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MANAGEMENT OF NATIONAL GUARD WEAPONS OF
MASS DESTRUCTION-CIVIL SUPPORT TEAMS

Report No. D-2001-043

January 31, 2001

Office of the Inspector General
Department of Defense

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Acronyms

CB	Chemical and Biological
CBIRF	Chemical Biological Incident Response Force
CoMPIO	Consequence Management Program Integration Office
CST	Civil Support Team
ELISA	Enzyme-Linked Immunosorbent Assay
ERC-A	Equipment Readiness Code A
EXEVAL	External Evaluation
HEPA	High Efficiency Particulate Air
MALS	Mobile Analytical Laboratory Systems
NIPRNET	Unclassified but Sensitive Internet Protocol Router Network
SBCCOM	U.S. Army Soldier and Biological Chemical Command
SIPRNET	Secure Internet Protocol Router Network
TDA	Table of Distribution and Allowance
UCS	Unified Command Suite
WMD	Weapons of Mass Destruction



INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
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ARLINGTON, VIRGINIA 22202

January 31, 2001

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR PERSONNEL
AND READINESS
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on Management of National Guard Weapons of Mass
Destruction-Civil Support Teams (Report No. D2001-043)

We are providing this report for information and use. We conducted the audit in response to a request in December 1994 by the Deputy Assistant to the Secretary of Defense for Counterproliferation and Chemical/Biological Defense. The Deputy Assistant to the Secretary of Defense specifically requested a 5-year audit effort into a wide range of chemical and biological defense issues, one of which was the chemical and biological defense missions being moved into the National Guard and Reserve. We have issued numerous reports on the various challenges related to chemical and biological defense and we intend to continue audit emphasis in this area. This report specifically addresses the program management of the Weapons of Mass Destruction-Civil Support Team Program. We considered management comments on a draft of this report in preparing the final report.

Comments on the draft of this report conformed to the requirements of DoD Directive 7650.3 and left no unresolved issues. Therefore, no additional comments are required.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. Harlan M. Geyer at (703) 604-9174 (DSN 664-9174) (hgeyer@dodig.osd.mil) or Mr. Donald A. Bloomer at (703) 604-8863 (DSN 664-8863) (dbloomer@dodig.osd.mil). See Appendix E for the report distribution. Audit team members are listed inside the back cover.

A handwritten signature in black ink that reads "David K. Steensma".

David K. Steensma
Deputy Assistant Inspector General
for Auditing

Office of the Inspector General, DoD

Report No. D-2001-043

(Project No. D2000LA-0023)
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January 31, 2001

Management of National Guard Weapons of Mass Destruction-Civil Support Teams

Executive Summary

Introduction. The Weapons of Mass Destruction–Civil Support Team (WMD-CST) Program is intended to help prepare the United States against terrorist use of a weapon of mass destruction and is commonly referred to as a homeland defense measure. Originally, 10 WMD-CSTs were established with a planned initial operational capability date of January 2000. In FY 2000 and FY 2001, Congress authorized an additional 17 and 5 WMD-CSTs, respectively. In FY 1999 Congress established Secretary of Defense certification requirements for the WMD-CSTs.

Presidential Decision Directive No. 39, “The United States Policy on Counterterrorism,” directs a number of measures be taken, including reducing the Nation’s vulnerability to terrorism, improving deterrence and response to terrorist acts, and strengthening capabilities to prevent and manage the consequences of terrorist use of nuclear, biological, and chemical weapons, including WMD. Defense Reform Initiative Directive No. 25 tasks the Army to establish a program for integration of Reserve Components into the domestic WMD response and provide DoD support to civilian authorities within the United States. DoD has expended about \$143 million on this program to date.

Objectives. Our overall audit objective was to evaluate the program management of chemical and biological defense resources in the National Guard and Reserve forces. For this segment of the audit, we evaluated the program management of National Guard units charged with chemical and biological defense responsibilities for homeland defense. Future reports will deal with the financial management of the WMD-CST program and the management of chemical and biological defense resources of National Guard and Reserve forces scheduled to deploy in the event of a major theater war.

Results. The Consequence Management Program Integration Office (CoMPIO) did not manage the WMD-CST program effectively. Specifically, CoMPIO failed to provide adequate guidance, training, and equipment for the 10 CSTs. Additionally, the Army process for certification of the teams lacked rigor and would not provide meaningful assurance. Lastly, safety issues identified by the WMD-CSTs were unresolved. As a result, the program had slipped significantly and none of the teams were fully operational. As of January 2001, the certification requests were still being evaluated by the Principal Deputy Assistant Secretary of Defense for Reserve Affairs, and none of the 10 WMD-CSTs had received Secretary of Defense certification. For details on the audit results, see the Finding section.

See Appendix A for details on our review of the management control program.

Summary of Recommendations. We recommend that the Under Secretary of Defense for Personnel and Readiness seek disestablishment of the Consequence Management Program Integration Office, obtain reassignment of the management oversight responsibilities for the WMD-CST program, and ensure that the actions specified in recommendations below are completed before forwarding any WMD-CST certification requests to the Secretary of Defense for approval. We recommend that the Assistant Secretary of Defense (Reserve Affairs) coordinate with the Federal Bureau of Investigation to determine the exact roles and missions that the National Guard WMD-CST are expected to fulfill in response to WMD incidents, and issue guidance prescribing certification standards and delineating the specific mission, duties, and responsibilities for the WMD-CST. We also recommend that the Assistant Secretary of Defense (Reserve Affairs), in coordination with the Chemical Branch of the Army Office of the Deputy Chief of Operations and Plans, conduct a thorough program review of the WMD-CST program (which at a minimum should include areas such as the operational concept, doctrine, equipage, sustainment, personnel assignments and rotations, funding, and certification process).

Deputy Secretary of Defense Actions. As a result of the issues identified in our draft report, on November 9, 2000, the Deputy Secretary of Defense issued a memorandum regarding the institutionalizing of the CoMPIO functions. The Deputy Secretary directed that the Army continue to manage the WMD-CST program, but with the Principal Deputy Assistant Secretary of Defense for Reserve Affairs providing specific policy guidance and oversight consistent with the broader policies of the Assistant to the Secretary of Defense for Civil Support. The Deputy Secretary also directed that the Principal Deputy Assistant Secretary of Defense for Reserve Affairs initiate a comprehensive review of the WMD-CST program and advise him of any corrective actions needed.

Management Comments. The Under Secretary of Defense for Personnel and Readiness concurred with the recommendations. The Under Secretary stated that the Assistant to the Secretary of Defense for Civil Support is responsible for coordinating and integrating the domestic consequence management program. The Under Secretary stated that the Principal Deputy Assistant Secretary of Defense for Reserve Affairs would work closely with the Assistant to the Secretary of Defense for Civil Support to ensure the appropriate interagency coordination is made for employment of the WMD-CSTs. The Under Secretary also stated that the Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense Programs recommended that program oversight for chemical and biological defense research, development, and acquisition pertaining to the WMD-CST program be assigned to that office. The Principal Deputy Assistant Secretary of Defense for Reserve Affairs stated that the recommended program review was underway in accordance with the Deputy Secretary of Defense's November 9, 2000, memorandum.

The Army Director of Military Support, Office of the Deputy Chief of Operations and Plans, agreed to institutionalize the functions of the CoMPIO within the DoD. The Director disagreed with delaying the certification of the WMD-CSTs. The Director maintained that the criteria established by the Army adequately attested to the ability of the WMD-CSTs to conduct their mission. The Director requested extensive revisions to the draft report.

Audit Response. The actions directed by the Deputy Secretary and the comments of the Under Secretary of Defense for Personnel and Readiness, the Assistant to the Secretary of Defense for Civil Support, the Principal Deputy Assistant Secretary of Defense for Reserve Affairs, and the Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense Programs were fully responsive. The comments of the Director of Military Support were generally not responsive. We continue to find that the Army criteria for certification has little resemblance to the criteria specified in Section 511 of the FY 1999 Defense Authorization Act. We met on several occasions with Army representatives, including the Under Secretary of the Army, the Special Assistant to the Secretary of the Army for Military Support, the Director of Military Support, and the Deputy Director of Military Support, to discuss the audit results. In addition, we fully considered the voluminous Army response to the draft report. We found no justification for making significant changes to our report and we stand by its facts. We are continuing to work closely with the involved organizations to ensure that valid certifications can be made as soon as possible.

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Background

This report is one in a series of reports on U.S. forces' management of chemical and biological (CB) defense resources and their readiness to operate in a CB warfare environment. We conducted this audit at the request of the Deputy Assistant to the Secretary of Defense for Counterproliferation and Chemical/Biological Defense. Presidential Decision Directive-39, "The United States Policy on Counterterrorism," was issued in June 1995. Presidential Decision Directive-39 directs a number of measures be taken, including reducing the Nation's vulnerability to terrorism, improving deterrence and response to terrorist acts, and strengthening capabilities to prevent and manage the consequences of terrorist use of nuclear, biological, and chemical weapons, including weapons of mass destruction (WMD). Subsequent to the issuance of Presidential Decision Directive-39, Congress enacted Public Law 104-201, the Defense Against Weapons of Mass Destruction Act of 1996 (the Act). The Act mandates enhancement of domestic preparedness and response capabilities for terrorist attacks involving nuclear, radiological, biological, and chemical weapons.

In response to the mandates contained in Presidential Decision Directive-39 and the Act, DoD established a Tiger Team within the Army. The team was to produce a comprehensive plan to increase the DoD response capabilities while developing the potential within the Reserve Component units.

Consequence Management Program Integration Office. On January 26, 1998, in Defense Reform Initiative Directive No. 25, the Deputy Secretary of Defense tasked the Army to establish the Consequence Management Program Integration Office (CoMPIO). In March 1998, CoMPIO was established under the Army's Director of Military Support and was tasked with implementing Tiger Team recommendations for integration of Reserve Components into the domestic WMD response. The Director of Military Support serves as the Secretary of the Army's action agent for planning and executing the DoD support mission to civilian authorities within the United States. CoMPIO was under the leadership of an active duty colonel and was composed of eight active Guard and Reserve military personnel, six DoD civilians, and five contractor personnel. According to the Tiger Team Report, CoMPIO responsibilities include budgeting, contracting, and quality assurance actions; evaluating current capabilities of WMD response elements; integrating WMD training activities; coordinating development of WMD consequence management doctrine and modifications; coordinating development and production of doctrinal publications; and coordinating development of scenarios and integrating WMD exercise activities among local, state, and Federal response elements. One of the first initiatives undertaken by CoMPIO was to coordinate establishing and fielding National Guard teams to assume a WMD consequence management mission as a part of homeland defense. Those teams, composed of full-time members of the National Guard, were intended to assist the emergency first responder community (such as the local fire department or hazardous materiel

response unit) under Title 32,¹ or respond under Title 10 as a subordinate Component of the Joint Task Force-Civil Support. To establish those teams, CoMPIO spent approximately \$73 million and \$70 million in procurement and operations and maintenance funds in FY 1999 and FY 2000, respectively.

WMD-Civil Support Teams. Originally, 10 WMD-Civil Support Teams (CSTs) were established with a planned initial operation capability date of January 2000. The CSTs were located in alignment with the 10 Federal Emergency Management Agency regions in California, Colorado, Georgia, Illinois, Massachusetts, Missouri, New York, Pennsylvania, Texas, and Washington. Each team consists of 22 personnel encompassing 14 specialties (see Appendix C). The CSTs are organized into six functional areas—administration and logistics, command, communications, medical, operations, and survey. Of the 22 personnel, 10, including all survey team members, require a military occupational specialty for nuclear, biological, and chemical warfare. The bulk of the CST mission lies with the survey team members who would enter a contaminated area to gather air, soil, and other samples for on-site evaluation by the nuclear science medical officer and various laboratories across the United States by way of electronic transmission (reachback). In FY 2000, Congress authorized an additional 17 CSTs. Those CSTs will be established in Alaska, Arizona, Arkansas, California (creating a second team), Florida, Hawaii, Idaho, Iowa, Kentucky, Louisiana, Maine, Minnesota, New Mexico, Ohio, Oklahoma, South Carolina, and Virginia. In FY 2001, Congress authorized another five teams. Team locations have not yet been determined.

Existing Federal WMD Response Capabilities. Other Federal units have already been established to respond to nuclear, biological, and chemical incidents. Two examples are the Marine Corps' Chemical Biological Incident Response Force (CBIRF) and the Federal Bureau of Investigation's Hazardous Materials Response Unit. CBIRF was established in 1996 in accordance with Presidential Decision Directive-39 to deploy domestically or overseas, when directed, to provide force protection or mitigation in the event of a WMD incident and be prepared to initially respond to no-notice WMD incidents with a rapid response force. CBIRF, a battalion-sized unit, provides a self-contained response in the areas of command, CB detection/identification and decontamination, medical, security, and service support. The CBIRF can be tailored to the threat or mission and deploys with external and internal communications, protective equipment, detection and identification equipment, personal decontamination equipment, medical treatment capability, and a mobile laboratory. The Federal Bureau of Investigation's Hazardous Materials Response Unit was established in 1996 to respond to the threat of terrorism involving nuclear, biological, and chemical weapons and to an expanding caseload of environmental crimes. The Hazardous Materials Response Unit has specialized sampling, detection, and identification capabilities for nuclear,

¹National Guard units operate under the command and control of the Governor and Adjutant General of their respective states (referred to as 32 U.S.C. [Title 32] authority). When a National Guard unit is federalized by the President, it is placed under the command and control of a Federal military response headquarters (referred to as 10 U.S.C. [Title 10] authority).

biological, and chemical agents in addition to a variety of personal protective and rescue equipment. Throughout 1998, the Federal Bureau of Investigation continued to acquire the required equipment and instrumentation to support an enhanced deployable laboratory to provide collection, preservation, and screening capabilities of potential evidentiary materials collected at major WMD events.

Objectives

The overall audit objective was to evaluate the program management of CB defense resources in the National Guard and Reserve forces. For this segment of the audit, we evaluated the program management of National Guard units charged with CB defense responsibilities for homeland defense. Subsequent segments of the audit will address the financial management of the CoMPIO and the management of CB defense resources in the National Guard and Reserve forces in support of deployed forces. See Appendix A for a discussion of the audit scope and methodology and our review of the management control program. See Appendix B for prior coverage related to the audit objectives.

Weapons of Mass Destruction-Civil Support Teams

Management of the WMD-CST program had not been effective. Specifically, CoMPIO did not provide adequate guidance, training, and equipment for the teams. Deficiencies occurred because of insufficient CoMPIO coordination with existing organizations, overly centralized decisionmaking, and program execution independent of established military structures, organizations, and guidance. As a result, the program schedule slipped significantly and none of the teams were ready for certification.

Program Management of WMD-CSTs

The special management structure established in January 1998 for the WMD-CST program did not lead to effective management. Doctrine for the WMD-CST was not developed in coordination with the Joint Staff or with the Army's Doctrine, Training, Leader Development, Organization, Materiel and Soldier process. The criteria established for certification of the WMD-CSTs were not meaningful and did not meet the requirements of the law.² Training programs and materials for WMD-CST personnel were not sufficiently identified, developed, approved, and implemented. Additionally, the CoMPIO processes for developing the table of distribution and allowance (TDA)³ and acquiring equipment unnecessarily circumvented the normal DoD acquisition channels, excluded consideration of available DoD assets, and incurred increased cost and risk.

WMD-CST Doctrine

Doctrine for the WMD-CST was not developed in coordination with the Joint Staff or with the Army's Doctrine, Training, Leader Development, Organization, Materiel and Soldier process. That situation occurred because of insufficient CoMPIO coordination with existing organizations and overly centralized decisionmaking. As of September 15, 2000, with 10 WMD-CSTs established, 17 beginning initial training, and 5 more being established,

²The FY 1999 National Defense Authorization Act states that a team may not be used to respond to an emergency unless the team, or that Reserve, possesses the requisite skills, training and equipment to be proficient in all mission requirements, and the Secretary of Defense has certified to that effect to Congress.

³TDA units are nondeployable units organized to fulfill missions, functions, and workload obligations of a fixed support establishment in the continental United States or overseas. TDA units are uniquely developed to perform a specific support mission. They usually include civilian manpower, whereas a modified table of organization and equipment unit generally will not.

CoMPIO had not finalized doctrine for the WMD-CSTs. The three primary missions of the WMD-CSTs listed in the WMD-CST Doctrine Handbook (second draft), June 2, 2000, are assess, advise, and facilitate. To enable the WMD-CSTs to perform those three missions, they were to receive an impressive array of training and equipment. The absence of finalized doctrine has encouraged and promoted an environment of persistent change to operational concepts and mission requirements, and a focus on short-term actions. Although those issues may seem to be minor, the absence of a finalized doctrine affects the training and equipping of the WMD-CSTs and also impacts their capabilities and readiness. Problems in several areas occurred because CoMPIO did not finalize doctrine, including transportation, stationing, and integration.

Transportation to Incident Site. According to the Tiger Team Report, proximity to air transportation was one of the major factors in determining the stationing of the WMD-CSTs. The second draft of the doctrine handbook states that the primary method of deployment for the WMD-CSTs is self-deployment with their own vehicles. That is a significant departure from the original concept of how the WMD-CSTs would deploy. The original concept called for the WMD-CSTs to be stationed near Air National Guard and Air Force Reserve bases. The fixed-wing air assets of the Air National Guard and the Air Force Reserve at those installations were to provide transportation to the incident site. That concept allowed the WMD-CSTs to comply with another Tiger Team concept—a 4-hour response time. Additionally, rotary-wing assets were to be tasked to provide WMD-CSTs airlift to, and around, the incident sight. The air transportation guidance was not included in the latest draft doctrine handbook and significantly increases the response time of the teams. The change seriously degrades the ability of the WMD-CSTs to provide a timely regional response.

Stationing of the WMD-CSTs. Another major factor in the stationing decision was placing the teams so that WMD-CSTs would be within 250 miles of 90 percent of the Nation's population. In practice, however, that is not the case. For example, the proposed station of the Florida WMD-CST is at Camp Blanding, Florida. That location places the WMD-CST more than 350 miles from Miami but within 250 miles of Atlanta and the Georgia WMD-CST. Such stationing provides overlapping coverage of 250 miles but places one of the largest cities in the United States outside the desired coverage area.

Coordination With Other Organizations. While other organizations in DoD were drafting doctrine for the WMD-CSTs, CoMPIO was writing its own doctrine, independent of the other efforts. For example, the U.S. Joint Forces Command is responsible for WMD incidents within the United States. A subordinate organization of U.S. Joint Forces Command, the Joint Task Force-Civil Support, was recently activated by direction of the Secretary of Defense to serve as the U.S. Joint Forces Command lead for WMD events in the United States. Joint Task Force-Civil Support is in the process of drafting its WMD doctrine. Joint Task Force-Civil Support officials stated that they requested the CoMPIO draft doctrine for review and inclusion in their efforts. However, they had not been contacted by CoMPIO for an exchange of information, even

though the CoMPIO draft doctrine identifies Joint Task Force-Civil Support as its higher headquarters when the WMD-CSTs are federalized under Title 10.

The CoMPIO draft doctrine lacked specific detail concerning command relationships when the WMD-CSTs are federalized. The draft doctrine handbook discussed extensively the state emergency management response and Federal assistance roles but contained only limited discussion on coordination with Joint Task Force-Civil Support. The draft doctrine handbook stated only that, if federalized, the operational control of the WMD-CSTs transfers to Joint Task Force-Civil Support and the Joint Task Force-Civil Support should monitor WMD-CST reports and communications. Joint Task Force-Civil Support believed part of its charter was to provide oversight of the U.S. military effort in response to WMD incidents in the United States once federalized. To accomplish coordination with the WMD-CSTs is a necessity to provide a unified military effort.

The mission of the WMD-CSTs and their relationship with other Federal organizations was also not adequately defined. The lack of definition occurred because CoMPIO failed to coordinate the mission of the WMD-CSTs with the law enforcement community. For example, CoMPIO has heavily marketed the ability of the WMD-CSTs to provide on-site identification of a potential agent through collection and sampling. However, this should have been coordinated with law enforcement agencies such as the Federal Bureau of Investigation. On September 14, 2000, the Federal Bureau of Investigation issued a memorandum to all of its field offices discussing the role of the WMD-CSTs. The memorandum states that it is the current policy of DoD and the Department of Justice that

U.S. military personnel, including active duty, Reserve Components and/or National Guard personnel will not collect evidence . . . unless specifically authorized by law enforcement and/or requested by the FBI [Federal Bureau of Investigation] as the lead agency for crisis management.

Unless the roles and missions of the WMD-CSTs are clearly defined in doctrine and coordinated among all agencies with likely involvement in WMD incidents, the Federal response could be hampered significantly.

A clear and concise doctrine should have been promulgated before the establishment and fielding of any WMD-CSTs. The doctrine needs to identify the mission, the employment concepts, and the expected capabilities of the WMD-CSTs as equipped in sufficient detail to be of use to planners. The WMD-CSTs should have standardized procedures with respect to both their Title 32 and Title 10 status and the WMD-CST personnel in those capabilities. Although U.S. Army Training and Doctrine Command has personnel experienced in the development of doctrine, including missions such as CB reconnaissance and decontamination, the training command was not requested to develop the doctrine. CoMPIO elected to develop the doctrine itself. The

10 original WMD-CSTs now approach a time period when personnel will be rotating to other assignments and their successors will not have an institutionalized doctrine upon which to rely.

WMD-CST Certifications

The criteria established for certification of the WMD-CSTs were not meaningful and did not meet the requirements of the law. The use of a C3 readiness rating⁴ and the successful completion of an external evaluation (EXEVAL), a training event for the unit, were not meaningful measures of WMD-CST performance or capability. Further, provisions were not made for recurring certifications of the WMD-CSTs. This occurred because of insufficient CoMPIO coordination with existing organizations, and program execution independent of the oversight of established military structures, organizations, and guidance. The FY 1999 National Defense Authorization Act states,

A reserve component rapid assessment element team [CST], and any Reserve assigned to such a team, may not be used to respond to an emergency . . . unless . . . the team, or that Reserve, possesses the requisite skills, training and equipment to be proficient in all mission requirements.

The Army's Directorate of Military Support established, and CoMPIO implemented, three requirements each WMD-CST had to meet to request certification of the WMD-CST: a C3 readiness rating or higher (C1 is the highest state of readiness) on the unit status report; the successful completion of an EXEVAL; and a recommendation from the WMD-CST commander after attaining the first two criteria.

Army Regulation 220-1, "Unit Status Reporting," September 1, 1997, establishes readiness ratings for the Army and defines a C3 readiness rating as follows:

The unit possesses the required resources and is trained to undertake many, [*but not all,*] portions of the wartime mission(s) for which it is organized or designed. The resource or training area status will result in a significant decrease in flexibility for mission accomplishment and will increase the vulnerability of the unit under many, but not all, envisioned operational scenarios. The unit would require [*significant*] compensation for deficiencies.

By comparison, Army Regulation 220-1 defines a C1 readiness rating as, "The unit possesses the required resources and is trained to undertake the full wartime mission(s) for which it is organized or designed." Using this Army standard

⁴Combat Readiness Rating Codes are: C1 Fully Combat Ready, C2 Substantially Combat Ready, C3 Marginally Combat Ready, and C4 Not Combat Ready.

readiness reporting rating system, achievement of a C1 rating by each WMD-CST is necessary to meet the requirements of the FY 1999 National Defense Authorization Act.

The second requirement was successful completion of an EXEVAL. EXEVALs are training events designed to show commanders the strengths and weaknesses of their units for determining future training requirements. EXEVALs do not imply any certification status or warfighting capability. The EXEVALs conducted with the first 10 WMD-CSTs were of marginal value because of the absence of major items of equipment and personnel. For example, none of the first 10 WMD-CSTs had received a Mobile Analytical Laboratory Systems (MALS) van at the time of the EXEVALs. The MALS van contains the major items of equipment necessary for a thorough on-site assessment and identification of a potential agent.

The U.S. Army Forces Command had sufficient concern about the problem and offered to conduct another mini-EXEVAL on the MALS van. In addition, the First and Fifth U.S. Army, the U.S. Army Forces Command major subordinate commands that conducted the EXEVALs, reported that only 5 of the 10 WMD-CSTs had their full complement of personnel. Critical personnel, such as the medical officer, nuclear medical science officer, or survey team members, were missing from some of the CSTs at the time of the EXEVALs. Other problems noted by the First and Fifth U.S. Army included shortages of personal protective equipment (10 of 10 teams), hand-held assay tickets with code books used to detect biological agents (8 of 10 teams), and the lack of a reachback capability (9 of 10 teams). As a result of those shortages, and the corresponding lack of capabilities, the First U.S. Army requested that those WMD-CSTs obtaining additional training (at state expense) from the West Desert Test Center, Dugway Proving Ground (Dugway), Utah, obtain a letter certifying their capability with biological agents.

U.S. Army Forces Command requested a postponement of the EXEVALs until the WMD-CSTs received the full complement of equipment. However, U.S. Army Forces Command was instructed by the Army's Directorate of Military Support (the higher headquarters of CoMPIO) to administer the EXEVALs even though the WMD-CSTs did not have the MALS van and had only a limited capability with the Unified Command Suite (UCS). (The UCS, a communications suite mounted on a commercial truck chassis, is intended to provide an architecture that will ensure communications and data connectivity among the local, state, and Federal response forces.) The U.S. Army Forces Command offer to conduct an unforecasted and unfunded mini-EXEVAL for the 10 WMD-CSTs must be viewed as a significant decision to support a critical requirement. U.S. Army Forces Command was willing to accept the costs and provide the personnel because, as they stated, "It was a moral obligation to properly train these teams before sending them off to do this most dangerous mission." CoMPIO had not identified the frequency of EXEVALs for unit certification or if it was a one-time-only requirement. The EXEVAL cycles

need to be identified, funded, and programmed into the workload for U.S. Army Forces Command, the First and Fifth U.S. Army, and their subordinate Training Support Battalions.

The third requirement was simply a letter of recommendation from the unit commander to their state Adjutant General recommending certification.

All 10 WMD-CSTs have reported a C3 readiness rating on their Unit Status Report, undergone an EXEVAL, and as of January 22, 2001, nine WMD-CSTs had submitted a request for certification. However, all 10 WMD-CSTs underwent EXEVALs without a MALS van. The MALS van is the cornerstone of the WMD-CST capabilities. Most of the WMD-CSTs underwent EXEVALs without critical personnel and personal protective equipment, and they all passed. Subsequently, they were issued the rest of their equipment, including personal protective equipment and pacing items. Then, in some cases, they finished hiring needed personnel. Because they had already met two of the three criteria established by CoMPIO, the commanders of the WMD-CSTs felt undue pressure to recommend certification. The WMD-CSTs have not, however, been trained and evaluated on all of the equipment they will use for a mission.

The certification approval process (CoMPIO and the Army's Directorate of Military Support established) went from the states, through the National Guard Bureau and Army, to the Secretary of Defense. Requests are submitted by the individual states to the National Guard Bureau. Once approved by the National Guard Bureau, the requests are forwarded to the Army's Directorate of Military Support, who also reviews and approves the requests. The requests are forwarded to the Secretary of the Army for approval, who then forwards the requests to the Secretary of Defense for final approval. The Assistant Secretary of Defense (Reserve Affairs), who is the principal staff assistant and advisor to the Secretary of Defense with responsibility for overall supervision of matters which involve the Reserve Components, including the National Guard, has inserted himself into the review process and has requested that the Secretary of the Army forward the requests to his office for review and approval prior to submission to the Secretary of Defense.

As of January 22, 2001, seven of the nine WMD-CSTs that had requested certification had progressed to the Office of the Secretary of Defense and the other two requests were at the Secretary of Army for review and approval, but none have received Secretary of Defense certification. The Assistant Secretary requested that the Army provide additional documentation for WMD-CST certification requests forwarded through his office before he recommended approval to the Secretary of Defense. The additional documentation he requested concerned issues⁵ related to the WMD-CSTs.

⁵Those issues include problems cited later in this report, for example, that the Army had not tested and certified the safety of the coupling between the M40 mask and M48 blower and that all personnel assigned to WMD-CSTs had not completed requisite training, briefed to the Assistant Secretary of Defense (Reserve Affairs) by the audit team on August 9-10, 2000.

Unit Status Report. The unit status report may not be the correct reporting format for the WMD-CSTs unless the positions within the WMD-CST are further defined for mission criticality. With only 22 personnel, the WMD-CSTs lack the depth and breadth of personnel to easily reconstitute their forces. Most of the critical military occupational specialty positions, such as the nuclear medical science officer, are only one deep. We believe the WMD-CSTs should have a C1 readiness rating to be eligible for certification because of the small unit size and stated response time. Additionally, the identification and staffing of critical positions should be required for reporting purposes.

Operational Readiness Inspections. An operational readiness inspection would be a better criteria than an EXEVAL for measuring WMD-CST capability and performance. An operational readiness inspection would provide an objective basis for validating, on a recurring basis, that WMD-CST personnel possess the necessary skills and proficiency to safely conduct their operations. CoMPIO did not establish a requirement for refresher training on either an individual or unit basis other than the training that unit personnel receive when assigned to the unit. The need for refresher training was left to the individual WMD-CST commander. Officials at the West Desert Test Center, U.S. Army Soldier and Biological Chemical Command (SBCCOM), and the Joint Program Office-Biological Defense expressed concern about the lack of an identified requirement for refresher training or proficiency certification.

Recurring Certification. Procedures for recertification of the WMD-CSTs had also not been developed. Requirements for periodic recertifications must be determined for operational readiness inspections. Additionally, criteria must be established to determine when a WMD-CST would be nondeployable because personnel in the critical occupational specialties are absent or in a rotation status, and, whether those conditions would require additional inspections. The certification requirements established by the Army's Directorate of Military Support, and implemented by CoMPIO, are not in consonance with the requirements or intent of the law. The Commanding General, Fifth U.S. Army, stated in his report to U.S. Army Forces Command, "All units require additional training and experience to improve proficiency in mission execution" and that "current certification does not measure WMD-CST mission readiness in objective terms." If, in the opinion of the Army, the WMD-CSTs must improve their proficiency to meet Army standards, the WMD-CSTs do not comply with the certification requirements of the law and should not be certified.

WMD-CST Training

Training programs and materials for WMD-CST personnel were not sufficiently identified, developed, and approved. Further, the training was inadequate. This occurred because of insufficient CoMPIO coordination with existing training organizations, and program execution independent of the oversight of established military structures, organizations, and guidance. The first

10 WMD-CSTs were in the process of requesting certification, even though training courses were still under development and major pieces of equipment had not been exercised. The various types of nuclear, biological, and chemical agents that WMD-CST personnel may encounter require that the training they receive provide them with a sufficient level of proficiency in all mission areas. That is another area where there are several organizations within the Army that could have provided thorough, detailed training on the identification, handling, and disposal of suspected agents.

Military Occupational Specialty Qualification. Although survey team members are required to be military occupational specialty qualified as nuclear, biological, and chemical personnel (military occupational specialty 54B), nonmilitary occupational specialty qualified individuals who were assigned to the WMD-CSTs did not receive military occupational specialty qualification through training at the U.S. Army Chemical School (the School), Fort Leonard Wood, Missouri. The School is the organization approved by the U.S. Army Training and Doctrine Command to provide the training. Approximately 65 personnel recruited into the WMD-CSTs who required military occupational specialty 54B qualification received some of their training from National Guard Bureau programs and attended a compressed 3-week nuclear, biological, and chemical noncommissioned officer course of instruction instead of the standard 16-week nuclear, biological, and chemical noncommissioned officer course. The School did not award certification of military occupational specialty qualification because the personnel did not attend the entire 16-week program of instruction. The military occupational specialty qualification was awarded by the National Guard Bureau.

Course Development. CoMPIO identified and developed training courses for WMD-CST personnel without fully coordinating with the Army. Most of the classroom instruction WMD-CST personnel receive is from established curricula from various civilian emergency first responder and Army schools. However, a new course required of all WMD-CST personnel is the WMD Emergency Assessment and Detection course, a 3-week course under development by the Battelle Corporation. The course is not an approved U.S. Army Training and Doctrine Command course and is not part of a standard soldier training program, which applies to military occupational specialty training courses.

The School had to draft a special text manual for the course because the course includes material and teaches skills not included in the standard nuclear, biological, and chemical noncommissioned officer military occupational specialty 54B course. The special text manual was labor- and cost-intensive for the School to produce. Rather than developing the course under an existing contract between the School and Battelle Corporation, CoMPIO took charge to draft a new contract with Battelle Corporation for the course. This precluded a collaborative effort between the School and Battelle Corporation, slowing development of the course. It also served to exclude input from subject matter experts. As of August 1, 2000, the Directorate of Training Development, U.S. Army Maneuver Support Center, Ft. Leonard Wood, Missouri, a

subordinate organization of the U.S. Army Training and Doctrine Command, was still writing the individual tasks for the course, but was removed from collaborating with Battelle Corporation on the program of instruction.

The program of instruction included a lot of commercial-off-the-shelf equipment. Neither the School nor Battelle Corporation had the subject matter experts to teach the course to the first 10 WMD-CSTs. As part of its contract, Battelle Corporation sent two employees to training courses to become subject matter experts. Battelle Corporation was to teach the first two iterations of the course using a draft program of instruction. After the first two iterations, the School was to begin a review of the program of instruction for the course. After the review is completed, the draft program of instruction will be staffed (expected to begin during FY 2001). Once staffed, a special text manual will be submitted to the U.S. Army Training and Doctrine Command for approval. As of August 1, 2000, Army instructors had not received the training to become subject matter experts.

Training Equipment and Training Aids. Not all of the WMD-CSTs or the School had sufficient quantities of training equipment. In addition to lacking a program of instruction, the School had no training aids other than individual protective equipment which were reclaimed by CoMPIO during the training of the first 10 WMD-CSTs. With the exception of the MALS van (the MALS van is used to identify a chemical or biological agent), the lack of training aids has been rectified.

Training for the MALS is conducted at Aberdeen Proving Ground, Aberdeen, Maryland. By splitting the training, however, it is difficult for the WMD-CSTs to sufficiently cross-train personnel and ensure that there will always be personnel available who are proficient on the equipment. Cross-training is vital to organizations such as WMD-CSTs, where the entire complement of the team is only 22. Insufficient cross-training of personnel could degrade the ability of the WMD-CST to fully perform its mission and be of value to the emergency first responder community. Additionally, by splitting the training between two geographic locations, the WMD-CSTs will have to budget for more travel costs for their personnel.

Instruction on the MALS as a part of the WMD Emergency Assessment and Detection Course would serve to address some of the personnel issues confronting each of the WMD-CSTs. The units were also encountering problems with insufficient quantities of training equipment and training aids. One WMD-CST attempted to purchase training aids directly from the vendor to conduct what they felt was required proficiency training on commercial-off-the-shelf equipment. The vendor contacted CoMPIO, which instructed the vendor not to provide the equipment or CoMPIO would cancel the contract. Later, CoMPIO officials contradicted that action by stating that procurement of such items was the responsibility of the individual state's Directorate of Logistics. The Directorate of Logistics serves as the logistician for National Guard units in a particular state. The problems related to training equipment and training aids

encountered by the School and the units were other areas where the Army, such as the U.S. Army Training and Doctrine Command, has the experience and could have assisted, had CoMPIO requested the Army to assist.

The training regimen must be finalized and approved as a critical first step toward institutionalizing the individual and unit training of the WMD-CSTs to the desired capability. The WMD-CSTs must also complete the EXEVALs with all of their equipment and their full complement of personnel. If that is not done, the proficiency level of the WMD-CSTs cannot be adequately determined. Finally, the WMD-CST training must be institutionalized within the existing infrastructure of the Army, to Army standards. As of September 15, 2000, this training has been provided at no cost to the WMD-CSTs. The Army cannot continue to expend unprogrammed resources to sustain WMD-CSTs capability.

WMD-CST Equipment and Safety

The ability of the WMD-CSTs to effectively and safely carry out their mission is questionable because of the management and fielding of the teams' TDA equipment. The TDA list was originally taken from the Tiger Team Report, Annex F, which also established the funding, personnel, and training requirements for the team. During the initial months of the standup and funding of the CoMPIO, the TDA had grown without evaluation by subject matter experts within the Army. CoMPIO, despite lacking acquisition certified personnel familiar with chemical and biological defense systems, retained acquisition decision authority. The result was a TDA not officially authorized by the Army, and continues to change. The equipment fielded to the teams was not subject to testing and evaluation or the rigors of an Operational Requirements Document to ensure that it would provide the needed capabilities or could be sustained within the Service infrastructure. Sustainment of fielded systems was instituted in a specialized facility that did not draw on existing resources. The dedicated facility raised the cost to support the WMD-CSTs and is outside of either the Army or National Guard Bureau chain of command.

TDA Development and Equipment Acquisition. The TDA development and equipment acquisition process CoMPIO employed to purchase equipment for the WMD-CSTs unnecessarily circumvented the normal DoD acquisition channels, excluded consideration of available DoD assets, and incurred increased risk. The development and establishment of the initial 10 WMD-CSTs was done on an accelerated timetable that was imposed by CoMPIO. According to the timetable presented in the Tiger Team Report, the initial 10 teams were to be certified by FY 2002. The CoMPIO compressed the schedule for certification to be complete by calendar year 2000. Subsequently, CoMPIO developed a draft TDA and fielded equipment before clarifying the mission requirements.

As of August 1, 2000, the TDA was undergoing revisions that will compound equipment disparities between the original 10 teams and the 22 additional teams. Additionally, items fielded to the original 10 teams included several items we

were not able to ascertain the rationale for either why the item was included on the TDA or the quantity that was authorized. For example, items authorized to each of the 10 original teams included 1 heat stress monitor (at a unit cost of almost \$3,000); 4 Palm Pilot personal digital assistants; 22 compasses (one for each member of each WMD-CST); and 4 Global Positioning System receivers (one for each member of the survey teams). Development of the TDAs is an area where experienced organizations, such as the Army's Office of the Deputy Chief of Staff for Logistics, the Army's Force Development Branch, or the Defense Logistics Agency, could have provided invaluable experience and expertise.

Utmost Advantage. CoMPIO did not use existing expertise in DoD in making program management decisions. CoMPIO established a program called Utmost Advantage to equip, supply, and sustain the WMD-CSTs with state-of-the-art technology by leveraging Government-to-Government unique skills, industry support, and areas of specialization. Although intended to establish cooperation through working groups to derive recommendations and execute decisions, the program resulted in one person in CoMPIO who determined the requirements in the form of a draft TDA and orchestrated equipment acquisition, logistics, and resource management. According to CoMPIO officials, subject matter experts from SBCCOM; the Soldier Systems Center, Natick, Massachusetts (Natick); the Edgewood Chemical and Biological Center, Edgewood, Maryland (Edgewood); and the Marine Corps Systems Command, Quantico, Virginia; assisted with equipment decisions. However their role was ambiguous, unfunded, and without a formal documented agreement with CoMPIO.

Officials at Dugway stated that CoMPIO originally approached them to assist in implementing the WMD-CST program. Although Dugway could provide the subject matter experts for live-agent testing and comparison of military and commercial equipment; live-agent training; and an evaluation of tactics, techniques, and procedures employed by the teams; CoMPIO did not use that expertise. Dugway officials stated that they required a work order and funding to participate in the WMD-CST program. CoMPIO provided neither and, as a result, Dugway was bypassed and told that SBCCOM was the single voice for testing and evaluation of equipment.

SBCCOM became involved in the WMD-CST program when CoMPIO approached subordinate organizations, Edgewood and Natick, to provide program assistance. Edgewood is the Army's principal research and development center for CB defense technology, engineering, and service. Natick provides life-cycle management of soldier and related support systems through centralized development, procurement, integration, and management of individual soldier items and organizational items. Despite the assistance and recommendations of Edgewood and Natick, CoMPIO officials overly relied on work done by the Interagency Board. The Interagency Board is a multi-governmental organization created at the recommendation of the Army's Directorate of Military Support, the higher headquarters of CoMPIO, and cochaired by representatives of CoMPIO and the Federal Bureau of Investigation. Because of the composition of the Interagency Board, it is

difficult to distinguish between the decisions and opinions of the Interagency Board from those of CoMPIO. In addition, while the Interagency Board appears to involve the Federal Bureau of Investigation into DoD's WMD-CST program, this involvement appears limited to identification of equipment only.

In November 1998, CoMPIO unofficially designated Natick as the program manager of Utmost Advantage and asked it to carry out various functions (such as equipment acquisition) without a charter, documented requirements, or doctrine. Natick was given an equipment-fielding deadline of June 1, 1999, and made 10 separate requests (between December 1998 and March 1999) for a finalized equipment list. Changes to the requirements and equipment were made by CoMPIO as late as April 1, 1999, leaving Natick to procure 10,000 pieces of equipment by the June 1, 1999, deadline. CoMPIO never officially delegated any authority to Natick and, by the first quarter of September 1999, had removed Natick's unofficial program manager status and phased Natick out completely. CoMPIO involved the Marine Corps Systems Command in equipment procurement because it had equipped the Marine Corps' CBIRF and held many of the General Services Administration equipment contracts CoMPIO wanted for the teams. Officials at the Marine Corps Systems Command stated that although Natick was providing direction on acquisitions to them, CoMPIO retained final decision authority on selection of equipment.

Acquisition, Sustainment, and Support of WMD-CST Equipment. For the acquisition of WMD-CST equipment, CoMPIO bypassed the normal assignment of a program manager by the Army Acquisition Executive. As a result, CoMPIO made equipment decisions without adequately clarifying the mission requirements. CoMPIO funded creation of a new sustainment support organization, the Defense Consequence Management Support Center, under the Special Operations Forces Support Activity located at Lexington, Kentucky. The Special Operations Forces Support Activity is a subordinate organization of the U.S. Special Operations Command. The Defense Consequence Management Support Center was supposed to provide sustainment support for specialized, nonstandard items of equipment issued to the WMD-CSTs by conducting stock management, warehousing, technical services, integrated logistics support, industrial operations, and coordination and monitoring of forward support for area resupply and sustainment. As of September 15, 2000, those functions still need to be developed at the Defense Consequence Management Support Center, while the National Guard Bureau and the Army already have the expertise and infrastructure in place to maintain the military equipment fielded to the WMD-CSTs. The lack of a structured acquisition program magnified the risk of unit fielding and sustainment. The requirements developed by the CoMPIO did not match those in the Tiger Team Report and depended heavily on the input of the Interagency Board. The use of the Interagency Board led to a case where DoD operational requirements were developed and vetted outside of Department and Service processes. Sustainment of the WMD-CST major end items and commercial-off-the-shelf systems becomes a long-term consequence of the CoMPIO approach, as support for the

Defense Consequence Management Support Center in Lexington, Kentucky, facility comes at an additional cost rather than leveraging existing Service or National Guard resources.

Other sustainment issues were also overlooked when equipment was fielded to the teams, such as refilling the tanks of the self-contained breathing apparatus. The Tiger Team Report addresses the need for response elements, namely the WMD-CST survey teams, to spend extended time in the hot zone or to make multiple entries. CoMPIO did not address the need for on-site air refills and did not issue a portable refill mechanism. That leaves most of the WMD-CSTs having to rely on responding firefighters for refills, and, in some cases, WMD-CST personnel who are not trained on how to fill the tanks. As a result, even if the WMD-CSTs can reach the responding firefighters and those firefighters have a refill capability and are not themselves casualties, the WMD-CSTs might not be able to refill their self-contained breathing apparatus tanks.

Officials at the National Guard Bureau noted that the necessary equipment supply and resupply infrastructure already exists within DoD and creating a new organization, such as the Defense Consequence Management Support Center, is duplicative and wasteful. For example, the WMD-CST Life Cycle Management Handbook, produced by the Defense Consequence Management Support Center and CoMPIO, was created to address equipment sustainment and supply issues. As oversight responsibility for the WMD-CSTs is transferred, the necessity of the Life Cycle Management Handbook or the Defense Consequence Management Support Center was at best questionable in light of the long-standing Army sustainment capability.

Equipment Safety Issues. The lack of program management oversight and direction resulted in safety issues and disparity in the equipment readiness of the 10 teams. Safety concerns with the fielding of untested equipment were raised. In an attempt to supply the teams with powered air-purifying respirators, CoMPIO issued the M48 blower to use with the M40 mask, even though the pair were not originally designed to function together. The WMD-CSTs raised safety concerns because test data was not available that would assure them the specific combination of blower and mask would work in a contaminated environment. In the words of one WMD-CST commander, “It probably would work; I’m just not willing to bet my life on it.” CoMPIO fielded the untested combination of equipment anyway. The consensus among the WMD-CSTs is that they would use the M40 mask without the M48 blower because the combination was untested, resulting in further degradation of their mission capability.

Some WMD-CSTs were short on other basic military issue CB defense gear. The Washington WMD-CST did not have any chemical protective suits; it had commercial splash suits instead. Also, it was unclear whether personal protective items had been tested by an independent third party before purchase or whether purchase decisions had been based solely on the assertions of the manufacturer or assertions of first responders because the equipment met their

needs. To ensure an acceptable level of safety with personal protective items, commercial-off-the-shelf equipment such as Level-A suits, need to be tested against militarized agents by a trusted source. Similarly, military chemical defense equipment should be tested against toxic industrial compounds and toxic industrial materials. Identifying limitations and operating parameters of personal protection equipment issued for use in situations that could involve toxic industrial compounds, toxic industrial materials, or militarized chemical or biological agents would allow for better informed decisionmaking by the WMD-CST commanders.

WMD-CST commanders need to know the operational limitations of their equipment. For example, they need to know whether the useful life of a standard issue filter for an M40 gas mask is degraded if used against an agent such as ammonia. Such information is critical for logistical decisions and personal protective measures to prevent unnecessary casualties. The safety of the WMD-CSTs depends on reliable information on the performance of their equipment in the environment within which they will operate. The WMD-CST commanders and personnel lack confidence in the unknown, untested, and unsubstantiated reliability of the equipment that they were issued by CoMPIO.

Several operational issues that could affect the safety of WMD-CST personnel had not been fully resolved. Some of the issues related directly to a mission defined only in abstract terms. For example, the stated mission of the WMD-CSTs is to assess, advise, and facilitate. While that may instill confidence in the public and emergency first responder personnel, the stated mission is totally devoid of operational parameters. Conversely, such an abstract mission statement, without amplifying doctrine and established conditions, tasks, and standards, has resulted in a constantly changing training regimen and TDA. Establishment of the WMD-CSTs did not follow the normal Army protocol for establishing a mission statement, drafting a doctrine, and equipping to mission requirements. An example of the lack of safety concerns lies in how the mission was drafted to be conducted. Each WMD-CST has two survey teams. Equipment for the teams supplies 2 hours of fresh air when equipment that provides a 4-hour air supply could have been purchased. According to the WMD-CST operations manual, the survey teams are to suit up, conduct predeployment checks, walk a minimum of 500 meters into the hot zone,⁶ conduct survey operations, redeploy back 500 meters, and then go through decontamination procedures. The operations are likely to exceed 2 hours, even under ideal conditions when the MALS is located directly on the edge of the warm zone.⁷ The MALS could be parked in the hot zone to shorten the distances, but doing so presents a different and equally dangerous set of circumstances. Issues that affect the safety of the WMD-CSTs should have been fully resolved before establishing and equipping the teams.

⁶Hot Zone-The area immediately surrounding a hazardous material incident that extends far enough that personnel outside the zone do not experience adverse effects from hazardous material releases.

⁷Warm Zone-The area of hazardous material incident where personnel and equipment, decontamination, and hot zone support takes place. The warm zone includes control points for access to the hot zone, thus assisting in reducing the spread of contamination institutional controls.

Medical Chemical Defense Materiel. CoMPIO did not ensure issuance of medical chemical defense materiel to the teams or take into account Army policy on maintaining medical chemical defense materiel. The Army maintains medical chemical defense materiel in 5,000 soldier blocks, which are not to be broken out except for a contingency. The policy exists partly because medical chemical defense materiel items are potency-dated, consist of controlled substances, and require a high level of stock maintenance and management. CoMPIO should have recognized the logistical problems presented by medical chemical defense materiel and leveraged existing DoD supply chains to ensure the teams were initially fielded with medical chemical defense materiel, which is a basic requirement for soldiers who could potentially deploy to a CB environment. Doing so would have complied with the CoMPIO concept of “total unit fielding.” Instead, it was left to the states’ National Guard Headquarters to furnish the medical chemical defense materiel. We were not able to locate any memorandums of agreement at the state level to provide medical chemical defense materiel to the WMD-CSTs on a recurring basis.

Equipment Variations. Equipment variations were the result of the lack of management oversight and the lack of requirements definition, testing, and configuration control. The lack of a formal lessons learned process led the WMD-CSTs to individually identify various issues and methods of correction. For example, one team added a hood to the head space sampler of the gas chromatograph/mass spectrometer [HAPSITE]. The hood draws possible contamination in to the glove box filtration system. Without the hood, the interior of the MALS could possibly be contaminated. Although the California WMD-CST believed they should add the hood for the safety of the operator, CoMPIO had the hood and other team-initiated safety modifications removed. The Georgia WMD-CST identified the possibility that survey missions into the hot zone could require greater air supply than available because of distances involved. The John Deere Corporation donated a six-wheel utility vehicle to the team to help alleviate that problem. CoMPIO had considered adding similar vehicles to the other teams, but had not included them on the TDA or in funding.

Pacing Items. Two pacing items, the MALS and the UCS, provide additional evidence of the lack of program management in engineering, design, testing, evaluation, and fielding. The pacing items do not meet the operational needs of the WMD-CSTs. According to the Tiger Team Report, the WMD-CSTs would rapidly respond to a WMD incident, conduct detection, assessment and hazard prediction, and provide technical advice concerning WMD incidents and agents. The two pacing items fielded to the WMD-CSTs to meet this mission, the MALS and the UCS, provide the WMD-CSTs with a limited unique capability. The items are not interoperable and were fielded without a full complement of equipment. The MALS was intended to provide the teams with an ability to analyze and observe agent samples and share that vital information to the UCS through a digital transmission link. According to the CoMPIO draft doctrine, communications connectivity of the MALS with the UCS and other response elements is key in the operational capability of the WMD-CST to support the on-site incident commander. The MALS and the UCS were delivered to the

WMD-CSTs at a cost of approximately \$1.6 million per team. The MALS and UCS were briefed as mission-necessary equipment; however, during a meeting with the auditors on August 9, 2000, the Director of CoMPIO stated that the WMD-CSTs did not need the MALS or the UCS to accomplish their mission of assess, advise, and facilitate. Again, this is an area where experienced Army personnel could have provided valuable insight and raises the question of how many other items fielded to the CSTs may not be necessary.

Mobile Analytical Laboratory System. The MALS design does not adequately accommodate the mission need. According to CoMPIO officials, the MALS was intended to be a platform for currently fielded lab equipment as well as emerging technology. The platform that was chosen, however, does not provide adequate physical space for the currently designated components or laboratory operations conducted by two people wearing chemical protective gear deemed necessary by the WMD-CST MALS operators. Discussions with officials from the organizations involved in developing the MALS that CoMPIO fielded revealed that engineering of the MALS was not adequately managed to produce a system capable of meeting mission requirements. Further, no analysis was conducted to compare the capabilities provided by the MALS with those of other existing military or commercial systems.



Figure 1. MALS

MALS Glove Box and Filtration System. The design of major components of the MALS has adversely affected the ability of the WMD-CSTs to conduct their mission. The MALS is equipped with a glove box and high efficiency

particulate air (HEPA) filter system for handling and preparing samples. Officials at SBCCOM stated that the ability to prepare, refrigerate, and deliver a sample to the nearest health organization afforded by the glove box and on-board refrigeration unit provides an essential and unique capability. SBCCOM engineered the glove box similar to one engineered for the Federal Bureau of Investigation's Hazardous Materials Response Unit. The glove box was installed in a vehicle not chosen by personnel at SBCCOM and occupies almost half of the usable space. As a result, there is little room to work. CoMPIO chose a commercial Ford panel van for the MALS, despite more adaptable platforms in DoD inventories.⁸ Commercial generators, batteries, and air conditioning units were added to the platform, although available through traditional DoD acquisition channels. In this regard, CoMPIO failed to consider the impact inoperable commercial-off-the-shelf equipment would have on the operational readiness of a team and where and from whom a WMD-CST would receive commercial maintenance support on such equipment in time of crisis or during a training event.

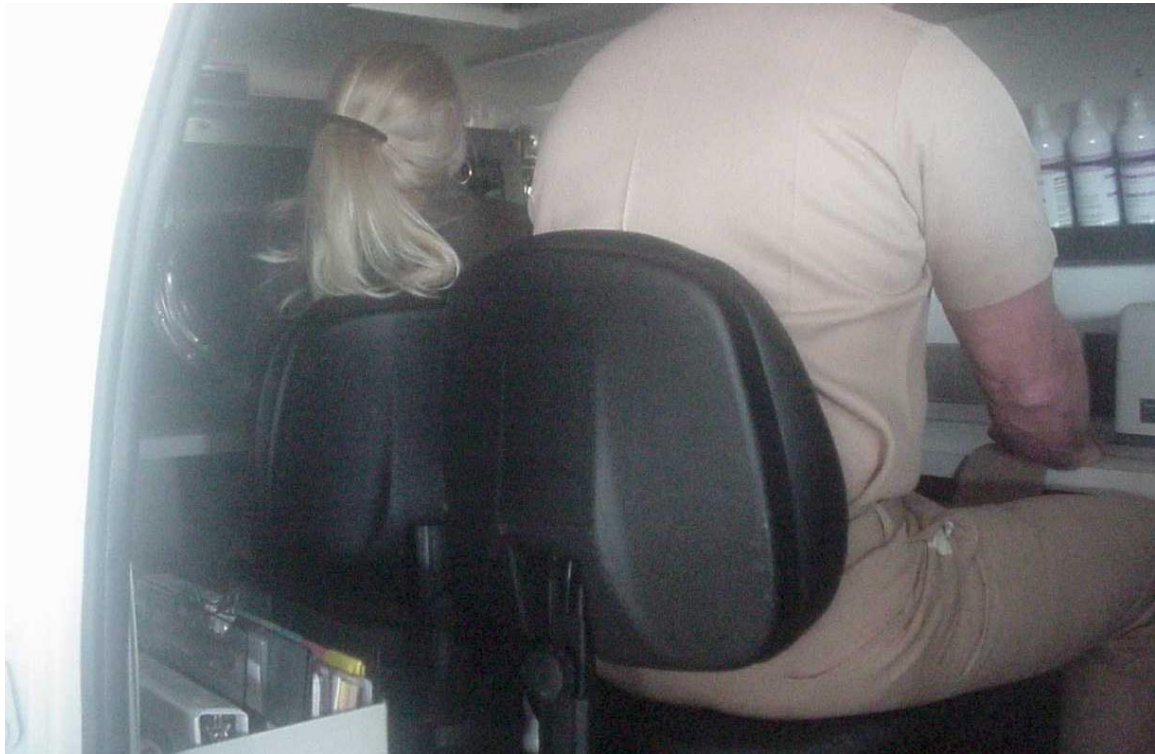


Figure 2. MALS interior

⁸For example, the Army's Nuclear, Biological, and Chemical Reconnaissance System-Fox (the Fox vehicle) provides commanders the ability to detect, identify, and mark areas of contamination; sample for nuclear and CB contamination; and report accurate information to supported commanders in real time. The Fox vehicle is based on a six-wheeled, all-wheel-drive armored vehicle capable of cross-country operations at speeds up to 65 miles per hour. The Fox vehicle is also amphibious, attaining swimming speeds up to six miles per hour.

The glove box was fielded without operations and maintenance manuals and did not perform to specification. These problems were validated when SBCCOM deployed a team to repair or replace the glove boxes at each WMD-CST. The WMD-CST personnel identified that the glove box filtration system also had design flaws which could endanger the users should they attempt to change the HEPA filters after use in a contaminated environment. Additionally, there were ongoing issues related to the user's confidence level related to the use of the glove box with an agent. Personnel were trained to use the glove box using a mockup at SBCCOM. However, personnel did not train on an actual glove box. SBCCOM subsequently identified the need for additional training on the use and maintenance of the equipment. Another concern identified by the WMD-CSTs was that there is no way to fully decontaminate the filtration ducts after exposure to a contaminant. This factor had various ramifications related to the handling of the contaminated equipment, depending on which state the MALS is in. For example, according to WMD-CST personnel, under California standards the MALS would be a \$400,000 consumable item because introduction of a hazardous sample would make it a new hot zone. The MALS would have to be left at the site with any other contaminated material. While CoMPIO officials stated that such issues would be a state problem, identification of state-by-state anomalies should have been identified and agreements worked in conjunction with the WMD-CST regional mission. This issue is a program management issue that must be addressed.



Figure 3. HEPA Filter

MALS Portable HAPSITE. Operational issues affecting usefulness to the WMD-CSTs have been identified with the HAPSITE.⁹ The MALS is equipped with a HAPSITE that consists of a headspace sampler and a gas chromatograph/mass spectrometer for field identification of organic compounds. One issue identified by the WMD-CSTs is that the HAPSITE does not heat the sample sufficiently to identify a vast number of compounds, especially heavier, persistent agents. An upgrade for the HAPSITE has been identified and purchased, and is supposed to correct the deficiencies. According to SBCCOM officials, they were not sure how effective the upgrade is because they have not been given the opportunity to test it. Additionally, some of the WMD-CSTs have identified that the HAPSITE is unreliable, noting a failure of the ion pump and that the system pressure reads too high. One WMD-CST repeatedly identified their HAPSITE as a deadlined Equipment Readiness Code A (ERC-A¹⁰) item, inhibiting mission capability.



Figure 4. HAPSITE with copper tubing in background

⁹The HAPSITE is a self-contained, field-portable gas chromatograph/mass spectrometer used to provide fast on-site analysis of volatile organic compounds. The headspace sampling system enhances the gas chromatograph/mass spectrometer by expanding the analysis of volatile organic compounds in soil or water.

¹⁰Equipment Readiness Code A (ERC-A) identifies principal weapon systems and equipment, critical to accomplishing primary doctrinal mission tasks and critical mission support items. ERC-A items or systems are also designated as pacing items.

The MALS operators have called the operating safety of the unit into question as well. The HAPSITE is connected to a filter installed on the outside of the MALS van, which filters air leaving the HAPSITE. The WMD-CSTs identified that the filter, an M40 mask filter, is installed backwards, as though to filter air coming into the van rather than leaving the HAPSITE. Although an SBCCOM official noted that “it should work,” we did not find anyone in the CB community who knew with any certainty whether the filter would perform properly the way it was installed. The WMD-CST personnel were also concerned about the way the HAPSITE was connected to the filter. It was assembled using standard copper tubing joined in several locations with fittings. Each joint presented a possible point of failure, capable of contaminating the MALS and its occupants.

In addition to the operational issues of the HAPSITE, the technology that allows user identification of organic compounds and subsequent sharing of the information became an issue as well. A laptop computer was issued with a software interface to the HAPSITE, but lacked sufficient random access memory to allow for proper operation of software necessary for other MALS components. Additionally, the connectivity between the MALS HAPSITE computer and the UCS information system does not address the needs of the team. The UCS information system is Windows NT-based while the MALS is Windows 98-based. That variance in operating platforms does not accommodate transfer of data from the MALS to the UCS, thereby negating reachback capability of identifying a compound. The connectivity problem is a prime example of the lack of program management oversight in the engineering and fielding of the equipment that could have been provided by experienced personnel in the Army.

MALS Biological Detection Capability. The MALS vans have been progressively downgraded in capability. The MALS vans issued to the WMD-CSTs lacked the florescent microscope, the polymerase chain reaction technology [DNA fingerprinting], and the enzyme-linked immunosorbent assay (ELISA), although CoMPIO advertised having these items in May 2000. Combined, those items provide the biological detection capability of the vehicle and team, as each component has detection strengths and weaknesses. According to officials at SBCCOM, the florescent microscope purchased for each of the MALS required a space of 27 to 28 inches deep by 30 inches high and 45 inches wide. The available space inside the MALS is 24 inches deep by 26 inches high and 39 inches wide. Additionally, the entire microscope package, including the microscope, digital camera, processor, power source for the burner, keyboard, screen, and laptop computer, requires five electrical outlets. The CoMPIO-approved design of the MALS has only three electrical outlets. DNA fingerprinting was not fielded to the teams because the technology is still evolving to a real-time, hand-held application considered better suited for the WMD-CST mission. DNA fingerprinting should be available in approximately 1.5 years.



Figure 5. Space inside of the MALS with area reserved for florescent microscope labeled

The ELISA was identified by the U.S. Army Medical Research Institute of Infectious Diseases as the “gold standard” of identification technology for three biological agents on the high probability list. As of September 15, 2000, the biological detection and identification capability of the fielded MALS is limited to bio-immunoassay tickets [bio-tickets] produced by the Joint Program Office for Biological Defense. The Joint Program Office for Biological Defense has management responsibility for all DoD biological defense acquisition programs. According to officials at the West Desert Test Center at Dugway, experienced and trained personnel who teach courses on the proper use of bio-tickets had difficulty with the bio-tickets because of high rates of false positive and false negative readings. In their opinion, the requisite skills required to use the bio-tickets and obtain trusted results are perishable and require constant training. Without all the originally planned equipment in the MALS, such as ELISA, and training to operate it, the WMD-CSTs will not be able to provide timely and effective biological agent identification to incident commanders and will not be able to protect public health and safety.

Unified Command Suite. The UCS is another example of equipment development without a mission needs statement. As fielded, the UCS is incapable of supporting the entire WMD-CST mission. The UCS also serves as a prime example of where CoMPIO failed to leverage existing Government assets and made acquisitions without regard to sustainment.

The UCS was intended to provide connectivity between the WMD-CST, the Incident Commander, and DoD assets. According to the draft doctrine, the UCS provides the teams with high frequency, ultra-high frequency, and very high frequency radios and access to the Secure Internet Protocol Router Network (SIPRNET), the Unclassified but Sensitive Internet Protocol Router Network (NIPRNET), secure telephones, and other communications equipment. A concept of operations document for the UCS dated January 21, 1999, states, “The UCS provides a replacement for existing capabilities that are limited to nonsecure cellular phones and military tactical radios that are often incompatible with those of other responding agencies.” However, the concept of operations does not demonstrate the need for secure communications or compatible military tactical radios, making the UCS an unnecessary system.

The emergency first responder community developed a working group to identify communications requirements, deconflict frequencies to prevent the disabling of public or other responder communications, and enable compatibility of communications equipment. According to National Guard Bureau officials, tactical communications suites from other research and development programs could have been used, to the benefit of the Army and an option that would have been a low-cost temporary solution while the WMD-CST program determined the communications equipment and capability requirements.

Operational Constraints. According to the CoMPIO operations handbook, once the WMD-CSTs arrive at the scene, they are to establish a KU-Band satellite link with the Trojan Spirit team located at Fort Belvoir, Virginia, to enable NIPRNET, SIPRNET, and voice and messaging services. The handbook points out, however, that establishing communications from the UCS will be situation dependent and require detailed planning efforts by the WMD-CST. Under ideal situations, the team will have established intra-agency communications 4 hours after arrival at the scene, not taking into account the various contingencies that may add up to another 3 hours of configuring.

The UCS plan CoMPIO authorized included two secure telephones, two unclassified telephones, one SIPRNET workstation, and one NIPRNET workstation. CoMPIO could have ensured SIPRNET and NIPRNET connectivity of the UCS through the National Guard through GUARDNET, an existing National Guard system. Telephone connectivity could have also been obtained through the existing National Guard structure. The use of GUARDNET would have also spared the teams from using scarce resources to send personnel for information security training at Fort Dix, New Jersey. The teams could have been trained on the National Guard system on line. A minimum of two people from each WMD-CST were required to receive the accreditation standards training.

Information System Accreditation. CoMPIO established a system of communications equipment without regard to the established Army-required accreditation of the complete system. CoMPIO officials disregarded recommendations and assistance from the National Guard Bureau to obtain UCS accreditation. According to CoMPIO officials, “CoMPIO is the lead for all

accreditation issues related to the Unified Command Suite.” CoMPIO took the position that it would field the UCS as a system of systems without accreditation. Indeed, one CoMPIO official noted that

. . . once the units [the UCS] are in the field being used . . . the bureaucrats will have a much more difficult time of stopping the train.

The same CoMPIO official stated that CoMPIO did not have the funding to accomplish accreditation and added:

. . . we are not going to wait two years to fit it into their [the systems accreditors] schedule. If they want to do the accreditation they will need to come up with a plan, a timeline, and the funding to do so.

CoMPIO handled one portion of the accreditation; it secured temporary accreditation, which expired April 7, 2000, for the use of the Trojan network. The temporary authorization to operate was for training purposes only. The authorization also did not allow for any peripherals (such as the MALS) to be attached to the system. As of September 15, 2000, none of the UCS communications was accredited to operate under Army policy. Accreditation would not be an issue if CoMPIO had leveraged existing assets to the fullest before developing the UCS.

Reachback Infrastructure. The reachback capability of the teams and their ability to run communications for the Incident Commander on the scene were doubtful. Infrastructure to conduct reachback operations to the identified subject matter experts for agent identification, verification, or other assistance did not exist. The reachback capability is one of the cornerstones of the CST capability as developed and promoted by CoMPIO. According to a communications official at the First U.S. Army who was involved with five CSTs during the EXEVALs, without established protocols and communications infrastructure the reachback concept will not work. From a management standpoint, procedures were not agreed on to establish the framework for a reachback capability. This undermines one of the key capabilities of the WMD-CSTs. Compounding the problem were the time constraints and lack of allotted frequencies to conduct reachback operations.

Radio Frequency Assignment. Radio frequency assignments had insufficient range for conducting operations. The teams were preassigned radio frequencies by the U.S. Army Frequency Management Office, Fort Sam Houston, Texas, for training purposes. However, the frequencies were only good within a 50-kilometer radius of their home base. This situation was especially debilitating to the California WMD-CST because they were located in Los Alamitos, California, and the assigned radio frequency was for their initial home station in the Sacramento, California, area. According to the WMD-CSTs, once employed, they would call the U.S. Army Frequency Management Office to have a frequency assigned for the incident area. Once contacted it would take the U.S. Army Frequency Management Office 2 to 3 hours to establish the frequency. The U.S. Army Frequency Management Office is not a 24-hour organization. The U.S. Army Frequency Management

Office officials stated they could work out a solution but had not been asked. The WMD-CST Operations Handbook does not address this contingency. Further, there were no established communications protocols for the WMD-CST to follow.

Conclusion

The 10 WMD-CST commanders are dedicated individuals, highly motivated about their positions, and committed to their mission as well as focused on doing the best possible job regardless of the decisions and conditions imposed on them. However, the special management structure established for the WMD-CST program in January 1998 did not lead to effective program management. On the contrary, the program has lacked good management controls. Under the normal process of establishing new units, the mission and mission needs statement would have been clearly established and defined prior to acquiring and fielding equipment, training personnel, or establishing an entirely new sustainment process. CoMPIO did not use the existing expertise of the Army or National Guard in the program management of the WMD-CSTs. CoMPIO had not clearly defined the operational parameters of the mission or established a mission needs statement. The lack of guidance resulted in numerous training, equipment, sustainment, and safety issues identified by the WMD-CSTs and subject matter experts. The certification process specified by law was intended to avoid issues related to the operational readiness and capabilities of the WMD-CSTs. To provide the intended assurance, the certification process must be much more rigorous.

Management Comments on the Finding and Audit Response

Summaries of management comments on the finding and our audit response are in Appendix D.

Recommendations, Management Comments, and Audit Response

Revised Recommendation. As a result of management comments, we revised draft Recommendation 1.b. and 2.a. to properly delineate offices within the Office of the Secretary of Defense with program management oversight responsibilities for the WMD-CST Program. Draft Recommendations 2.a., 2.b., and 3. have been renumbered as Recommendations 2., 3., and 4., respectively.

1. We recommend that the Under Secretary of Defense for Personnel and Readiness:

a. Seek disestablishment of the Consequence Management Program Integration Office.

Under Secretary of Defense for Personnel and Readiness Comments. The Under Secretary of Defense for Personnel and Readiness concurred. The Under Secretary stated that the Deputy Secretary of Defense issued a memorandum on November 9, 2000, initiating the disestablishment of the Consequence Management Program Integration Office.

b. Seek reassignment of the program management oversight responsibilities for the Weapons of Mass Destruction-Civil Support Team Program to the Assistant to the Secretary of Defense for Civil Support, the Principal Deputy Assistant Secretary of Defense (Reserve Affairs), and the Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense Programs as appropriate.

Under Secretary of Defense for Personnel and Readiness Comments. The Under Secretary of Defense for Personnel and Readiness concurred. The Under Secretary stated that the Assistant to the Secretary of Defense for Civil Support is responsible for the coordination and integration of the consequence management program. The Under Secretary also stated that the Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense Programs recommended that program oversight of all chemical and biological defense research, development, and acquisition as it pertains to the WMD-CST program be assigned to that office. Further, the Deputy Secretary of Defense November 9, 2000, memorandum directed the Army to continue to manage the program with the Principal Deputy Assistant Secretary of Defense (Reserve Affairs) providing policy guidance and oversight consistent with the broader policies of the Assistant to the Secretary of Defense for Civil Support.

Audit Response. Recommendation was revised to correspond to management oversight responsibilities delineated by the Under Secretary.

c. Ensure that the actions specified in Recommendation 3. are completed before forwarding any Weapons of Mass Destruction-Civil Support Team certification requests to the Secretary of Defense for approval.

Management Comments. The Under Secretary of Defense for Personnel and Readiness, the Assistant to the Secretary of Defense for Civil Support, the Principal Deputy Assistant Secretary of Defense for Reserve Affairs, and the Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense Programs concurred with the recommendation. The Assistant to the Secretary of Defense for Civil Support stated that they believe the WMD-CSTs should be certified once they met the criteria designated in Section 511 of the FY 1999 Defense Authorization Act. The Director of Military Support, Office

of the Deputy Chief of Operations and Plans, Department of the Army, nonconcurrent with the recommendation. The Director maintained that the criteria established by the Army attested to the ability of the WMD-CSTs to conduct their mission.

Audit Response. The comments of the Under Secretary of Defense for Personnel and Readiness, the Assistant to the Secretary of Defense for Civil Support, the Principal Deputy Assistant Secretary of Defense for Reserve Affairs, and the Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense Programs are responsive. The comments of the Director of Military Support did not provide any factual information with which any alternative conclusions could be determined. The criteria established by the Director of Military Support for requesting certification are not as stringent as the criteria contained in Section 511. Specifically, one of the criteria established by the Army was a readiness rating of at least C3-marginally combat ready.

Section 511 of the FY 1999 Defense Authorization Act states that

A reserve component rapid assessment element team, and any Reserve assigned to such a team may not be used to respond to an emergency described in paragraph (1) unless the Secretary of Defense has certified to the Committee on Armed Services of the Senate and the Committee on National Security of the House of Representatives that the team, or that Reserve, possess the requisite skills, training, and equipment to be proficient in [all] mission areas.

The Section 511 requirement is clearly more stringent than that denoted by a readiness rating of C3.

2. We recommend that the Assistant to the Secretary of Defense for Civil Support coordinate with the Federal Bureau of Investigation to determine the exact roles and missions that the National Guard Weapons of Mass Destruction-Civil Support Teams are expected to fulfill in response to weapons of mass destruction incidents.

Under Secretary of Defense for Personnel and Readiness Comments. The Under Secretary of Defense for Personnel and Readiness concurred with the recommendation. The Under Secretary stated that the Assistant to the Secretary of Defense for Civil Support is responsible for the coordination and integration of the consequence management program and that the Principal Deputy Assistant Secretary of Defense for Reserve Affairs would work closely to ensure appropriate interagency coordination is made for the employment of the WMD-CSTs.

Audit Response. Recommendation was revised to correspond to management oversight responsibilities delineated by the Under Secretary.

3. We recommend that the Principal Deputy Assistant Secretary of Defense (Reserve Affairs) issue guidance prescribing certification standards and delineating the specific mission, duties, and responsibilities for the Weapons of Mass Destruction-Civil Support Teams.

Management Actions Undertaken. The Principal Deputy Assistant Secretary of Defense for Reserve Affairs, as part of the program review directed by the Deputy Secretary of Defense's November 9, 2000, memorandum, is evaluating the mission, duties, and responsibilities for the WMD-CSTs as well as the certification standards and should result in new guidance being issued.

4. We recommend that the Principal Deputy Assistant Secretary of Defense (Reserve Affairs), in coordination with the Assistant to the Secretary of Defense for Civil Support, the Deputy Assistant to the Secretary of Defense for Chemical and Biological Defense Programs, and the Chemical Branch of the Army Office of the Deputy Chief of Operations and Plans, conduct a thorough program review of the Weapons of Mass Destruction Team Program. At a minimum, the review should include areas such as the operational concept, doctrine, equipment, sustainment, personnel assignments and rotations, funding, and the certification process.

Management Comments. The Principal Deputy Assistant Secretary of Defense for Reserve Affairs and the Director of Military Support, Office of the Deputy Chief of Operations and Plans, Department of the Army, concurred with the recommendation. The Principal Deputy Assistant Secretary of Defense for Reserve Affairs stated that a thorough program review is already underway, in accordance with the Deputy Secretary of Defense's November 9, 2000, memorandum. The Principal Deputy also stated that this review had already set in motion many administrative actions which would address most of the findings and recommendations of the draft audit report.

Appendix A. Audit Process

Scope and Methodology

We evaluated the management of the WMD-CST program. We reviewed applicable Presidential Decision Directives, Public Law, Defense Reform Initiative Directives, and DoD directives and plans from January 1993 through January 1998 for the authorization, underlying WMD-CST concept, and establishment of this WMD defense resource. We reviewed and analyzed the draft doctrine, draft mission training plan, draft operational handbook, medical handbook, and Life-Cycle Management Handbook (interim guidance). We reviewed the TDA issued to the initial 10 CSTs to determine, in conjunction with various subject matter experts, if the equipment was adequate for the mission. We reviewed the training of WMD-CST team personnel to determine whether they received adequate, uniform training to achieve full mission capability. We interviewed personnel from each of the 10 existing WMD-CSTs, inspected the equipment issued to them, and discussed their concerns with that equipment.

DoD-Wide Corporate Level Government Performance and Results Act Coverage. In response to the Government Performance and Results Act, the Secretary of Defense annually establishes DoD-wide corporate level goals, subordinate performance goals, and performance measures. This report pertains to achievement of the following goal, and subordinate performance goal:

FY 2000 DoD Corporate Level Goal 2: Prepare now for an uncertain future by pursuing a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. Transform the force by exploiting the Revolution in Military Affairs, and reengineer the Department to achieve a 21st century infrastructure. **(00-DoD-2)**
FY 2000 Subordinate Performance Goal 2.2: Transform U.S. military forces for the future. **(00-DoD-2.2)**

Use of Computer-Processed Data. We did not use computer-processed data to perform this audit.

Audit Type, Dates, and Standards. This program audit was performed from December 1999 through January 2001 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of management controls considered necessary.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD. Further details are available on request.

Management Control Program Review

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, and DoD Instruction 5010.40, "Management Control (MC) Program Procedures," August 28, 1996, require DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of the Review of the Management Control Program. We reviewed the adequacy of controls over the management of the WMD-CST program in support of homeland defense. Specifically, we reviewed the controls over the process to establish the new National Guard teams. We reviewed development of doctrine for the WMD-CSTs. We reviewed planning for a domestic nuclear, biological, and chemical contingency. We reviewed controls over nuclear, biological, and chemical defense resources involving authorization, issue, maintenance, and storage of equipment. We reviewed the control process involved in identification and training of essential personnel. We also reviewed the results of management's self-evaluation of those controls.

Adequacy of Management Controls. We identified material management control weaknesses, as defined by DoD Instruction 5010.40, for the WMD-CST program. The management of the WMD-CST program did not ensure that oversight by established military structures and organizations occurred and that existing guidance was used to review operational concepts, doctrine, equipage, sustainment, personnel assignments and rotations, funding, and certification processes to ensure all essential processes were in place when required, proper training and equipment was available, and a realistic certification process was established. Implementing the recommendations will correct the identified weaknesses and assist in decisionmaking for the additional 22 teams. A copy of the report will be provided to the senior official responsible for management controls in the Army.

Adequacy of Management's Self-Evaluation. The Army did not identify the management of the WMD-CST program as an assessable unit, and, therefore, did not identify or report the material management control weaknesses identified by the audit.

Appendix B. Prior Coverage

During the last 5 years, the General Accounting Office and the Army have issued six reports discussing CB defense initiatives for homeland defense. Unrestricted General Accounting Office reports can be accessed over the Internet at <http://www.gao.gov>.

General Accounting Office

General Accounting Office Report No. NSIAD-99-163 (OSD Case No. 1843), "Combating Terrorism: Need for Comprehensive Threat and Risk Assessments of Chemical and Biological Attacks," September 1999

General Accounting Office Report No. NSIAD-99-160 (OSD Case No. 1840), "Chemical and Biological Defense: Coordination of Nonmedical Chemical and Biological R&D Programs," August 1999

General Accounting Office Report No. T-NSIAD-99-184, "Combating Terrorism: Use of National Guard Response Teams Is Unclear," June 23, 1999

General Accounting Office Report No. NSIAD-99-151 (OSD Case No. 1807), "Combating Terrorism: Analysis of Potential Emergency Response Equipment and Sustainment Costs," June 1999

General Accounting Office Report No. NSIAD-99-110 (OSD Case No. 1774), "Combating Terrorism: Use of National Guard Response Teams Is Unclear," May 1999

Army

Department of the Army, Internal Review, Quick Response Audit Report No. Q99-6, "Utmost Advantage," June 29, 1999

Appendix C. WMD-CST Composition

Position	Rank	MOS ¹	MOS Description
Commander	O-5	01A	Officer Generalist
Deputy Commander	O-4	01A	Officer Generalist
Assistant Operations Officer	O-3	01A	Officer Generalist
Senior Operations NCO ²	E-8	54B	Chemical Operations Specialist
Operations NCO	E-7	71L	Administrative Specialist
Assistant Operations NCO	E-6	71L	Administrative Specialist
Logistics NCO	E-7	92Y	Unit Supply Specialist
Administrative NCO	E-5	75B	Personnel Administrative Specialist
Communications Team Chief	E-7	31U	Signal Support System Specialist
Information Systems Operator	E-6	74B	Chemical Branch Officer
Physicians Assistant	O-4	62B	Field Surgeon
Medical Operations Officer	O-3	70H	Health Services Plans and Operations
Nuclear Medical Science Officer	O-3	72A	Nuclear Medical Science Officer
Medical NCO	E-7	91B	Medical Specialist
Survey Team Leader	O-3	74B	Chemical Branch Officer
NBC ³ Reconnaissance NCO	E-7	54B	Chemical Operations Specialist
2 – NBC Team Chiefs	E-6	54B	Chemical Operations Specialist
4 – NBC NCOs	E-5	54B	Chemical Operations Specialist

¹MOS – military occupational specialty

²NCO – noncommissioned officer

³NBC – nuclear, biological, and chemical

Appendix D. Management Comments on the Finding and Audit Response

This section addresses comments provided by the Army Director of Military Support. The Army, in responding to the draft report, provided comments as a mark up of the draft report. The Army comments, have been extracted and are presented here with the associated audit responses. The Army comments and audit responses are presented by topic.

Education

Army Comments. The Army stated that the CSTs have been trained, but admitted that neither doctrine, the mission-training plan, nor the special text manual were completed. The Army also stated that the U.S. Army Chemical School may not have the resources to present the CST course during FY 2002 or FY 2003 because the establishment of the CSTs fell outside the Program Objective Memorandum Cycle. The Army also stated in its response that the course of instruction for the CSTs was taught by CST members and without the training aids that were just now being procured by CoMPIO.

Audit Response. We disagree that the CSTs could have been adequately trained when essential elements for training such as a final, signed doctrine; the mission-training plan; and the special text manual are not completed. The possibility of the training not being available, possibly for 1 or 2 years, because of funding constraints should be of paramount concern, given the high priority that this program should have.

The Army has not responded to questions raised concerning the qualifications and credentials of CST instructors. Although military occupational specialty qualification was required for most members of the CSTs, the Army Chemical School would not confer this qualification on CST members attending the course because they felt the course would not be accredited by Army Training and Doctrine Command. Lastly, the Army has still not adequately addressed the issue of training courses that would be required for the WMD-CSTs to operate in a given state. For example, although the California WMD-CST team members will receive DoD training, before they can operate in the state of California, they must also attend additional training required of all emergency responder personnel in California. The Army has maintained that, either this is an issue for the respective state national guards, or it is not an issue at all because the WMD-CSTs will be federalized under Title 10. We believe a training issue like this must be resolved before a WMD-CST becomes operational.

External Evaluations

Army Comments. The Army stated that “FORSCOM [Army Forces Command] did not have the subject matter experts to evaluate the procedures in the MALS, nor did successfully demonstrating these tasks require another scenario based external evaluation. Further, the Army stated

. . . nothing precluded FORSCOM [Army Forces Command] from conducting additional training with the units . . . The point that should not be missed in this observation is that the external evaluations corroborated that the teams were capable of performing their mission even without some of the personnel.

Lastly, the Army stated that “Operational equipment shortages (especially of PPE [personnel protective equipment]) have little to do with training.”

Audit Response. After the initial external evaluations were completed, the Commanding General, Army Forces Command, prudently recommended in his report to the Director of Military Support that the WMD-CSTs undergo another evaluation [mini-EXEVAL] on the items of equipment the teams were previously missing. The Director of Military Support acknowledged the execution of the EXEVALs and asserted that the requirement had been completed. Nothing further was required. Subsequent to the completion of the EXEVALs, the First and Fifth U.S. Armies both offered reevaluations for all 10 WMD-CSTs. Only one WMD-CST (New York) accepted the offer and underwent an EXEVAL with their equipment. It is also disconcerting for the Army to state that shortages in equipment have little to do with training; especially for units where a large majority of the equipment was purchased from commercial vendors. Unless the teams had the equipment, they could not possibly be trained on it because it was not standard issue within the Army. We reiterate that Section 511 of the FY 1999 Defense Authorization Act requires proficiency in all mission areas.

Certification Process

Army Comments. The Army response stated, “The WMD-CSTs who have requested certification have the requisite personnel, equipment, and training to be proficient in mission requirements.” The Army also stated that certification is a one-time requirement to comply with the requirements of Section 511.

Audit Response. Section 511 of the FY 1999 Defense Authorization Act is very straightforward, it requires the WMD-CSTs possess the requisite skills, training, and equipment to be proficient in **all** mission requirements.

Conversely, the criteria established by the Army for certification was a readiness rating of at least C3 (marginally combat ready), the completion of an external evaluation; and a request from the commander for certification.

Flaws in the education and training of the WMD-CSTs were discussed earlier in the report. Further, the Directorate of Military Support and CoMPIO failed to ensure that neither the training nor the EXEVALs were conducted in an order which ensured proficiency as required by Section 511. We also believe there is a need for recertification or readiness inspections of the WMD-CSTs. The Army does impose those types of requirements on other types of units in the Army, for example, tank and artillery crews.

Safety

Army Comments. The response stated that the Inspector General, DoD, auditors identified no safety issues. The Army also stated that true safety concerns can be reported to the Defense Consequence Management Support Center with requests for support or sent to an Equipment Technical Working Group for validation, and if necessary, action.

Audit Response. We met with representatives of the Army on several occasions to discuss issues, the majority of which dealt with safety-related matters identified by the WMD-CSTs. For example, the lack of information on the parameters of the commercial-off-the-shelf equipment was a continuing issue as was the lack of personnel in key positions, and specifically issues related to the MALS vehicle. The meetings included discussions with the Principal Deputy Assistant Secretary of Defense for Reserve Affairs, the Deputy Director of Military Support, the Director of CoMPIO, the Special Assistant to the Secretary of the Army for Military Support, and other Defense officials. At those meetings the Inspector General, DoD, personnel were dismissed by the Army as not being sufficiently sensitive to the importance of getting the WMD-CSTs certified. Further, it is neither expeditious nor reassuring to the members of the WMD-CSTs that they may have to await the decision of a working group to find out if they have a “true” safety concern while on call to respond to a possible WMD event. The WMD-CST members have safety concerns that the Army should address.

Equipment

Army Comments. The Army provided a variety of responses to the equipment concerns identified in the draft audit report. According to the Army, what few equipment-related issues that did exist have been rectified.

Audit Response. The Army comments attempt to minimize the importance of questionable equipment decisions made by CoMPIO without satisfactorily addressing them. For example, the issue of the florescent microscope not fitting inside the vehicle has been corrected through the use of extension cords with surge protectors, or unplugging other equipment in order to perform chemical analysis. The effect is a degradation to the mission of the WMD-CST. According to WMD-CST personnel, the florescent microscope is now to be used in a tent that is to be erected next to the MALS vehicle. The modification does

not adequately address the issue and raises other concerns. Further, the MALS has gone beyond its original concept to include movement of additional equipment at a cost of over \$400,000 with no consideration of the set-up and teardown time should a sudden wind shift occur. Another issue was the HEPA filter in the back of the MALS van. In response to questions about the safety of removing the HEPA filters, the Army stated that “this is contrary to the peer-reviewed certification of the system by a team of industrial hygienists at SBCCOM and experience of the SBCCOM team that installed and checked the filters. User feedback and concern, however, have been addressed by the . . . quality review.” We believe that the requirement for a single individual to remove five, metal-encased filters, each weighing about 30 pounds, into a thin plastic bag without puncturing it deserves additional attention.

Reliance on Commercial-Off-The-Shelf Equipment

Army Comments. The Army stated that of the 90 line items of equipment that are fielded to each WMD-CST, 70 percent are commercial-off-the-shelf and 30 percent are standard Army items of equipment. The Army stated that all of the items were coordinated through and approved by the National Guard Bureau headquarters. The Army stated that commercial-off-the-shelf equipment was acquired to enhance the capabilities of the WMD-CSTs and ensure their interoperability with the civil response units they support.

Audit Response. While some commercial items did not have any military equivalent, the majority of items did have a standard issue counterpart. For example, the Army had developed a Level-A suit that the survey team could use when entering the warm or hot zone. However, the teams were issued commercial suits instead. There was no evidence a comparison of the two suits was available. Commercial items of equipment were provided to the WMD-CSTs without sufficient review of all available military equipment. By choosing to go with the Interagency Board recommendations, a board they cochaired, CoMPIO bypassed DoD and Service processes for validation. As such, CoMPIO did not leverage existing resources but rather created additional logistics and sustainment costs. This contributed to increased cost estimates of \$10.9 million to equip a single team versus the original estimate of \$18.2 million to equip 54 teams. The WMD-CSTs are Army National Guard units and it is imperative that they have the same equipment as other Army National Guard units to the greatest extent possible.

Coordination with the Federal Bureau of Investigation

Army Response. The Army stated that the roles and missions of the WMD-CSTs have been clearly delineated in many forums and documents. The Army stated that the WMD-CSTs have been encouraged to coordinate to preclude any “hampering” of an incident response. The Army stated that the Army General Counsel advised against addressing any law enforcement references in the doctrine because the function of the WMD-CST is consequence

management, not crisis management. The Army also stated that the memorandum discussed in the audit report resulted from one team and an Federal Bureau of Investigation on-scene agent not communicating properly. Additionally, the Army stated that there is no need to be concerned that the WMD-CSTs would be collecting evidence, since their role is to only collect samples to identify potential agents.

Audit Response. The Army needs to establish the roles and missions of the WMD-CSTs beyond the advertised “advise, assist, and facilitate” that have been put forward in various arenas. This should begin with the recognition that crisis management and consequence management can and probably will occur simultaneously. There is no clearly recognizable time at which an event will transition from crisis management to consequence management. Both can occur simultaneously. The Army must also recognize and address the issue that samples of possible agents could also serve as evidence in the event of a criminal prosecution. The roles and missions of the WMD-CSTs will require continual coordination and updates with diverse Federal and state agencies.

Sustainment of the WMD-CSTs

Army Comments. The Army stated that one of the specific functions of CoMPIO was to develop the FY 2000-2003 Program Objective Memorandum requirements, and concluded that CoMPIO had properly managed the WMD-CST program. On the subject of recurring certifications of the WMD-CSTs, the Army stated that “neither the Army, nor the National Guard have included funding requests for these requirements in their annual budget submission. Even without additional funding the priority of these units will ensure they receive support before lower priority units.” The Army also stated that “the USACMLS [U.S. Army Chemical School] may not be prepared to present the course on its own until FY02 or 03 [FY 2002 or 2003]. Neither TRADOC [Army Training and Doctrine Command] nor the USACMLS have programmed resources to support this course or the WMD-CSTs as their initial fielding and training development occurred inside their POM [Program Objective Memorandum] cycle . . . the training has been paid for by Army funds, received in Program Budget Decisions, and Congressional adds, but has not been included in the Service POM. The FY02 [FY 2002] and FY03 [FY 2003] are at risk for lack of sustainment funding for the teams and the support organizations.”

Audit Response. These funding issues should be given close attention by DoD as the FY 2002 budget is finalized and the next POM is prepared by ARMY.



Appendix E. Report Distribution

Office of the Secretary of Defense

Under Secretary of Defense for Acquisition, Technology, and Logistics
Under Secretary of Defense (Comptroller)
 Deputy Chief Financial Officer
 Deputy Comptroller (Program/Budget)
Under Secretary of Defense for Personnel and Readiness
 Principal Deputy Assistant Secretary of Defense (Reserve Affairs)
Assistant to the Secretary of Defense for Chemical and Biological Defense Programs
Assistant to the Secretary of Defense for Civil Support
Senior Advisor to the Deputy Secretary of Defense for Chemical and Biological Protection

Department of the Army

Assistant Secretary of the Army (Financial Management and Comptroller)
Chief, National Guard Bureau
Auditor General, Department of the Army

Department of the Navy

Naval Inspector General
Auditor General, Department of the Navy

Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller)
Auditor General, Department of the Air Force

Unified Command

Commander in Chief, U.S. Joint Forces Command

Non-Defense Federal Organization

Office of Management and Budget

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

Senate Committee on Appropriations
Senate Subcommittee on Defense, Committee on Appropriations
Senate Committee on Armed Services
Senate Committee on Governmental Affairs
House Committee on Appropriations
House Subcommittee on Defense, Committee on Appropriations
House Committee on Armed Services
House Committee on Government Reform
House Subcommittee on Government Management, Information, and Technology,
Committee on Government Reform
House Subcommittee on National Security, Veterans Affairs, and International
Relations, Committee on Government Reform

The full text of Management Comments is located at:

<http://www.dodig.osd.mil/audit/reports/01-043pt2.pdf>

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