5   |
| 2. Employ chemical alarms and detectors.                               | Each task force must have at least one M-8 chemical agent detector paper/M-22 alarm operational and properly positioned around the perimeter, personnel, vehicles, and equipment. M-9 chemical agent detector paper must be checked in each unit after the chemical weapon attack.                    | 1   | 9   |
| 3. Go to Mission-Oriented Protective Posture level 4 within 8 minutes. | Army common tasks, skill level 1: 100 percent of soldiers must don complete Mission-Oriented Protective Posture level 4 in 8 minutes. All zippers, buttons, and ties must be correctly fastened. Boots and gloves must be tucked into chemical protective equipment. No simulated gear is authorized. | 2   | 7   |
| 4. Seek overhead shelter.  | Army common tasks, skill level 1: 100 percent of soldiers must seek the best available overhead cover when appropriate.   | 0   | 10  |
| 5. Perform NBC reconnaissance mission.                                 | The NBC reconnaissance unit must reach the objective, conduct appropriate NBC reconnaissance, maintain communication with higher headquarters staff throughout the operations, and have a team providing security.  | 4   | 1   |
| 6. Conduct unmasking procedures using M256 kits.                       | Army common tasks, skill level 1: Soldiers must confirm the presence or absence of an agent. At least one M256 kit should be assigned per task force.   | 2   | 5   |

Source: NTC.

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Notes: Each number in the table represents an entire brigade that was assessed in its performance of the listed task during its NTC rotation. The numbers do not total 10 because not all brigades were tested on all tasks. An entire brigade is assessed as performing a task “to standard” or “not to standard.” In some cases, supplementary notes indicate what percentage of the entire brigade succeeded in the task and what percentage failed. Or supplementary notes might indicate which battalions in the brigade failed a particular task. An entire brigade would be described as not going to Mission-Oriented Protective Posture level 4 (or the highest level of protection) within 8 minutes when some of its battalions failed to do so. In some cases, a battalion failed to go to this level of protection within 8 minutes because some personnel did not have complete chemical protective suits. For other tasks, the unit of measure differs. For example, for the task of employing chemical alarms and detectors, supplementary notes generally state how many of the total chemical alarms that were placed were operational. For the task of performing NBC reconnaissance, the brigade is judged on the performance of its NBC reconnaissance unit.

We were unable to compile summaries, such as the NTC summary in table 1, of how well brigades did in basic NBC tasks at the JRTC and the CMTC because these centers did not routinely assess and collect this information. However, JRTC and CMTC after-action reports frequently noted deficiencies in units’ NBC training attributable to their incomplete preparation at home stations. For example, for several rotations for fiscal years 2002 and 2003, JRTC observers/controllers reported that soldiers and leaders lacked training and knowledge of critical NBC tasks.

Observers/controllers recommended that units “Develop an NBC training plan at home station that addresses the individual, leader, and collective soldier skills necessary to sustain operations in an NBC environment.” A similar CMTC recommendation called for “more emphasis on NBC training and integration at home station.”

The observation that units do not get adequate NBC training at their home stations is not new and has been repeatedly reported by DOD and the Army. In 1998, for example, the DOD Office of the Inspector General reported that unit commanders generally were not fully integrating chemical and biological defense into their units’ collective mission training exercises. The report noted that “units rarely trained for their mission-essential tasks under [chemical/biological] conditions.”<sup>16</sup> In 2002, the Army Audit Agency reported that it had evaluated training for chemical and biological defense provided to soldiers at the unit level and found that this training needed to be more effectively integrated and supplemented.<sup>17</sup> In DOD’s 2002 report to Congress on its Chemical and Biological Defense Program, the department stated that the Army’s CTCs continued to see

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<sup>16</sup> Department of Defense, Office of the Inspector General, *Unit Chemical and Biological Defense Readiness Training*, Report No. 98-174 (Arlington, Va.: July 17, 1998).

<sup>17</sup> U.S. Army Audit Agency, *Unit-Level Training for Chemical and Biological Defense*, A-2002-0486-IME (Alexandria, Va.: July 10, 2002).

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units at the company, battalion, and brigade levels that were unable to perform all NBC tasks to standard.<sup>18</sup> The report concluded that this less-than-satisfactory performance at the CTCs was directly attributable to a lack of home-station NBC training. The report stated the need for increased emphasis in educating senior leaders on the necessity for NBC training and expressed concern that NBC training consist not only of NBC survival but also of continuous operations in an NBC environment.

We have also reported for more than a decade on problems with Army units' inadequate home-station training. In 1991, we reported that Army home-station training lacked realism and often did not include NBC training.<sup>19</sup> In 1996, we reported that officials from Army major commands, corps, divisions, and individual units said that chemical and biological defense skills not only tended to be difficult to attain and were highly perishable but were also often given a lower priority because of, among other things, too many other higher priority taskings.<sup>20</sup> In 1999, we noted that training units lacked proficiency when they arrived at the training centers, and as a result, the content of the CTC training was frequently modified to provide less challenging scenarios than would normally be expected.<sup>21</sup> We also reported that, although units should have been proficient at battalion-level tasks when they arrived at the CTCs, many had trained only up to company level, and the units' leaders struggled with the more complicated planning and synchronization tasks required for the battalion- and brigade-level exercises conducted at the centers.<sup>22</sup>

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<sup>18</sup> Department of Defense Chemical and Biological Defense Program, *Annual Report to Congress, Volume I* (Apr. 2002) p. 120.

<sup>19</sup> GAO, *Army Training: Evaluations of Units' Proficiency Are Not Always Reliable*, [GAO/NSIAD-91-72](#) (Washington, D.C.: Feb. 15, 1991).

<sup>20</sup> GAO, *Chemical and Biological Defense: Emphasis Remains Insufficient to Resolve Continuing Problems*, [GAO/NSIAD-96-103](#) (Washington, D.C.: Mar. 29, 1996).

<sup>21</sup> GAO, *Military Readiness: Full Training Benefits from Army's Combat Training Centers Are Not Being Realized*, [GAO/T-NSIAD-99-92](#) (Washington, D.C.: Feb. 26, 1999).

<sup>22</sup> GAO, *Military Readiness: Full Training Benefits from Army's Combat Training Centers Are Not Being Realized*, [GAO/NSIAD-99-210](#) (Washington, D.C.: Sept. 17, 1999).

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## NBC Training Was Not Conducted at the Marine Corps' Combined Arms Exercises at Twentynine Palms

No NBC training was conducted during combined arms exercises at the Marine Corps' training center at Twentynine Palms for at least 5 years prior to our review.<sup>23</sup> While Marine Corps orders and doctrine emphasize the need to include NBC defense training in combined arms exercises, they do not provide any clearly articulated NBC defense training tasks or requirements that must be accomplished in conjunction with these exercises. In the absence of specific training requirements, NBC defense training has historically been left up to the discretionary control of the unit commander, and Marine Corps commanders decided to remove it to make room for other training. According to a Marine Corps training official, unit commanders gave several reasons that NBC defense training at the combined arms exercise was given a lower priority, including that it was difficult to perform tasks in cumbersome and uncomfortable protective gear, chemical training was time-consuming, and the likelihood of NBC warfare was perceived as low.

In November 2001, the Naval Audit Service issued a report on infantry and armor readiness in the Marine Corps.<sup>24</sup> One of its findings was that the Marine Corps was not fully integrating chemical and biological training into its collective unit exercises in a consistent manner. The Naval Audit Service attributed this condition to the fact that Marine Corps officers did not consider chemical and biological training a high priority, even though they considered it important. One of the Naval Audit Service's recommendations was for the Marine Corps to "integrate [chemical and biological defense] training into unit field exercises under realistic conditions, and insure that [chemical and biological defense] training is appropriately integrated into such major events as Combined Armed Exercises . . . ." In a February 2004 memorandum to the Commandant of the Marine Corps, the Commanding General of the Marine Corps Training and Education Command stated that in response to the Naval Audit Service's recommendation, NBC training and assessment had been added to the formal schedule at the combined arms exercise program in January 2004. The memorandum stated that "Due to world events, it continues to

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<sup>23</sup> Twentynine Palms normally conducts 10 combined arms exercise rotations per fiscal year, lasting 22 days for active duty forces and 15 days for reserve component forces. These exercises emphasize warfighting skills required for a unit's mission-essential tasks. However, in recent years, training at Twentynine Palms has emphasized preparation for "real-world" missions, such as stability and support operations and combat and counterinsurgency operations in Afghanistan and Iraq.

<sup>24</sup> Naval Audit Service, *Marine Corps Infantry/Armor Readiness Reporting*, N2002-0011 (Washington, D.C.: Nov. 21, 2001).

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be a challenge concerning the ‘full integration’ of Nuclear, Biological, Chemical Defense [NBCD] training into unit exercise programs.”

In 2003, in response to the Naval Audit Service’s recommendation, the Marine Corps began its planning for introducing NBC training into the combined arms exercises at Twentynine Palms. In that year, the Marine Corps assigned two NBC staff specialists to Twentynine Palms to begin devising a training plan for the combined arms exercise program. Also, chemical protective equipment was obtained for use at Twentynine Palms by rotating Marine Corps units. In January 2004, the Marine Corps introduced NBC defense classroom courses and one field exercise into the combined arms exercise program. Appendix III provides a listing of the classroom NBC courses that were introduced in the first week of rotations in fiscal year 2004 and were conducted at the platoon to company levels.

According to a Marine Corps official, eight combined arms exercise rotations were conducted in fiscal year 2004. NBC training was introduced into the third and fourth rotations in January and February, respectively. Rotations five and six concentrated on stability and support operations but did include NBC classroom training. Rotations seven and eight, for reserve units, also received the NBC classroom training but no NBC field exercises. Planned rotations 9 and 10 were canceled. The Marine Corps is introducing a shortened, revised combined arms exercise scenario that is more oriented to current operational requirements. Exercise revisions include an emphasis on small-unit leadership and stability and support operations, which encompass asymmetric and counterinsurgency operations. A Marine Corps official told us that the current design of the revised combined arms exercise scenario does not include NBC training. However, an extensive home-station training period for units precedes attendance at the revised combined arms exercise, and Marine Corps units are required to accomplish NBC training required for their units’ mission-essential tasks. According to the Marine Corps, when it resumes its standard combined arms exercise rotations, units will participate in whatever NBC task training the combined arms exercise scenarios include at that time.

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## NBC Lessons Learned from Iraq and Afghanistan Reflect Problems Identified at Training Centers

For both the Army and the Marine Corps, lessons learned during Operation Iraqi Freedom identified many NBC skill deficiencies that were highlighted earlier by observers/controllers during individual brigade rotations through the Army’s CTCs during fiscal years 2002 and 2003. These continuing deficiencies illustrate the importance of requiring Army and Marine Corps units to establish minimal NBC defense training tasks

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for units training at their respective CTCs. Problems identified by both the Marine Corps and the Army during this operation included

- units arriving without appropriate NBC equipment and suits,
- units arriving without necessary individual and collective NBC skills,
- units unable to properly set up and operate their NBC detection equipment,
- chemical personnel not included in battlefield decisions, and
- units unable to properly decontaminate their equipment.

Many of these problems were also noted in the Army's lessons learned reporting from earlier conflicts, including those in the Balkans, Somalia, and Operation Desert Shield/Storm. Establishing minimal NBC tasks for units attending CTCs could provide an opportunity for units' NBC defense capabilities to be objectively assessed and for CTC observers/controllers to identify units' NBC equipment shortfalls. This information may aid commanders in decisions on units' training needs.

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## Army and Marine Corps After-Action Reporting at the CTCs Does Not Fully Facilitate the Identification of NBC Training Trends

The Army and the Marine Corps do not always report lessons learned on NBC training at the CTCs in a way that can be used to identify trends over time and allow for cross-unit and cross-center comparisons. Army and Marine Corps regulations and orders strongly encourage after-action reporting for all training exercises, including those that occur at the CTCs. However, Army and Marine Corps after-action reviews of CTC training do not always discuss NBC training and, when they do, the reporting is not standardized to allow for uniform reporting to fully support the identification of NBC trends.

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## Army and Marine Corps Regulations and Orders State That Lessons Learned Should Be Reported for CTC Training

Army and Marine Corps regulations and orders state that after-action reports and lessons learned should be prepared to capture the results of training that occurs at the CTCs, but they do not always state that NBC training must be covered in these documents or encourage NBC training results to be presented in a standardized format. As a result, different types of after-action reports and lessons learned are prepared for CTC training, and these documents might or might not mention NBC training.

The Army's regulation that establishes the purpose and objectives of its CTC program states that as part of their mission to provide realistic joint combined arms training, the CTCs will provide the Army and joint participants with feedback to improve warfighting, to increase units'

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readiness for deployment and warfighting, and to provide a data source for lessons learned.<sup>25</sup> This regulation also requires that each CTC conduct doctrinally based after-action reviews for each unit that undergoes a rotation at a CTC.<sup>26</sup> The Army regulation on the Army's lessons learned system requires that these after-action reports be submitted to the Center for Army Lessons Learned (CALL) no later than 120 days from the end of an exercise.<sup>27</sup> Each of the Army's CTC regulations describes a general format to be used in the after-action reports and lists specific topics to be included. Though the CTC and lessons learned regulations agree on some general points, they differ on what should be covered specifically in after-action reports. For example, the JRTC and CMTC regulations indicate that NBC defense training should be addressed in the training unit commander's after-action report, but the CTC, NTC, and overall Army lessons learned program regulations do not. Appendix IV includes specific details of how the various Army regulations differ in recommended formats for after-action reports.

Like the Army regulations, the Marine Corps order on its lessons learned system states that after-action reports should be prepared for all training exercises.<sup>28</sup> However, the Marine Corps order for the combined arms exercise program at Twentynine Palms does not specify that written after-action reports must be prepared, only that a structured debrief be conducted upon the conclusion of each event or exercise. Though not required by Marine Corps order, Twentynine Palms does prepare a Microsoft PowerPoint (computer software) presentation describing events that took place during the final 3 days of the exercise.<sup>29</sup> For the two rotations in 2004 in which NBC field training was included in the combined arms exercise, NBC training was not included in after-action

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<sup>25</sup> Army Regulation 350-50, paragraph 1-5(b).

<sup>26</sup> Individual CTC regulations also contemplate the preparation and dissemination within command channels of extensive after-action reports. (See Forces Command Regulation 350-50-1, Forces Command Regulation 350-50-2, and U.S. Army Europe Regulation 350-50.)

<sup>27</sup> U.S. Army, "Army Programs: Army Lessons Learned Program: System Development and Application," Army Regulation 11-33 (Oct. 10, 1989). The U.S. Army Training and Doctrine Command, as executive agent for the Army Lessons Learned Program, is responsible for establishing a facility that has the resources to "receive, process, archive, analyze, and disseminate information from the combat training centers and major training." This facility is the Center for Army Lessons Learned, located at Fort Leavenworth, Kansas.

<sup>28</sup> Marine Corps Order 5000.17A.

<sup>29</sup> Marine Corps Order 3500.11E.



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reporting because it did not occur during the 3 training days covered by the reporting.

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## Army's CTC Reports Might or Might Not Contain Information on NBC Training

All Army regulations do not require that NBC training completed at a CTC be discussed in the written after-action reports that are prepared for each training rotation at the three Army CTCs, and thus the reports do not always include information on NBC training. These reports are primarily intended to be feedback for the units being trained to help them assess their own training levels and craft home-station training plans to address identified deficiencies. The after-action reporting and supplementary materials provided to the units that are trained, such as videos of training, are called "take-home packages" and may include as many as five or six compact discs containing Microsoft PowerPoint presentations and summaries of observers/controllers. The structure, format, and content of the after-action reporting vary by center.

The NTC typically includes Microsoft PowerPoint briefings and written after-action reports for the units training during each rotation. When subunits of a brigade experience NBC "events," or NBC training scenarios, during their rotations, observers/controllers generally include a description of the units' performance in an "NBC executive summary," which cites areas in which subunits need to improve proficiency, along with specific recommendations for home-station training and citations of applicable NBC-related field manuals. When subunits do not experience NBC events, this section is absent from after-action reporting for the overall unit. Nowhere in the report does the NTC include an overall brigade summary for the entire rotation period of 20 to 25 days that indicates the number of NBC events that occurred during a single rotation, the percentage of subunits that conducted NBC tasks, the type of tasks performed, or how well all individual subunits did. The NTC does include, in many cases, an assessment of a brigade's NBC skills in its first week of training. Out of the 21 rotations conducted by the NTC during fiscal years 2002 and 2003, take-home packages for 12 brigades contained such scorecards, which assessed units' ability to perform six essential NBC tasks when they first arrived for training.

Like a take-home package for the NTC, a take-home package prepared by the JRTC contains multiple types of documents and after-action reporting. One document lists the types of NBC events planned for the rotation and their timing. When NBC events are not planned for the rotation, this document is absent, and when planned NBC events are canceled, there is no documentation stating that these scenario events did not occur or why.

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Neither is there a document that contains an overall summary of how many NBC events occurred during a single rotation, the percentage of subunits performing NBC tasks and the type of tasks performed, or how well all individual subunits did. Unlike the NTC, the JRTC includes no “scorecard” for assessing units’ ability to perform basic NBC tasks. When subunits do experience NBC events, JRTC observers/controllers cite areas in which subunits need to “sustain” or “improve” proficiency, along with specific recommendations for home-station training and citations of applicable NBC field manuals.

A CMTC take-home package also contains multiple Microsoft PowerPoint briefings, written after-action reporting, and videotapes. However, a package might or might not mention NBC training that occurred during a rotation, as this is not a mandatory reporting section. When a subunit experiences an NBC event, an observer/controller may mention how the unit performed if the subunit’s performance was considered to be notable. When NBC events are discussed in an after-action report, CMTC, like NTC and JRTC, includes general observations of a unit’s performance, comments on what it did well, and recommendations for improvement. Because there is no overall NBC summary document, however, CMTC’s take-home packages seldom provide information on how many NBC events occurred during a rotation, what these events were, what percentage of the overall rotating unit participated, and how well they did on particular NBC tasks. Because no NBC section is required, it is not possible to calculate what percentage of CMTC rotations experience NBC events.

Twice a year, CALL publishes “trends” documents for each Army CTC. These publications cover all rotations that occurred during a 6-month period and expunge any information from the reporting that would identify a particular unit. The trends documents are compiled from after-action reports prepared for CTC training. They are prepared by observers/controllers and given to CALL representatives at each CTC, who then forward these reports to CALL analysts at Fort Leavenworth, Kansas. When NBC training is determined to reveal a “trend” to report, it is included in the trends publications. Individual take-home packages and after-action reports that identify particular units are not generally made available. Rather, they are protected to prevent them from becoming public “report cards.” CALL is now limited in its ability to identify NBC trends in its trends reports because NBC training completed at CTCs is not now uniformly reported in a standardized format that can reliably provide comparable data to support the identification of NBC trends.

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The Army has a large portion of CTC after-action reports located in a database at CALL. However, because each CTC sends different or no information on NBC training, CALL does not have information available that would make it possible to do cross-unit or cross-center comparisons. CALL also stores compact discs and videotapes, some of which are entered into the electronic database. The CALL representative at each CTC maintains some portions of the take-home packages on site. However, at least in part because the take-home packages are considered the property of the units being trained, they are not made widely available. Also, many of the Army's after-action reports for NBC training at the CTCs for fiscal years 2002 to 2003 were not received, not locatable, or never loaded into the database located at CALL for archiving and subsequent research. We found during our visit to CALL that its researchers were very skilled in performing database analysis, but they were limited by incomplete and nonstandard reporting for NBC training data.

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### Marine Corps' Written After-Action Reports Do Not Include NBC Training Information

The Marine Corps' written after-action reporting system does not address NBC training conducted in the combined arms exercise primarily because NBC training has not been included in that training. At Twentynine Palms, a final written exercise report containing lessons learned is prepared by the Marine Air Ground Task Force Training Command for the last 3 days of the combined arms exercise. However, the command does not prepare written after-action reports for the other major segments of the exercise. After-action feedback is primarily given orally throughout the exercise period. This oral feedback is based on observations by observers/controllers assigned to each unit being trained. In the combined arms exercises that included NBC training in 2004, the written final exercise reports did not include any lessons learned on NBC operations because this training did not occur during the final 3 days. At that time, NBC exercise scenarios had not been fully integrated into the combined arms exercises.

The Marine Corps has no formal evaluation requirements for the combined arms exercise. The applicable Marine Corps order states that "A structured debrief will be conducted upon conclusion of each event or exercise." A Microsoft PowerPoint briefing on the final 3 days of the exercise does identify training objectives that the participant forces used to guide them through their training exercises, and in a sample briefing we reviewed, we found an assessment of the unit's performance for each training objective. However, NBC operations were not identified as a training objective, and the briefing included no lessons learned or recommendations for NBC defense training. NBC content is being added to the standard combined

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arms exercise scenario. However, the standard combined arms exercises have recently been replaced by revised combined arms exercises oriented toward current operations, and the revised combined arms exercise scenarios for Twentynine Palms contain no NBC defense training.

In addition, the Marine Corps has not been archiving at any central location its reporting on any unit training—NBC or otherwise—completed at Twentynine Palms or submitting related training issues to its lessons learned system. Therefore, no after-action reports on the combined arms exercises that occur at Twentynine Palms are being placed into the Marine Corps Lessons Learned System’s database. The Marine Corps recently determined that its overall lessons learned system was not functioning well. In December 2003, a working group that studied the Marine Corps Lessons Learned System found that problems with reporting and maintaining lessons learned were Marine Corps-wide. A Marine Corps information paper reported that throughout the Marine Corps, only eight reports had been submitted to the Marine Corps Lessons Learned System in 2002. The information paper also stated that the Marine Corps plans to implement an improved Web-based lessons learned system in the future. It also plans to establish a permanent organization to collect, review, and maintain this improved lessons learned system. Separately, an Enduring Freedom Combat Assessment Team was formed in 2001 to collect lessons learned in Afghanistan. In 2003, the team was restructured to support Operation Iraqi Freedom.

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## Conclusions

The CTCs represent a rare opportunity for Army and Marine Corps units to perform advanced training under conditions that are designed to approximate actual combat as closely as possible, thereby enabling units to assess and build upon skills learned at home stations. The services stress the importance of including NBC defense training in their exercises. Yet only a small percentage of the servicemembers passing through the CTCs encounter NBC defense training tasks because an Army or Marine Corps regulation or order requiring it is lacking. We recognize that commanders’ discretion in determining unit training plans for CTC rotations is, and should continue to be, a central part of Army and Marine Corps training doctrine. However, until units are required to perform at least minimum NBC tasks while attending the CTCs, the services will continue to risk missing a unique opportunity to (1) uniformly assess these units’ proficiency while they are operating in a field environment and (2) leverage the benefits of an objective assessment by an expert staff of units’ NBC skills.

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NBC lessons learned during training rotations at the combat training centers would be very useful for the services in their attempts to anticipate and train for NBC problems that may occur later during operations. Service regulations or orders specify that (1) all units at CTCs should conduct doctrinally based after-action reviews of events supported by observers/controllers, (2) lessons learned should be entered into an archived database, and (3) training unit commanders' after-action reports should be analyzed for trends and lessons learned. However, service regulations or orders do not now state that NBC training at the CTCs must be captured in a standardized format. In the absence of such a requirement, the Army's archived NBC data on training at the CTCs will remain incomplete or noncomparable and thus will not fully support research and reporting on NBC trends and lessons learned. The Marine Corps also does not employ a standard method of reporting NBC training at Twentynine Palms or providing the Marine Corps' trend and lessons learned reporting systems with NBC training information. Until the Marine Corps standardizes the reporting formats to capture service-defined NBC training at Twentynine Palms, it will be unable to analyze, over time, the units' NBC skills at these exercises, the effectiveness of NBC training at Twentynine Palms, or NBC trends and lessons learned. Overall, improvements to collecting, archiving, and using NBC training data could help the services capitalize on their substantial investment in maintaining CTCs and in sending units to train there, as well as to monitor the quality of NBC training and units' NBC skill levels.

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## Recommendations for Executive Action

To ensure that the NBC training opportunities offered to Army and Marine Corps units from training at their combat training centers are maximized and that NBC lessons learned at these centers are uniformly recorded and archived, we recommend that the Secretary of Defense direct the Secretary of the Army to take the following two actions:

- Establish the minimum NBC tasks for units attending training exercises at CTCs.
- Standardize reporting formats to capture NBC training that occurs at the CTCs.

We also recommend that the Secretary of Defense direct the Secretary of the Navy to direct the Commandant of the Marine Corps to take the following two actions:

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- Establish the minimum NBC tasks for units attending the combined arms exercise at Twentynine Palms.
  - Standardize reporting formats to capture NBC training that occurs during a combined arms exercise at Twentynine Palms.

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## Agency Comments and Our Evaluation

In written comments, DOD stated that it agreed with the findings and recommendations of the report and that the Army and Marine Corps have established programs to implement the recommendations. Army and Marine Corps officials indicated that they are currently taking those actions necessary to develop the NBC content to be included in future CTC rotations and modify their after-action reporting systems and regulations to ensure that NBC training completed at CTCs is appropriately reported. However, because of current operational requirements, full implementation of NBC training at CTCs will be delayed. DOD's comments are printed in their entirety in appendix V.

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As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from its issue date. At that time, we will send copies of this report to interested congressional committees; the Secretaries of Defense, the Army, and the Navy; the Commandant of the Marine Corps; and the Director, Office of Management and Budget. We will also make copies available to others upon request. In addition, the report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-9619 or e-mail me at [pickups@gao.gov](mailto:pickups@gao.gov). Additional contact and staff acknowledgments are listed in appendix VI.

Sincerely yours,



Sharon L. Pickup  
Director, Defense Capabilities  
and Management

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# Appendix I: Scope and Methodology

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To determine the extent to which Army and Marine Corps units participate in nuclear, biological, and chemical (NBC) training at the combat training centers (CTC) and the extent to which these units and personnel perform NBC tasks at the centers to service standards, we interviewed appropriate officials and reviewed pertinent documents and after-action reports at the following locations:

- Office of the Department of the Army, Deputy Chief of Staff, G-3, Washington, D.C.;
- Center for Army Lessons Learned, Battle Command Training Program, Combined Arms Center-Training, Combined Arms Research Library, Fort Leavenworth, Kansas;
- U.S. Army Chemical School, Maneuver Support Center, and the Army Maneuver Support Center Academic Library, Fort Leonard Wood, Missouri;
- Training Division, Headquarters, U.S. Forces Command, Fort McPherson, Georgia;
- Office of the Deputy Chief of Staff for Operations and Training, Training and Doctrine Command, Fort Monroe, Virginia;
- Army National Training Center, Fort Irwin, California;
- Army Joint Readiness Training Center, Fort Polk, Louisiana;
- Army Combat Maneuver Training Center, Hohenfels, Germany;
- Marine Corps Combat Development Command, Quantico, Virginia; and
- Marine Air Ground Combat Center, Twentynine Palms, California.

To compile a collection of planning documents and after-action reports for the Army CTC rotations that occurred during fiscal years 2002 and 2003, we visited and obtained documents from various locations. The largest collection of planning documents and after-action reports was located at the Center for Army Lessons Learned (CALL), though we also obtained some documents from other locations, including the CTCs. We were able to obtain at least some parts of after-action reporting for 41 of the 57 rotations that occurred at the National Training Center (NTC), the Joint Readiness Training Center (JRTC), and the Combat Maneuver Training Center (CMTC) in fiscal years 2002 and 2003. The following organizations provided us with the planning documents and after-action reports for units attending the CTCs:

- Center for Army Lessons Learned, Fort Leavenworth, Kansas;
- National Training Center, Fort Irwin, California;
- Joint Readiness Training Center, Fort Polk, Louisiana; and
- Combat Maneuver Training Center, Hohenfels, Germany.

To determine the extent of NBC training completed at the Army CTCs during fiscal years 2002 and 2003, we analyzed all available planning and after-action reports. As mentioned in our report, we found that NBC training that occurred was not always discussed in after-action reports; that subunits of an entire brigade experienced chemical or biological events that did not affect the overall brigade; and that observers/controllers frequently noted deficiencies in units' basic NBC skills, often attributing them to inadequate home-station training. Because the CTCs' formatting of NBC reporting differed and none contained an overall summary document of all the NBC training that occurred during a single rotation, we were not able to definitively determine whether we had been able to collect all pertinent documents, though we did examine all of the reporting that the CTCs and CALL said was available.

The Marine Corps provided us with only two after-action reports for combined arms exercises at Twentynine Palms. It told us that there was no central repository for these after-action reports and that only two reports were located. However, because NBC training had not been introduced to the combined arms exercise until January 2004 and was suspended thereafter, we were able to determine that no after-action reports on NBC training would have been submitted. The one after-action report that the Marine Corps provided us with, for the January 2004 combined arms rotation, did not mention NBC training because this training did not occur during the last 3 days of the exercise—the only time period captured in the after-action report.

To determine whether the Army and the Marine Corps report NBC training at the CTCs in a standardized format that allows the services to identify trends and lessons learned and to do cross-unit and cross-center comparisons, we collected all available after-action reports from the above-listed locations. These reports were all part of the after-action reporting contained in “take-home packages”—that is, the materials prepared for the units to take with them to document training completed and to aid in units' development of home-station training plans. Because these reports contained particular names of units and comments on unit performance, they are not made generally available, which required us to obtain these reports from lessons learned repositories and the CTCs. We also compared these reports with general trends documents prepared by the Army and the Marine Corps, which expunge units' identification and summarize the results of groups of rotations, and learned that not all NBC training at CTCs was reported because of the lack of standardized reporting formats.



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We conducted our review from March 2003 through October 2004 in accordance with generally accepted government auditing standards.

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# Appendix II: NBC Tasks Defined As Essential by the Army and the Marine Corps

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Both the Army and the Marine Corps have defined in various publications what they believe are the essential nuclear, biological, and chemical (NBC) skills that all soldiers and Marines should have. In no case, however, do service regulations or orders prescribe where the training must take place. Specifically, applicable documents do not state that any particular NBC tasks must be included in training that units receive while they are at the Combat Training Centers (CTCs), but they do state that NBC training should be incorporated into all types of exercises. The services' guidance and policy have left it to the discretion of commanders to determine where their units should train in the required NBC skills. The following is a listing of Army and Marine Corps definitions of essential NBC skills.

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## Army Universal Task List

In Field Manual 7-15, *The Army Universal Task List*, the Army provides a common, doctrinal foundation and catalog of the Army's tactical missions, operations, and collective tasks. A commander can use this list as a menu in developing the unit's mission-essential task list. The NBC tasks cited in the Army's *Universal Task List* are

- take measures to avoid or minimize the effects of NBC attacks and reduce the effects of NBC hazards,
- identify NBC hazards,
- warn personnel/units of contaminated areas,
- report NBC hazards throughout the area of operations,
- use individual/collective NBC protective equipment,
- perform immediate decontamination,
- perform operational decontamination,
- perform thorough decontamination,
- perform area decontamination, and
- perform patient decontamination.

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## NBC Tasks Required by Army Forces Command

The tasks listed by U.S. Army Forces Command,<sup>1</sup> which are all skill level-1 NBC survival-oriented tasks, are

- protect yourself from chemical and biological injury/contamination using your M40-series protective mask with hood,
- replace the canister on your M40-series protective mask,

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<sup>1</sup>The Forces Command list of NBC tasks is contained in its message dated July 17, 2003, "Training Guidance for Follow-on Forces Deploying ISO Operation Iraqi Freedom."

- maintain your M40-series protective mask with hood,
- react to chemical or biological hazard/attack,
- protect yourself from NBC injury/contamination with chemical protective equipment,
- identify chemical agents using M8 detector paper,
- protect yourself from NBC injury/contamination when drinking from your canteen while wearing your protective mask,
- administer first aid to a nerve agent casualty,
- administer nerve agent antidote to self (self-aid),
- decontaminate your skin using the M291 skin decontaminating kit,
- decontaminate your skin and personal equipment using an M258A1 decontamination kit, and
- decontaminate your individual equipment using the M295 individual equipment decontamination kit.

In addition, the Army requires that “Units will conduct weapons qualification on individual and crew-served weapons with personnel wearing protective equipment.”<sup>2</sup>

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## Marine Corps’ NBC Survival Standards

The Marine Corps lists NBC “survival standards” for each individual in Marine Corps Order 3400.3F, “Nuclear, Biological, and Chemical Defense Training.” They are as follows:

1. Identify North Atlantic Treaty Organization NBC markers.
2. Properly maintain Individual Protective Equipment.
3. Properly don, clear, and check their field protective mask within 9 seconds of an NBC alarm or attack.
4. Properly don the appropriate individual protective clothing and assigned field protective mask to Mission-Oriented Protective Posture Level 4.
5. Perform basic functions (e.g., drinking, waste removal, sleep) while in Mission-Oriented Protective Posture Level 4.

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<sup>2</sup> U.S. Army, “Army Training and Education,” Army Regulation 350-1 (Apr. 9, 2003).

6. Perform NBC detection measures with issued detection equipment, i.e., M256A1 Chemical Detection Kit, M8 detection paper, M9 detection tape, and DT 236 radiac detector.
7. Decontaminate skin and personal equipment using M291 skin decontamination kit or other appropriate decontaminants.
8. Perform individual (emergency) Mission-Oriented Protective Posture equipment exchange.
9. React to a nuclear attack.
10. React to a chemical attack.
11. React to a biological attack.
12. Take the specific actions required to operate efficiently before, during, and after NBC attacks to reduce the effects of NBC contamination.
13. Recognize or detect chemical agent contamination and perform immediate decontamination techniques: e.g., person, weapon, clothing, equipment, position, vehicle, and crew-served weapons.
14. Treat a chemical agent casualty.
15. Be able to drink water from a canteen or other water container while masked.
16. Be able to properly format and send an NBC 1 report.

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## Marine Corps' NBC Basic Operating Standards

The Marine Corps lists NBC "basic operating standards" for units in Marine Corps Order 3400.3F, "Nuclear, Biological, and Chemical Defense Training." They are as follows:

- The unit will maintain its collective nuclear, biological, and chemical defense equipment in a high state of serviceability at all times.
- The unit must be proficient in taking the specific actions required to operate efficiently before, during, and after NBC attacks to reduce the effects of NBC contamination.

- The unit must be able to recognize or detect chemical agent decontamination and perform immediate individual and operational decontamination techniques: e.g., person, weapon, clothing, equipment, position, vehicle, and crew-served weapons.
- The unit must demonstrate proficiency in contamination avoidance procedures when crossing NBC-contaminated areas.
- The unit must demonstrate proficiency in performing primary military duties, to include the use of crew/personal weapons and minimum/basic combat skills, while wearing Individual Protective Equipment for extended periods.
- The unit must demonstrate proficiency in operational and thorough decontamination procedures.
- The unit must demonstrate proficiency in the principles of collective protection, including passage through contamination control areas, where applicable.
- The unit must demonstrate proficiency in the use of dosimetric devices; chemical and biological detection; and monitoring equipment, where applicable.
- The unit must be able to send and receive NBC-1 reports and plot NBC-3 reports.
- The unit must be able to properly conduct monitor/survey missions as directed by higher headquarters personnel.
- The unit must be able to conduct unmasking procedures.

# Appendix III: NBC Classroom Courses Introduced into the Marine Corps Combined Arms Exercise Program in January 2004

| NBC training objective  | Course title and description  |
|---|---|
| <ul style="list-style-type: none"> <li>• Perform unit actions before, during, and after a nuclear, biological, and chemical (NBC) attack.</li> <li>• Exercise the NBC warning and reporting system.</li> <li>• Conduct thorough decontamination.</li> <li>• Monitor and survey decontamination operations.</li> </ul> | <p>Command Brief (1 hour): All NBC personnel will receive this instruction as a one-time prerequisite to nuclear, biological, and chemical defense instruction.</p> <hr/> <p>Vulnerability Analysis (2 hours): Students learn to source, develop, and contribute to unit intelligence preparation of the battlefield; conduct hazard assessments; and finally develop and recommend courses of action from NBC.</p> <hr/> <p>Control Center (Nuclear) (3 hours): Students rehearse the use of the NBC warning and reporting procedures for nuclear detonations. Includes manual plotting methods, communication protocols, and operational aspects. Time of stay/exit, shielding, and decay problems are illustrated.</p> <hr/> <p>Control Center (Chem-Bio) (2 hours): This course instructs and rehearses the student in the use of the NBC warning and reporting procedures for chemical and biological attack. Includes manual plotting methods, communication protocols, and operational aspects. Incident response through consequence management.</p> <hr/> <p>Joint Warning and Reporting Network (3 hours): This is the prescribed automated platform for integration of NBC warning and reporting to command and control systems and networks.</p> <hr/> <p>Radiation Safety/Depleted Uranium (1 hour): Designed to be refresher instruction for the unit. Addresses types and characteristics of ionizing radiation, medical effects, and protection standards/tasks. Reviews the current inventory of radioactive sources in the Department of Defense's use and the handling of accidents.</p> <hr/> <p>Unit Sustainment (3 hours): Formerly referred to as "decontamination," sustainment is the units' effort to recover personnel and equipment for continued use on the battlefield. This period of instruction develops the principles of decontamination and updates the NBC specialist/officer on the latest equipment and decontaminants.</p> <hr/> <p>Special Sustainment (1 hour): The special requirements for decontamination of casualties and aircraft are instructed per current doctrine. Instruction covers site reconnaissance and the development of best practices in areas that every unit may not encounter.</p> <hr/> <p>Biodefense and Medical Management (2 hours): Designed for both NBC and medical personnel, the lecture covers casualty identification, triage, and decontamination requirements. Part 2 of this instruction highlights the biological sampling and modeling of the battlefield; how to collect, escort, and ship etiologic agents; laboratory protocols; reporting requirements; and fundamentals of epidemiology.</p> <hr/> <p>Joint Mission Essential Task List (1 hour): Class begins with a review of mission-essential task development and NBC tasks at the strategic national, strategic theater, and operational levels. Lecture then details the Marine Corps' Task List and the seven mission-essential task areas for the Marine Air Ground Task Force, focusing on sense, shape, shield, and sustain. Puts Marine Air Ground Task Force requirements into perspective and sets the stage for joint and combined operations.</p> |

Source: U.S. Marine Corps.

# Appendix IV: Different Regulations Suggesting Different Formats for After-Action Reporting for the Army's CTCs

| Army Regulation 11-33<br>(Army Lessons Learned)  | U.S. Army, Europe, Regulation 350-50 (CMTC Training)   | Forces Command Regulation 350-50-1 (NTC Training) | Forces Command Regulation 350-50-2 (JRTC Training) |
|--|--|---|--|
| After Action Report, Part I: Executive Summary (completed by commander). <ul style="list-style-type: none"> <li>• Mission objectives.</li> <li>• General description.</li> <li>• Dates, locations, and major participants.</li> <li>• Significant issues.</li> <li>• Limitations.</li> </ul> | After Action Report, Part I: Executive overview. <ul style="list-style-type: none"> <li>• Mission objectives.</li> <li>• General description.</li> <li>• Participating units (including specific information) such as troop list, number of personnel who participated, and number and type of vehicles used.</li> <li>• Required task organization (must coincide with the current modification table of organization and equipment, broken down by vehicle type, unit requirement, and unit shipped).</li> <li>• Optional and added units (broken down by vehicle type, unit requirement, and unit shipped).</li> <li>• Significant issues.</li> <li>• Limitations.</li> <li>• Funding (including personnel, transportation type and cost, total vehicle transportation cost, and total cost reimbursed to the Combat Maneuver Training Center [CMTC]).</li> </ul> | (No corresponding required report section.)       | (No corresponding required report section.)        |
| After Action Report, Part II: Lessons Learned. <ul style="list-style-type: none"> <li>• Observation.</li> <li>• Discussion.</li> <li>• Lessons learned.</li> <li>• Recommended action.</li> <li>• Comments.</li> </ul>   | After Action Report, Part II: Lessons Learned. <ul style="list-style-type: none"> <li>• Observation.</li> <li>• Discussion.</li> <li>• Lessons learned.</li> <li>• Recommended action.</li> <li>• Comments.</li> </ul>   | (No corresponding required report section.)       | (No corresponding required report section.)        |

**Appendix IV: Different Regulations  
Suggesting Different Formats for After-Action  
Reporting for the Army's CTCs**

| <b>Army Regulation 11-33<br/>(Army Lessons<br/>Learned)</b>  | <b>U.S. Army, Europe, Regulation<br/>350-50 (CMTC Training)</b>  | <b>Forces Command Regulation 350-<br/>50-1 (NTC Training)</b>   | <b>Forces Command Regulation<br/>350-50-2 (JRTC Training)</b>   |
|--|--|---|---|
| After Action Report, Part III: Optional.<br><ul style="list-style-type: none"> <li>Chronology of events.</li> <li>Operation (plans/orders).</li> <li>Standing operating procedures.</li> </ul> | (No corresponding required report section.)  | (No corresponding required report section.)   | (No corresponding required report section.)   |
| (No corresponding required report section.)  | Tactical lessons learned, to include command and control; maneuver (offense/defense); fire support; intelligence; air defense; mobility/countermobility; electronic warfare; nuclear, biological, chemical defense; and combat service support.<br><br>Administrative and logistics lessons learned (including deploying to, training at, and redeploying from the CMTC).<br><br>General narrative comments, to include the following: <ul style="list-style-type: none"> <li>Benefits of training at the CMTC.</li> <li>Recommendations for doctrinal improvement.</li> <li>Recommendations and lessons learned on preparatory training.</li> <li>Recommendations for improving the training exercise.</li> </ul> | Tactical lessons learned. Address the Battle Functions.<br><br>Administrative lessons learned, including deployment, redeployment, equipment draw, and regeneration. <ul style="list-style-type: none"> <li>Benefits of training at the National Training Center (NTC).</li> <li>Recommendations for doctrinal improvement.</li> <li>Recommendations/lessons learned on preparatory training, including comments on usability of the Army Training and Evaluation Program or any other training and training support product developed by the Training and Doctrine Command (TRADOC).</li> <li>Recommendations for improvement of the NTC experience.</li> <li>Logistics or Resource Management lessons learned.</li> </ul> | Tactical lessons learned. Address the battlefield operating system; nuclear, biological, and chemical defense; electronic warfare; deployment; and any other pertinent topics.<br><br>Administrative lessons learned, including deployment, redeployment, and any other pertinent topics. <ul style="list-style-type: none"> <li>Benefits of training at the Joint Readiness Training Center (JRTC).</li> <li>Recommendations for improving existing doctrine.</li> <li>Recommendations for improving preparatory training, including comments on the usability of TRADOC publications or other training support products.</li> <li>Recommendations for improving the JRTC experience.</li> </ul> |

Sources: U.S. Army, "Army Lessons Learned Program: System Development and Application," Army Regulation 11-33 (Oct. 10, 1989); "Training: Combat Maneuver Training Center," U.S. Army Europe Regulation 350-50 (Aug. 4, 1994); "Training at the National Training Center," Forces Command Regulation 350-50-1 (July 1, 2002); and "Training at the Joint Readiness Training Center," Forces Command Regulation 350-50-2 (June 15, 1998).

Note: CTC = Combat Training Center.



# Appendix V: Comments from the Department of Defense



PERSONNEL AND  
READINESS

OFFICE OF THE UNDER SECRETARY OF DEFENSE  
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WASHINGTON, D.C. 20301-4000

November 29, 2004

Ms. Sharon L. Pickup  
Director, Defense Capabilities and Management  
U.S. Government Accountability Office  
Washington, D.C. 20548

Dear Ms. Pickup:

This is the Department of Defense (DoD) response to the GAO draft report, GAO-05-8, "CHEMICAL AND BIOLOGICAL DEFENSE: Army and Marine Corps Need to Establish Minimum Tasks and Improve Reporting for Combat Training Centers," dated October 22, 2004 (GAO Code 350328).

We have reviewed the draft report and our comments to the GAO's draft recommendations are enclosed. We fundamentally agree with the overall findings and recommendations of the report. The Army and Marine Corps have established programs to implement these recommendations. However, due to current operational requirements, most units currently training at the Combat Training Centers (CTC) are currently conducting training that commanders determine are essential for accomplishment of their directed missions. Full implementation of Nuclear Biological Chemical (NBC) training at CTC rotations is being deferred in order to focus on those tasks.

When missions, threats, and operating conditions allow, both Services will return to more traditional CTC training events with the GAO's recommendations fully implemented.

We appreciate the opportunity to review and comment on this report.

Sincerely,

Paul W. Mayberry  
Deputy Under Secretary of Defense  
Readiness

Enclosure



**GAO-05-8/GAO CODE 350328**

**“CHEMICAL AND BIOLOGICAL DEFENSE: ARMY AND MARINE  
CORPS NEED TO ESTABLISH MINIMUM TASKS AND IMPROVE  
REPORTING FOR COMBAT TRAINING CENTERS”**

**DEPARTMENT OF DEFENSE COMMENTS  
TO THE RECOMMENDATIONS**

**RECOMMENDATION 1:** The GAO recommended that the Secretary of Defense direct the Secretary of the Army to establish the minimum nuclear, biological, and chemical (NBC) tasks for units attending training exercises at combat training centers. (Page 30/Draft Report)

**DoD RESPONSE:** Concur with comment. While the Army is instituting a plan to train NBC tasks within the next year for all units during the reception phase of CTC rotations, the implementation of this plan will be delayed. The CTCs are currently conducting mission rehearsal exercises (MRE) prior to deployment in support of Operations Enduring Freedom and Iraqi Freedom. The MREs focus exclusively on those tasks that commanders determine are essential for accomplishment of their directed mission. The NBC training will be fully implemented when missions, threats, and operating conditions allow.

**RECOMMENDATION 2:** The GAO recommended that the Secretary of Defense direct the Secretary of the Army to standardize reporting formats to capture NBC training that occurs at the combat training centers. (Page 30/Draft Report)

**DoD RESPONSE:** Concur. The Army will standardize the training unit after action report formats for CTC rotations in the next published revisions to specifically include NBC training.

**RECOMMENDATION 3:** The GAO recommended that the Secretary of Defense direct the Secretary of the Navy to direct the Commandant of the Marine Corps to establish the minimum NBC tasks for units attending the combined arms exercise at Twentynine Palms. (Page 31/Draft Report)

**DoD RESPONSE:** Concur with comment. The Marine Corps is prepared to integrate NBC training in their Combined Arms Exercises (CAX) on short notice. However, full implementation has been delayed due to focus of CAX training being modified to prepare units for threats that commanders have determined are essential for accomplishment of their directed mission. The NBC training will be fully implemented when missions, threats, and operating conditions allow.

**RECOMMENDATION 4:** The GAO recommended that the Secretary of Defense direct the Secretary of the Navy to direct the Commandant of the Marine Corps standardize reporting formats to capture NBC training that occurs during a combined arms exercise at Twentynine Palms. (Page 31/Draft Report)

**DoD RESPONSE:** Concur with comment. The Marine Corps is developing a standardized system for recording CAX NBC training that will provide current trend information necessary to identify deficiencies and take corrective actions. This system will be available when current missions, threats and operating conditions allow a return to the more traditional CAX training program.

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# Appendix VI: GAO Contact and Staff Acknowledgments

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## GAO Contact

William W. Cawood, Jr., (202) 512-3959

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## Acknowledgments

In addition to the contact named above, Beverly Schladt, Mike Avenick, Matthew Sakrekoff, James Lawson, Leslie Bharadwaja, Gerald Winterlin, Jim Melton, R.K. Wild, Dave Mayfield, and Jay Smale made key contributions to this report.

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