JOINT REPORT TO CONGRESS

PREPAREDNESS AND RESPONSE TO A NUCLEAR, RADIOLOGICAL, BIOLOGICAL, OR CHEMICAL TERRORIST ATTACK

DEPARTMENT OF DEFENSE
DEPARTMENT OF ENERGY

prepared in consultation with the:

FEDERAL EMERGENCY MANAGEMENT AGENCY

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Executive Summary

This "Joint Report to Congress" reflects current unclassified, post-event Consequence Management plans and capabilities. It is provided by the Department of Defense (DOD) and the Department of Energy (DOE) as requested by Public Law 104-106, Title III, Section 379. The report was developed in coordination with the Federal Emergency Management Agency (FEMA), as well as, many components of DOE and DOD. While this report focuses on Consequence Management (i.e. managing the consequences of the detonation of a weapon of mass destruction (WMD)), the Federal Government response to a domestic terrorist incident involving a nuclear, biological, or chemical (NBC) device might begin with Crisis Management (i.e. efforts to prevent or resolve a terrorist incident). The details of the Federal Government's capability for domestic Crisis Management response are only covered in general terms in this report for security reasons. However, it is absolutely essential that the Federal Government response to a terrorist WMD incident synergize the actions of both Crisis Management and Consequence Management in order to meet the entire spectrum of the threat. Additionally, there are times when both Crisis Management and Consequence Management operations will be taking place concurrently.

The investigation that has gone into this report has revealed the following facts:

The Federal Government has had in existence since the early 1980s extensive plans, procedures, and structure to respond to non-NBC terrorist incidents either overseas or domestically. We have developed a very comprehensive crisis response mechanism to terrorist incidents which has worked extremely well. Over four years ago, the interagency counterterrorism community began an in-depth review of terrorists using WMD: nuclear, chemical, and biological. The initial effort focused on crisis management of such incidents. Approximately eighteen months ago, the interagency community increased emphasis on dealing with consequence management aspects of WMD terrorist attacks. This second effort developed because it became increasingly clear that efforts in Crisis Management could swiftly transition into Consequence Management. These interagency counterterrorism community review efforts have led to major improvements in the capability of the Federal Government to respond to terrorists use of WMD.

First, there has been a fundamental shift in the level of Federal involvement and decision-making authority during a WMD domestic terrorist incident. In previous years, the Department of Justice, through the FBI, would lead the federal response during crisis management. Decision-making authority was often delegated down to the FBI Senior Agent In-Charge (SAC) on scene at the incident site. Due to the mass casualties, physical damage, and potential for civil disorder resulting from a WMD detonation, it was determined that Federal decision-making authority must now reside in Washington. Decisions on such incidents will be coordinated between Washington, State, and local officials whenever possible. Simply stated, a terrorist use or potential use of a WMD is considered a vital threat to the national security of the United States.

Next, as a result of the Oklahoma City bombing, many federal agencies have raised the priority of improving their response capabilities, streamlined response procedures, and have ensured that senior leadership will be involved in any WMD incident. A good example of this is DOD's Secretary of Defense review of "Military Assistance to Civil Authorities" completed in December of 1995. This review ensures that the Secretary of Defense personally overseas DOD responses to acts of terrorism both domestic and overseas. The SECDEF will be assisted in response to a domestic terrorist incident by both the Chairman of the Joint Chiefs of Staff, who will assist in managing the DOD operational response, and the Secretary of the Army, who is the Executive Agent for civil emergencies, and provides domestic civil assistance through the Army's Director of Military Assistance (DOMS).

Finally, the interagency community found that including Consequence Management experts at the very beginning of a Crisis Management response was absolutely essential for minimizing casualties, reducing public panic, and ensuring a rapid Federal response to State and local officials. The interagency counterterrorism community has also taken steps to include senior policy decision-makers for Consequence Management in their Washington deliberations on Crisis Management.

DOD, DOE, and FEMA currently have plans in-place to respond to most natural and man-made domestic civil emergencies. However, a potential NBC terrorist attack presents unique challenges. Due to the emerging threat of NBC terrorism, FEMA is presently coordinating the development of an annex to the Federal Response Plan (FRP) dealing specifically with response to NBC terrorist attack emergencies. FEMA is also writing and coordinating a "Report to the President" on the adequacy of the FRP to respond to NBC terrorism incidents. This is part of a Presidential call for an overall in-depth assessment of the capabilities of the federal response community to deal with the consequences of WMDs.

DOD, DOE, and the other Federal Agencies currently have some very highly trained, and well equipped teams that would be available for Consequence Management in case of a domestic NBC disaster. However, many of the Federal teams cited for Consequence Management are also employed in Crisis Management. This report details the excellent capabilities of many of the Consequence Management organizations found in DOD, DOE, and elsewhere. An example are DOE's Radiological Assistance Program's (RAP) teams who provide training to state and local authorities.

As compared to the potential threat, however, professional NBC response personnel are relatively few in number and the pieces of equipment necessary to provide adequate support to an NBC event are in some cases one of a kind. The Federal response community is hard at work increasing their capabilities, and revising plans to respond better to NBC incidents, but we have not yet achieved all that we can.

State and local authorities, as first responders, are in need of their own NBC equipment and supplies, and greater access to up-to-date NBC training. DOD has an inventory of combat supplies for NBC contingencies, but the use of DOD stockpiles of NBC supplies and materials for domestic emergencies will have a direct adverse impact on military readiness and force protection. Any decision to release DOD NBC defensive materials for a domestic emergency will be made by the Secretary of Defense.

The emergence of the potential use of chemical and biological devices as vehicles for terrorism requires innovative research into new response methodologies. Authorizing the use of existing NBC capabilities for response in new and different ways, and providing the appropriate resources for federal agencies to develop new technologies to combat this threat provides a challenging prospect for future work. Such a program would require significant policy decisions which are beyond the scope of this report.

Department of Defense and Department of Energy

JOINT REPORT TO CONGRESS

PREPAREDNESS AND RESPONSE TO A NUCLEAR, RADIOLOGICAL, BIOLOGICAL, OR CHEMICAL TERRORIST ATTACK

I. INTRODUCTION

A. Scope of the Report

This Joint Report to Congress, as requested by Public Law 104 -106, Title III, Section 379, summarizes Department of Defense (DOD), Department of Energy (DOE), and Federal Emergency Management Agency (FEMA) current plans, resources, and capabilities to respond to a chemical, biological, radiological, or nuclear domestic terrorist attack. It also provides some insight in what can be done to improve our national ability to deal with the consequences of such an incident. This report has been written at the UNCLASSIFIED level. Thus, only general comments on the Federal Government crisis response capabilities to a terrorism incident are discussed.

The cited law requests a "discussion of the military and civil defense plans and programs of DOD" for a "civil defense emergency" (domestic terrorist incident) in which "...DOD has a primary responsibility to respond." and one in which DOD has "...a supporting..." role. State and local authorities always have the primary responsibility to respond to any emergency within their jurisdiction. When requested, the Department of Defense can provide extensive assistance in those domestic emergencies that overwhelm the capabilities of state and local authorities[1], and DOE can provide unique, state of the art assets particularly if the emergency incident is of a nuclear or radiological nature.

The attacks on the World Trade Center in New York City and the Federal Building in Oklahoma City have added a new dimension to Federal Emergency Planning, which heretofore has been mostly focused on response to natural and technological disasters. Citizens of the United States can no longer rely on their home town being insulated from the hatred and violence so often expressed in the international community. A number of Federal Emergency Plans (e.g., the Federal Response Plan (FRP), the Federal Radiological Emergency Response Plan (FRERP), and the National Contingency Plan (NCP)) have been developed for particular emergency events. FEMA is responsible for coordinating federal response to domestic emergencies, with specific technical expertise provided by agencies such as the DOD, DOE, the Environmental Protection Agency (EPA), the Nuclear Regulatory Commission (NRC), the Public Health Service, and other members of the FRP interagency community.

[1] DOD Directive 3025.1, Military Support to Civil Authorities (MSCA). Needs to be requested.

B. Defining the Different Phases of a Terrorist NBC Incident

The federal response mechanism is, and must be, dynamic to meet unanticipated contingencies. There are two distinct different phases to a terrorist NBC incident commonly referred to as Crisis Management and Consequence Management. These phases can occur simultaneously, sequentially, or independently of each other.

In a domestic terrorist attack situation, the Federal Bureau of Investigation (FBI) of the Department of Justice is responsible for pursuing criminal matters related to the incident, and has been designated as the lead agency in this regard. Working the criminal aspects of a terrorist threat or attack is termed *Crisis Management Response*. Crisis Management Response involves measures to resolve the hostile situation, and investigate and prepare a criminal case for prosecution under Federal law. Close interaction between the FBI and federal responders from other agencies is critical to preserve evidence in the event of a terrorist event.

Procedures for Crisis Management are well defined within the interagency community at the national level. The national level Crisis Management terrorism response system meets on a weekly basis and is designed to respond rapidly to any terrorist threats and incidents upon notification. Domestic incidents involving NBC weapons by terrorists will automatically include FEMA and Public Health Service senior decision makers to cover Consequence Management efforts needed to quickly prevent and/or resolve any such incidents. The national level Crisis Management terrorism response system will facilitate and coordinate interagency support to the lead agency (the FBI for domestic terrorist incidents) during Crisis Management and will provide the same service to the lead agency (usually FEMA) during Consequence Management of any domestic terrorist incident, particularly those involving an NBC device.

Once an incident takes place, the primary responsibility for response to an emergency is with the State and local governments. The Federal Government provides assistance when the Governor of the affected state indicates that local capability is overwhelmed and requests assistance under the Stafford Act. However, since the President has defined the use of NBC weapons by terrorists a threat to the national security of the United States, he can elect to automatically declare a national emergency and provide immediate emergency assistance to State and local governments as provided under the Federal Emergency Response Plan (FRP). The designated lead agency for coordination of Federal assistance to State and local governments is the Federal Emergency Management Agency (FEMA). Supporting the affected community in managing the consequences of an incident is termed *Consequence Management Response*. Consequence Management Response involves measures to alleviate the damage, loss, hardship or suffering caused by emergencies. It includes measures to restore essential government services, protect public health and safety, and provide emergency relief to affected governments, businesses and individuals.

When a hazardous material is suspected at an incident site *Technical Operations* will be activated. Technical Operations involve measures to identify and assess the threat posed by the hazardous material, to provide consultation to decision makers concerning the implications of the hazardous material for Crisis Management and Consequence Management, to neutralize the

material, and to provide decontamination assistance. Technical Operations may be triggered pre-release in support of a Crisis Management Response and continue post-release in support of the Consequence Management Response. The lead agency for Technical Operations depends upon the material involved and the location of the incident.

C. Coordination with FEMA for Consequence Management

1. Summary of Concept of Operations

FRP

FEMA's Federal Response Plan (FRP) was developed by 27 Federal Departments and Agencies and the American Red Cross to facilitate timely coordination and application of all federal resources, including those of the Department of Defense. The FRP was built on the principal of functionality - 12 primary areas have been identified in which Federal support may be necessary in a disaster operation. Each of these 12 support functions is arranged with a designated lead agency to coordinate operations within that area of expertise. These areas have been designated Emergency Support Functions (ESFs). They are listed below (see chart) along with the cognizant lead agency.

Emergency	Support	Functions	(ESFs)		
1	2	3	4	5	6
Transportation	Communications	Public Works & Engineering	Firefighting	Information and Planning	Mass Care
DOT	NCS	DOD, Corp of Engineers	USDA, Forest Service	FEMA	American Red Cross

Emergency	Support	Functions	(ESFs)		
7	8	9	10	11	12
Resource Support	Health & Medical Services	Urban Search & Rescue	Hazardous Materials	Food	Energy
GSA	HHS, Public Health Service	FEMA	EPA	USDA, Food and Nutrition service	DOE

As shown, DOD and DOE are each the lead agency for one of the ESFs. DOD has been assigned Emergency Support Function #3, Public Works and Engineering, which is lead by the US Army Corps of Engineers (ACE), and DOE is the lead agency for Emergency Support Function #12, Energy. DOD is a supporting agency for each of the remaining eleven Emergency Support Functions (ESFs), while DOE helps in support of ESFs #1, 3, 5, 7, and 10.

The FRP is evolving into an "all hazards" plan which will include consequence management activities for terrorist events. There are a number of federal reports in-process which will provide plans and capabilities for response to terrorism (see below). Within this all inclusive framework, FEMA and other Federal Departments and Agencies have gained a great deal of

experience. In addition to actual disasters and emergencies, numerous exercises have been conducted to test plans and procedures to manage the consequences of terrorist events. In 1993, for example, FEMA conducted an Exercise known as CIVEX, which involved a biological terrorist incident (Anthrax) in the New York City subways. In this exercise, the Federal departments and agencies, as designated in the FRP, and State and City officials worked through the issues that would surround such an event.

2. FRP Review for the President

FEMA is currently working, along with its FRP signatory agencies, to produce a Status Report to the President on "Consequence Management for Nuclear, Biological, and Chemical (NBC) Terrorism". It will document the adequacy of the Federal Response Plan to deal with NBC terrorist incidents and make specific recommendations regarding capability enhancement. The report will contain a number of different terrorist attack scenarios that can be exercised in the future. It is anticipated that FEMA will publish a new annex to the FRP, titled the "Incident Annex for Terrorism Emergencies".

3. Federal Radiological Emergency Response

For events involving radiological materials, FEMA would coordinate the national response as the Lead Agency for Consequence Management in close coordination with the Lead Federal Agency determined under the guidelines set forth in the Federal Radiological Emergency Response Plan (FRERP). The FRERP is separate and independent from the FRP and would provide a major augmentation of capability available under the Stafford Act. For radiological emergencies DOE maintains unique emergency response assets and subject matter expertise. Additional radiological assets and technical personnel are available from agencies such as the Nuclear Regulatory Commission (NRC), the Environmental Protection Agency (EPA), the National Aeronautics and Space Administration (NASA), the Department of Health and Human Services (HHS), and the Veterans Administration (VA). Any incident invoking the FRERP, and which involves terrorists, will be managed by the national Crisis Management (terrorism response) system which in-turn would support FEMA as the Lead Agency for Consequence Management.

FRERP
Rad. Em.
Resp. Plan

D. DOD NBC Material Inventories

DOD also, has ongoing studies of its potential response to the growing domestic threats of NBC terrorist activity. The Secretary of Defense, in February of 1994, designated the Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs, ATSD (NCB), formerly Atomic Energy, as the single focal point for NBC defense (non-operational matters) within the Office of the Secretary of Defense (OSD). In addition, the Secretary appointed the Army as the Executive Agent for DOD to coordinate and integrate research, development, test, evaluation, acquisition, and military construction requirements of the departments for the NBC defense research program. Also, the Assistant Secretary of Defense for

ATSD

Special Operations and Low-Intensity Conflict {ASD(SO/LIC)} is responsible for fast-tracked research and development of items needed by the SOF community to combat terrorism, including NBC attacks. OASD(SO/LIC) cochairs the Technical Support Working Group responsible for the interagency coordination of counterterrorism R&D.

Information related to DOD's capabilities in an NBC combat scenario is well documented in the DOD Nuclear/Biological/Chemical Warfare Defense, Annual Report to Congress (Draft 3/96). This report provides detailed data, broken out by service, on the combat requirements for NBC supplies and equipment such as, gas masks, chemical detection kits, decontamination equipment, atropine autoinjectors, etc. It also breaks out the amount of these supplies that are in the DOD inventory.

Current stockpiles of these materials are maintained in extremely limited quantities necessary to respond to DOD contingencies and military-related chemical accidents or incidents. Using equipment and supplies from these stocks for domestic emergencies will directly impact military readiness and force protection. If used, they would require expeditious replacement.

When required, the decision to release NBC supplies and equipment from military inventories to state and local authorities will be made by SECDEF. The Secretary of Defense personally oversees DOD responses to acts of terrorism both domestic and overseas.[2 3] SECDEF will be assisted in response to a domestic terrorist incident by the Chairman of the Joint Chiefs of Staff, who will assist in managing the DOD operational response, and the Secretary of the Army, who is the Executive Agent for civil emergencies, and provides domestic civil assistance through the Army's Director of Military Support (DOMS).

II. FEDERAL SUPPORT TO TECHNICAL OPERATIONS

A. Nuclear Response

1. General

Five agencies -- DOD, the Department of Energy (DOE), the Environmental Protection Agency (EPA), the National Aeronautics and Space Administration (NASA), or the Nuclear Regulatory Commission (NRC) -- can be designated as Lead Federal Agency (LFA) under criteria for Radiological Emergencies as set forth in the Federal Radiological Emergency Response Plan (FRERP) (Draft 12/95) (see chart below). The role of the LFA is to lead and coordinate Federal on-scene actions and assist State and local governments in determining measures to protect life, property, and the environment. In a major incident which resulted in a Presidential emergency or major disaster declaration, the LFA would coordinate with the Federal Coordinating Officer (FCO) to assist in use of FRP resources. If terrorists are involved, the

[2] DODDIR 3025.XX, "Military Assistance to Civil Authorities", (Draft)

[3] Requests for overseas assistance may be received by the President or the State Department

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national Crisis Management terrorism response system will coordinate with FEMA on who will be the lead agency for Consequence Management.

The Federal Radiological Emergency Response Plan (FRERP) defines the DOE role as follows:

DOE will act as the Lead Federal Agency (LFA) for an event at a DOE facility, DOE managed transportation event, or an unknown event if concurred in by the other four potential LFAs (DOD, EPA, NASA, NRC). DOE will provide unique radiological response assets in support of a radiological event both when acting as an LFA and in support of other LFAs.

DOE will support the US Government (USG) response in managing the consequences of a radiological emergency or nuclear attack through various existing capabilities. DOE has personnel and equipment, and the operational readiness to assist in Consequence Management following a radiological emergency or nuclear attack. DOE volunteers who work within the DOE nuclear complexes make up the staff. Their competency is derived from their daily responsibilities in the nuclear programs, and their operational readiness is assured through specific, training, drills and exercises. DOE capabilities total more than 400 personnel and they and their equipment are available to assist where ever their expertise is required.

2. DOE Capabilities

Threat Assessment Capability

DOE also provides communicated threat assessments involving nuclear materials or other weapons of mass destruction. Requests for assessment can originate from law enforcement agencies (FBI, US Customs, or other Federal Agency) or the international community. DOE assesses and evaluates the world-wide black market/illicit sales of nuclear materials events and maintains a database of incidents in support of the domestic and international enforcement community. DOE manages and maintains the Threat Assessment Communications System (SCAT), a dedicated, secure electronic communication system to expedite DOE emergency response to a nuclear threat. These capabilities originate from the Atomic Energy Act, NSDD for Malevolent Nuclear Activity, and an FBI - Energy Research and Development Administration (ERDA) MOU.

DOE participates in threat assessment research projects; produces products to identify threats; facilitates the joint DOE/FBI communicated threat profiling activities; and strives to improve detection of trends and patterns in criminal and potential nuclear threat activities. This capability originates from the Atomic Energy Act (Section 161.K), Joint Project Statement between the DOE and the FBI.

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IDENTIFICATION OF LEAD FEDERAL AGENCY FOR RADIOLOGICAL EMERGENCIES	
Type of Emergency	Lead Federal Agency (LFA)
Nuclear Facility	
- Licensed by NRC or and Agreement State	Nuclear Regulatory Commission (NRC)
- Owned or Operated by DOD or DOE	DOD or DOE
- Not Licensed, Owned, or Operated by a Federal Agency or an Agreement State	Environmental Protection Agency (EPA)
Transportation of Radioactive Materials	
- Shipment of Materials Licensed by NRC or an Agreement State	NRC
- Materials Shipped or for DOD or DOE	DOD or DOE
- Shipment of materials not licensed or owned by a Federal Agency or and Agreement State	EPA
Satellites Containing Radioactive Materials	National Aeronautics and Space Administration (NASA) or DOD
Impact from Foreign or Unknown Source	EPA
Other Types of Emergencies	LFAs confer

(Federal Radiological Emergency Response Plan (FRERP))

Nuclear Emergency Search Team (NEST)

DOE's Nuclear Emergency Search Team, more commonly known as NEST, consists of technical specialists who are prepared to respond quickly with specialized instrumentation and equipment to assist federal agencies in locating nuclear weapons or special nuclear material that may be lost, stolen or associated with bomb threats. NEST capabilities include search and identification of nuclear materials, diagnostics and assessment of suspected nuclear devices, and disablement and containment programs. However, this Report to the Congress focuses on Consequence Management. NEST personnel and equipment, while deployable at all times, are usually deployed as a Crisis Management response element.

Nuclear Response Cont.

Radiological Dispersion Predictive Capability

Atmospheric Release Advisory Capability (ARAC)

The Atmospheric Release Advisory Capability (ARAC), located at Lawrence Livermore National Laboratory (LLNL) in Livermore, CA, is a computer based predictive modeling capability for tracking atmospheric dispersions of radiation and hazardous materials. The model accounts for real-time meteorological conditions and topographical phenomena. Initial predictions can be made within 1 hour after receipt of specific information and updated thereafter as new data becomes available. ARAC output consists of maps showing airborne concentrations and contamination distribution caused by the release of radioactive material, and also the amount of radiation dosage on the affected population.

Aerial and Surface Monitoring Assessment

Aerial

DOE has helicopters and 2 fixed-winged aircraft which perform aerial radiation surveys using gamma spectroscopy to locate and characterize radioactively contaminated areas. The fixed-winged aircraft are capable of performing the initial radiological survey and can perform real-time radiological aerial air sampling and radioactive plume tracking. These aircraft are capable of night and all-weather operations. The helicopters are used to perform exhaustive radiological mapping of the contaminated area.

The aircraft are part of the DOE Aerial Measuring System (AMS) which is based at Nellis AFB near Las Vegas, Nevada and Andrews AFB near Washington DC These aircraft can be deployed within two hours of notification. Within CONUS, the fixed-winged aircraft can arrive at the contaminated site within 4-8 hours under favorable weather conditions.

Surface

Radiological Assistance Program (RAP) Regional Team

RAP teams are often the first responders to the scene based on their small numbers, light loads and geographic proximity. Teams consist typically of several health physicists (radiation control and safety experts) and radiological detection and measurement technicians. These teams are located throughout the US and provide identification of the presence of radioactive contamination. Eight RAP Regions located throughout the CONUS are capable of providing 38 radiological monitoring teams which include 3 health physicists per 6 person team. The RAP Teams are equipped with handheld radiation monitoring devices for alpha, beta, and gamma radiation; air monitoring equipment; anti-contamination clothing; and various types of communication equipment. In addition to radiation monitoring, the RAP teams can also provide initial medical advice on the handling of contaminated personnel who may be injured. A RAP

Nuclear Response Cont

team can usually be activated and deployed within two hours of a request for assistance from State, tribal, or local government officials. There are over 200 personnel available at the various DOE facilities that can be deployed as part of a RAP Team.

Accident Response Group

DOE's Accident Response Group (ARG) is the primary response element if an accident or event occurs with nuclear weapons. The ARG is composed of scientists, technical specialists, crisis managers and equipment ready for short notice dispatch to the scene of a nuclear accident. The ARG is specially trained in weapon recovery operations and in evaluating, collecting, handling and mitigating radioactive and other weapons-associated hazards.

ARG can also provide mobile laboratories to the scene which are managed and operated by Lawrence Livermore National Laboratory and Los Alamos National Laboratory for the ARG. The HOT SPOT mobile laboratory includes 2 trucks with stored portable instruments and 2 trailers containing a sophisticated radiation-counting laboratory. HOT SPOT carries portable survey instrumentation and detectors for alpha, beta, gamma and neutron radiation. The radiation counting laboratory contains a computer-based pulse-height analyzer, gas flow proportional counter, a tritium analytical capability, and a portable wound counter.

- The RANGER is a van containing a sophisticated ground contamination survey system which can provide isodose plots indicating radiation contamination levels and position. It contains Radioactivity Detection Indication and Computation (RADIAC) equipment.

- RASCAL is a mobile radioactive air sampling laboratory which contains eight portable air samplers and generators and also an air sampling laboratory.

Monitoring and Assessment Coordination and Support

DOE will deploy in coordination with another Federal agency and state, tribal, or local government a Federal Radiological Monitoring and Assessment Center (FRMAC). FRMAC provides a mobile communications and data management assessment team which coordinates all Federal agency radiological monitoring and assessment activities for the lead Federal agency or applicable state, local or tribal government. An advance party can be deployed within hours using DOE or commercial air. Military transport of the main contingent is relied upon for timely deployment to the scene. Typically, a FRMAC can be mobilized for lift-off and operation anywhere in the CONUS in 24 to 36 hours. (Note: The Advisory Team for Environment, Food and Health (ATEFH) is often deployed along with the FRMAC. ATEFH consists of representatives from EPA, Health and Human Services (HHS), and the US Department of Agriculture (USDA), and may be collocated with and have access to FRMAC data.)

The FRMAC will consist of 50 to 200 personnel per shift depending on the emergency situation, and includes personnel from all of DOE's radiological emergency response assets. The

Nuclear Response Cont

FRMAC has organic communications, general office, computer, and command and control equipment needed to operate as a coordination center including diesel generators and tents, if required.

After DOE completes its radiological characterization of the incident site, it will transfer the operation of the FRMAC to EPA to coordinate the performance of long-term radiological Consequence Management activities, such as, site restoration. If requested by EPA, DOE will provide technical assistance during this phase of the Consequence Management, as well.

Radiological Medical Advice and Assistance

DOE provides 24-hour consultative assistance service for medical and health physics problems associated with radiation incidents through the Radiation Emergency Assistance Center and Training Site (REAC/TS) located in Oak Ridge, Tennessee. A response team normally of approximately six members consisting of a physician, nurse, health physicist, cytogeneticist and radiobiologist can be deployed in an emergency to assist in nuclear incidents. This team can travel commercially or by light aircraft. The members are trained and equipped to perform medical and radiological triage; use decontamination procedures and therapies for external contamination and internally deposited radionuclides including chelation therapy; conduct diagnostic and prognostic assessment of radiation induced injuries; and conduct radiation dose estimates using dosimetry, bioassay, and in-vivo counting. Deployable equipment includes pharmocologics for treatment of internal contamination, a capability for treatment of conventional injuries and illnesses, and a Standard Advanced Cardiac Life Support and Advanced Trauma Life Support capability. REAC/TS also maintains a list of health care professionals throughout the United States who have been trained by REAC/TS for radiological emergencies. These professionals may also provide medical support.

DOE emergency response assets are critical in the near term stages of nuclear consequence management. Each of these unique assets are constantly improving their abilities through training, exercising and updating equipment to ensure that our federal response remains viable and effective during radiological events.

3. DOD Capabilities

The recent SECDEF review of military assistance to civil authorities clearly changes the response mechanism for DOD to any domestic terrorist event. All DOD assistance for a terrorist event will be personally managed by the SECDEF, and assisted by the Chairman of the Joint Staff. DOD Crisis Management response will work through the national interagency terrorism response system. All DOD Crisis Management response units will work for the Joint Special Operations Task Force Commander (JSOTF). This task force will be assigned to the appropriate Unified Combatant Commander (CINC), but during actual operations execution will report directly to the National Command Authority. Units for Consequence Management will report to the Crisis Response Task Force Commander who will directly support the JSOTF commander.

Nuclear Response Cont

In the event that only Consequence Management units are required to resolve the incident, the Secretary of the Army will assist the SECDEF for Consequence Management through the Director of Military Support. The CRTF Commander will control all DOD units deployed to the incident site. The CRTF Commander will always report to CINC, whether deployed for Crisis Response or just for Consequence Management.

DOD units listed below have certain Consequence Management response capabilities to provide assistance during a domestic terrorist event. However, very few are funded, manned, or structured for an immediate response at any given moment. Additionally, several of the units mentioned are either primarily Crisis Management response units or could be already committed for such a response. This dual tasking of units could create shortfalls in certain scenarios. The aforementioned procedures outlined for this section on nuclear response also apply in totality for chemical and biological domestic terrorist incidents.

Armed Forces Radiobiology Research Institute

Armed Forces Radiobiology Research Institute (AFRRI): This is DOD's sole laboratory for conducting biomedical research to address military medical operational requirements for dealing with the prompt and delayed effects of radiation exposure. AFRRI is currently assigned to the Uniformed Services University of the Health Sciences.

Defense Technical Response Group (DTRG)

Defense Technical Response Group (DTRG): DTRG, part of the Naval EOD Technical Division (NAVEODTECHDIV), is a joint-service manager for explosive ordnance disposal. DTRG, under DOD 3150.5, provides on-site operational and technical support personnel, equipment, and technology (R&D) to DOE and DOD units. DTRG also provides support to military EOD technicians in the field at all command levels. Primary duties include providing safe access routes to suspect ordnance, training, and liaison support to other agencies. DTRG is deployable within 4 hours.

Defense Nuclear Agency

The Defense Nuclear Agency (DNA): DNA operates a Joint Nuclear Accident Coordination Center (JNACC) in cooperation with the Department of Energy. The JNACC maintains current records reflecting the location and capability of specialized units and teams that can be used for a nuclear accident/attack response - the Nuclear Accident Response Capability Listing (NARCL). The JNACC can assist the DOD Crisis Response Task Force (CRTF) Commander or the Joint Special Operations Task Force (JSTOF) Commander at the incident site and the National Military Command Center (NMCC) in locating and dispatching required technical resources.

DNA maintains a deployable advisory team called the Defense Nuclear Agency Advisory Team (DNAAT). DNAAT assists the On-Scene Commander (OSC) through the CRTF Commander or the JSTOF Commander in the management of nuclear related issues. The

Nuclear Response Cont

DNAAT can advise on the DOD assets best suited to meet the requirements of the incident. The team is on-call 24 hours a day and can deploy within 6 hours of notification. The DNAAT is task-organized and includes the following personnel:

- Several officers from the Services qualified in various nuclear-related fields. These officers deploy to the incident scene and, as needed, act as liaison officers in the Washington area and other headquarters.

- Legal and public affairs experts who are familiar with nuclear response policies and plans.

- Special security operations project team members.

- Health physicists and radiological advisors from the Armed Forces Radiobiological Research Institute (AFRRI).

Also, the Medical Radiobiology Advisory Team (MRAT) may be included in the DNAAT. The MRAT can assist medical personnel by providing the most current medical guidance regarding the treatment of radiation casualties.

DNA RDT&E

In addition to the work described above, DNA maintains an active RDT&E program in support of the warfighting CINCs and other customers which contributes to improving technical capabilities relevant to counterterrorism. Some of these capabilities include:

- Explosive research for determining contamination ranges, predicting affects to structures, tagging and subsequent identification of users, and means to mitigate affects

- Developing technologies for the identification and characterization of nuclear, chemical, and biological munitions to include target characterization

- Enhancing weapons systems and facility survivability to Weapons of Mass Destruction (WMD)

- Modeling for the estimation of hazards from attack upon weapons and/or facilities

- Facilities and systems vulnerability assessments to WMD and explosive threats

- Collateral effects prediction, mitigation, and remediation

Nuclear Response Cont

Service Capabilities - US Air Force

Air Transportable Radioactivity Detection Indication and Computation (RADIAC) Package

US Air Force Air Transportable RADIAC Package (ATRAP): ATRAP provides on-site repair and calibration of RADIAC equipment; is manned by trained instrument repair technicians; and carries a collection of RADIAC equipment, and spare parts. Located at Kelly AFB, TX, ATRAP is deployable within 4 hours.

Air Force Radiation Assessment Team

Air Force Radiation Assessment Team (AFRAT): A deployable team of health physicists, technicians and equipment, AFRAT provides bioenvironmental support, radioisotope analysis, radiation protection, and consulting support. Located at Brooks AFB, TX, AFRAT is deployable within 5 hours.

Air Force Technical Applications Center

Air Force Technical Applications Center (AFTAC): AFTAC located at Patrick AFB FL, provides post-detonation plume trajectory prediction, meteorological modeling, complete plume analysis/characterization, and leading edge technology development for monitoring of chem - bio activities. AFTAC deploys a dedicated C-135 collection platform aircraft stationed in Omaha.

Service Capabilities - US Army

Radiological Advisory Medical Team

Radiological Advisory Medical Team (RAMT): Specially trained in radiological health matters, this team can provide assistance and guidance to the on-scene CRTF and local medical authorities. The team is located at Walter Reed Army Hospital, Washington, DC.

Radiological Control Team (USA)

Army Radiological Control (RADCON) Team: This team is organized to provide radiological monitoring support and advice to the CRTF. The team is deployable from Ft. Monmouth, NJ within several hours.

Nuclear Response Cont

US Army, 52nd Ordnance Group

US Army, 52nd Ordnance Group: This team, located at Fort Gillem, GA, provides EOD support to incidents involving nuclear, chemical, biological, or high technology devices and is the primary agency for access and disablement operations. During these incidents the 52nd Ordnance Group jointly develops, with DOE, the disablement plan and subsequently implements the approved disablement option. The team is deployable on extreme short-notice.

Service Capabilities - US Navy

Radiological Control Team (USN)

The Navy RADCON Team can provide expert health physics (radiation control and safety) assistance to the CRTF. The team is deployable from Norfolk, VA within several hours.

B. CHEMICAL - BIOLOGICAL RESPONSE

1. General

Department of Health and Human Services (DHHS) Support Plan

For incidents involving biological or chemical material, the DHHS is leading the development of an "Interim Health and Medical Services Support Plan for Federal Response to Acts of Chemical/Biological Terrorism". This will include threat assessment, consultation, agent identification, epidemiological investigation, hazard detection and reduction, decontamination, public health support, medical support, and pharmaceutical support operations.

Environmental Protection Agency's (EPA) National Contingency Plan (NCP)

For incidents involving hazardous materials, the EPA implements the National Contingency Plan (NCP) for Oil and Hazardous Substances to coordinate the environmental response. This will provide environmental monitoring, decontamination and long term site restoration (environmental clean up) operations.

2. Department of Defense Capabilities

Those procedures outlining the DOD response mechanism for a domestic nuclear terrorist incident also apply to chemical and biological incidents (see paragraph II A. 3).

Chemical, Biological Defense Command (CBDCOM)

With its history of more than 75 years of research and development focused on chemical and biological protection for the US Armed Forces, the Chemical, Biological Defense Command (CBDCOM) teams maintain the capability to support the national response to an incident both on and off the battlefield. These teams, located in Edgewood, Maryland, include the Technical Escort Unit (TEU), the Edgewood Research, Development and Engineering Center (ERDEC) and the Army Material Command Treaty Laboratory.

CBDCOM provides staff and overwatch support to the deployment and activities of the Technical Escort Unit (TEU), and maintains an emergency response capability to respond to chemical and biological accidents/incidents worldwide as required to support DOD, Federal, State and local agencies. CBDCOM also, monitors research, development and technology programs of the Chemical Biological Counterterrorism Team (C/B-CT) ERDEC, in support of emergency response forces, and ensures complete integration of technology and responders.

Edgewood Research, Development and Engineering Center (ERDEC)

Chemical, Biological (CB) Counterterrorism Team

Chemical, Biological (CB) Counterterrorism Team (C/B-CT) : The C/B-CT falls under the Edgewood Research, Development, and Engineering Center (ERDEC). It works closely with other federal agencies and develops technological countermeasures and equipment that warns and responds rapidly in the event of a chemical or biological incident. The Chief of the CB Counterterrorism Team cochairs with DOE the Technical Support Working Group's subgroup on weapons of mass destruction countermeasures responsible to both the Interagency and International Working Groups on CB Counter-terrorism Technical Response.

Mobile Analytical Response System (MARS)

Mobile Analytical Response System (MARS): ERDEC also maintains a rapidly deployable mobile environmental monitoring and technical assessment system, the Mobile Analytical Response System (MARS). This system is a seven component asset that provides for state-of-the-art analytical assessment of chemical or biological hazards at an incident site. The seven modules of the MARS are as follows:

- Remote Biological Diagnostic Module, a Biological Integrated Defense System for the US Army mounted in a Mil Van

- Modular Chemical Laboratory capable of handling neat agent

- Real Time Analytical Platform (RTAP), a chemical laboratory mounted inside a step van.

- Mobile Environmental Analytical Platform (MEAP), an improved version of the RTAP mounted on a semitrailer.

- Remote Chemical Agent Detector (RCAD), an integrated instrument containing a Surface Acoustic Wave and an Ion Mobility Spectrometer detector, coupled with a miniature meteorological station. The device transmits data remotely over a radio link to a central station.

- Fourier Transform Infrared Detector (FTIR), a detector capable of detecting any chemical crossing through a reflected beam.

- Mobile Emergency Response Center (MERC), a trailer equipped with chemical-biological databases, hazard prediction models and secure communications equipment.

US Army Technical Escort Unit (TEU)

US Army Technical Escort Unit (TEU): This one of a kind unit provides worldwide escort, neutralization, disposal and emergency response to toxic chemicals, munitions, and other hazardous materials.

The TEU maintains a 24 hour a day on-call emergency response capability to respond to a chemical or biological (C/B) incident with personnel trained in chemical, biological and Explosive Ordinance Disposal (EOD) operations to perform render safe procedures (RSP), damage limitation, reconnaissance, recovery, sampling, mitigation, decontamination, transportation, and perform or recommend final disposition of weaponized and non-weaponized C/B materials and hazards encountered.

The TEU provides emergency response for the mitigation of chemical warfare material found at Aberdeen Proving Grounds, Formerly Utilized Defense Sites (FUDS), and other environmental clean-up sites, where chemical warfare materials were tested.

TEU maintains 2 separate 24 hour, on-call, response capabilities:

- Chemical/Biological Response Team (CBRT) - The CBRT consists of 10 chemical and explosive ordnance disposal specialists that maintain a 24-hour, on call, 4-hour wheels up capability for worldwide deployment as the first responders to a threat of or actual C/B accident or incident, and emergency response involving chemical or biological agents, toxic chemicals, munitions, devices and other hazardous materials.

- Alert Team - The Alert Team maintains a 24-hour, on-call capability to respond to incidents involving C/B agents and munitions. In the event of a large C/B accident or incident around the world, this team would serve as the first tier/echelon of any TEU follow-on response package. The response can be specifically tailored, but normally consists of a command and control element including the following:

— Immediate Response Team - Conducts reconnaissance of the incident site; identifies munitions and hazards; performs render safe procedures on munitions; performs hazard mitigation (within their capability); provides small area decontamination; and advises the on-scene coordinator on personnel and equipment requirements.

— Personnel Decontamination - Conducts decontamination of personnel existing at the incident site; controls entry to/exit from site; and secures clothing/equipment of processed personnel. Also, decontamination support could be obtained from most military installations in the vicinity of the incident site.

Equipment: TEU has the following Chemical/Biological Sampling, Detection, and Identification equipment:

CB Sampling Kit
Biological Chromatograph Detector Ticket Kits
Portable Isotopic Neutron Spectroscopy (PINS)
MINICAMS
M1 Chemical Agent Monitor
M90 Chemical Agent Detector
Draeger Detector Tubes
M18A2 Chemical Agent Detector
Monitox (phosgene detector)
Microtip-Photo Ionization Detector (PID), VOCs
AIMS (multi-gas Explosive LELs), multi-gas explosive LELs
Flame Ionization Detector (FID), multi-chemical detector
Various Levels of Personnel Protective Clothing
Industrial/Commercial X-ray Equipment
Decontamination Equipment
Hazard Mitigation Equipment

TEU also possesses a deployable analytical capability, which includes a portable Gas Chromatograph/Mass Spectrometer with an associated software library. This system is used to make an initial determination of chemical components in the specified area monitored. Up to 75 compounds can be checked in the library.

Personnel/Organization: TEU is authorized 19 officers, 63 enlisted and 68 civilians. The unit's two primary military occupational specialties are chemical and explosive ordnance disposal (EOD). Of the 68 civilians, 43 are Toxic Material Handlers which possess skills similar to the military chemical specialty. TEU headquarters is at Aberdeen Proving Grounds (Edgewood Area), with detachments at Pine Bluff Arsenal, Arkansas, and Dugway Proving Ground, Utah.

Education and Training: TEU personnel are required to attend a Technical Escort Course which trains them to identify toxic chemical agents or munitions, use decontamination and protection equipment, and conduct disposal operations. In addition, EOD personnel are trained to render safe munitions and explosive devices with the use of specialized tools and equipment. Unit certification includes all OSHA HAZWOPER courses, the hazardous materials packaging course, weapons and tactics training, and first aid and medical management for C/B agent casualties. Personnel are also provided training on C/B Site Identification, Gas Chromatograph

Mass Spectrometer, Portable Isotopic Neutron Spectroscopy, Radiation Safety, Commercial & Industrial X-ray Systems, and Commercial & Military Chemical Detectors and Monitors.

Deployment: The team can muster in 30 minutes during duty hours, 1 hour off duty hours and is required to load on a military aircraft with all equipment at Aberdeen Proving Ground (APG) within four hours.

TEU Shortfalls

Personnel Shortfall: There are 20 authorized civilian personnel vacancies in the TEU. Approval by DoD to hire the 20 civilians would strengthen the TEU and ensure enough personnel would be available to provide the required initial response force necessary to support a consequence management effort as a result of a C/B attack.

Equipment Shortfalls: TEU is fully mission capable, but lacks the depth and robustness to maintain the readiness status expected of this unique national capability. The TEU has many state-of-the-art pieces of equipment, but many are nearly one-of-a-kind. If DoD allocated additional funding, the TEU could procure more of these pieces of equipment to support multiple on-going routine and contingency operations. Highest priority is for real time biological detectors. Other equipment would include non-intrusive and stand-off detection capability for specific agents/materials, multispectral C/B detectors, personnel protection equipment improvements, tools and techniques for mitigation of C/B hazard, and better decontamination equipment.

CBDCOM Shortfalls

Response Shortfall: If DoD allocated additional funding, CBDCOM could develop a skilled, prequalified cadre of on-call personnel, including senior professional chemists and biologists for a Chemical and Biological Emergency Response Team (similar to the Nuclear Emergency Search Team (NEST). This would include an emergency response center equipped with updated chemical/biological data bases, hazard prediction models, and secure communications equipment.

Education Shortfalls:

- Technical experts at the CBDCOM have the knowledge to educate and train local law enforcement and emergency response personnel in the nature of chemical/biological agents and how to deal with those agents. If the DoD allocated additional funding a set of short (one to three day) courses could be established for regional and municipal personnel. Training courses could begin within 90 days.

- Technical experts at the CBDCOM have the knowledge to provide advice, guidance, and consultative assistance to all levels of government including our allies as required.

- Education and consultation services that could be provided if tasked and funded include:

-- An 800 Hotline phone number for emergency assistance for information on agent characteristics, detection, protection and remediation procedures.

-- Access to CBDCOM expertise for vulnerability assessments, assistance in training exercises, and guidance on hardening facilities against potential CB hazards.

-- Research into expansion of the use of chem-bio military equipment for utilization in the civilian sector.

-- Maintenance of an exhaustive data base on potential agents, precursors, potential delivery means, and toxicological effects.

US Army Nuclear and Chemical Agency (USANCA)

USANCA provides expert technical support and assistance to all Army elements worldwide and to other US Government and NATO agencies engaged in nuclear, biological, and chemical programs. USANCA participates in international standardization of NBC matters, establishes NBC contamination survivability criteria, and assists others on the effects of NBC weapons.

US Army Medical Research Institute of Chemical Defense (USAMRICD)

USAMRID at Aberdeen Proving Ground, MD, is responsible for the discovery, development, testing and evaluation of medical treatments and material to prevent and treat casualties of chemical warfare agents. USAMRID develops drugs, skin protectorants and decontaminants, and studies several biological threat agents as well.

US Army Medical Materiel Development Activity (USAMMDA)

USAMMDA manages the development of safe and effective combat casualty medicaments and diagnostic equipment, including drugs and vaccines to treat battlefield casualties of chemical and biological warfare or infectious diseases.

US Army Medical Research and Materiel Command (USAMRDC)

US Army Medical Research Institute of Infectious Diseases (USAMRIID)

US Army Medical Research Institute of Infectious Diseases (USAMRIID) is a subordinate laboratory under the US Army Medical Research and Materiel Command (USAMRDC), Ft. Detrick, Maryland. USAMRIID develops strategies, products, information, procedures, and training for medical defense against agents of biological origin and naturally occurring infectious diseases of military importance that require special containment. The mission is primarily focused on defense against potential biological warfare agents, but USAMRIID also performs research on endemic diseases that require specialized containment for working with the causative agents.

USAMRIID has many existing capabilities which can be directly employed for evaluating terrorist incidents from the initial communication of the threat or incident to its resolution. These capabilities include but are not limited to: technical expertise to assist in the evaluation of threat capability in relation to specific agent or agents; assistance in the evaluation of delivery methods and their impacts; identification of biological agents (infectious and toxic) in samples from an incident; technical and biomedical expertise required to protect personnel responding to such a terrorist incident or to decontaminate personnel and facilities; technical expertise to accomplish medical and operational planning; special vaccines for personnel who respond to (or are the target of) such incidents; and specialized transport of limited numbers of biological casualties under containment conditions to a receiving medical care facility.

USAMRIID has a 16-bed ward with the capability of isolating (up to a Biocontainment Level 3 level) patients with infectious diseases in a contingency situation. Within the same area is a special Biocontainment Level 4 (highest level of containment) patient care area designed for a maximum of 4 patients requiring this level of containment. These care areas are not currently capable of providing intensive care for critically ill patients, but could provide isolation and care of mild to moderately ill patients with augmentation of current staff. The 16-bed ward is primarily used for vaccine research protocols and not primarily for patient care during normal operations.

Special vaccines are available for some biological threat agents through USAMRIID's Special Immunization Program. USAMRIID also stocks limited quantities of the antiviral drug ribavirin, which may be useful in the prophylaxis and treatment of certain viral illnesses. A detailed listing of special vaccines is available upon request.

A key capability of the Institute is its staff of physicians who are experienced clinicians and also understand the unique diagnostic and therapeutic challenges posed by biological warfare agents, information with which most physicians are not familiar. Therefore a very specialized consultation capability is available through the Institute for use in responding to this type of threat.

Specific expertise is maintained through research activities supporting the overall mission of USAMRIID. These activities include pathogenesis studies, development of state of the art

vaccine and diagnostic assay programs in response to the biological threat, and application of products of USAMRIID's research to appropriate field and laboratory settings. Many of USAMRIID's scientists are world authorities in their particular fields and in regard to certain agents, and their knowledge and expertise is available for consultation at any time through appropriate command channels.

Aeromedical Isolation Team (AIT)

USAMRIID has developed the unique capability of deploying an Aeromedical Isolation Team (AIT) which is made up of physicians, nurses, medical assistants, and laboratory technicians who are specially trained to provide care to and transport patients with disease caused by either biological warfare agents or by infectious diseases requiring high containment. USAMRIID's teams are deployable worldwide on a 12 hour notice using USAF transportation assets. The AIT uses specialized isolation units called Vickers isolators which maintain a contained environment under negative pressure to safely transport such patients or to care for them in place for limited periods of time. This is a capability which is currently limited to two patients by the numbers of trained personnel and by the equipment on hand. Regular team training is accomplished through quarterly missions flown with the West Virginia Air National Guard.

USAMRIID Training

Training Offered: USAMRIID offers a quarterly course: "Medical Defense against Biological Warfare Agents", which is phase one of the combined "Medical Management of Chemical and Biological casualties" course taught in cooperation with our sister laboratory, the US Army Medical Research Institute for Chemical Defense. This course provides in-depth training on all aspects of medical prophylaxis and treatment of casualties due to biological threat agents. Although primarily intended for military health care providers, limited course slots could be made available to personnel from counter-terrorist agencies on a case-by-case basis, through the appropriate DOD channels.

US Army Medical Research Institute of Chemical Defense (USAMRICD)

Chemical Casualty Site Team (CCST)

US Army Medical Research Institute of Chemical Defense (USAMRICD) Chemical Casualty Site Team (CCST): USAMRICD CCST provides in-theater or on-site chemical casualty care training, research data collection, command liaison, clinical diagnosis, blood cholinesterase analysis, specimen collection for shipment to USAMRICD for analysis, and advise in support of tactical operations involving the threat or use of chemical weapons. Specific capabilities include the following:

- The CCST can conduct on-site blood cholinesterase testing of approximately 5,000 specimens over a period of three days, and of transport of biological specimens under liquid nitrogen to the USAMRICD for analysis.

- The CCST can collect clinical information and establish a modem based two-way data exchange with the USAMRICD local area network (LAN).

- The CCST can provide clinical consultation/diagnosis in the medical management of chemical casualties, and liaison with the local command authority.

Team Make-up: The CCST can provide a flexible response based on mission requirements. The response can range from two individuals to a team of 18 providing training, data collection, and clinical consultation at multiple sites simultaneously.

Deployment: The CCST is fully transportable by commercial air and can deploy within hours with no travel restrictions as a result of specialized equipment.

CCST Training

Training: The CCST can present formal training on the management of chemical casualties involving all known threat agents. Individual Medical Management of Chemical Casualties Handbooks are provided as part of this training.

CCST Equipment

Biological - Chemical Equipment. Items currently fielded by Army for reconnaissance, detection, identification, and decon are:

Chemical Agent Detector
Chemical Agent Detector
M256 Chemical Agent Detector Kit
M18A2 Chemical Agent Detector Kit
M272 Chemical Agents Water Testing Kits
DS2 Decon Solution
M11/M13 Decon Devices
M291 Decon Kit
Super Tropical Beach (STB) Decontaminant
M17 Lightweight Decon Apparatus
M1 Chemical Agent Monitor
Real Time Agent Monitoring Platforms (RTAPS)
Nerve Agent Antidotes (Atropine, Pralidoxime Chloride, and Convulsant Antidote for Nerve Agent) and Nerve Agent Antidote Kits (Atropine and Pralidoxime Chloride).
Nerve Agent Pretreatment (Pyridostigmine Bromide Tablets)
Patient Chemical Protective Wrap
Wheeled Field Litters
Skin Decontamination Kits

Generally, any hospital in the continental United States can provide patient care for individuals exposed to NBC agents. The uniqueness of NBC patients is that they must be decontaminated first. Patient Decontamination is addressed in Field Manual 8-10, Health Service Support in a Theater of Operations, and is a common skill all servicemembers (SMs) are trained to accomplish.

Naval Medical Research Institute (NAMRI)

NAMRI provides basic and applied research competence in infectious diseases, immunobiology/tissue transplantation, diving and environmental medicine, blood research, and human factors directly related to military requirements and operational needs. The Biological Defense Research Program (BDRP) reagents, assays and procedures have been designed for agents classically identified as biological threat, as well as non-classical threat agents, in environmental and clinical specimens. This program has developed rapid, hand-held screening assays as well as biosensor-linked confirmatory PCR and immunoassays for clinical and environmental samples which can be deployed globally.

Chemical Stockpile Emergency Preparedness Program (CSEPP)

CSEPP is a joint FEMA - Army program in which local assets are supplemented to respond to accidents/incidents at each of the eight chemical agent stockpile locations. Through this program, the Army provides technical assistance and required resources in developing and implementing emergency response plans and related preparedness capabilities, integrating the on- and off-post planning process.

III. ISSUES FOR THE CONGRESS

Although planning and procedures for a Federal response to an NBC incident are still evolving, substantial progress has been made, and continues to be made. Within the Federal Government there are a number of teams and organizations (primarily in DOD and DOE) which can help State and local civil authorities in a Nuclear, Biological, Chemical (NBC) terrorist response scenario. However, these team's NBC equipment is highly specialized and is not available in sufficient quantities to be quickly accessible to all major population centers, depending on the incident location.

Technical Operations (e.g. identification and assessment of suspect NBC material, and decontamination of personnel and environment) are clearly the rate limiting component for a response to an NBC incident. Technical Operations determine the ability of response personnel to operate in an NBC environment and to protect the affected community from the effects of NBC material, and will largely determine the overall success of the response. Allocation of additional funding by Federal agencies for Technical Operations capabilities (see body of this report) is definitely warranted. Funding is required to establish a DOD chemical/biological emergency response capability to support crisis and consequence management during a terrorist incident. An organization set up along the same lines as the DOE NEST Team would be a good start. DOD is attempting to establish such an organization.

The focus of efforts to significantly improve our ability to manage the consequences of a terrorist incident, however, should be on the first responders, the local police, fire, and rescue organizations. Local authorities need quick access to NBC detection, decontamination, and transport equipment when an incident involving NBC materials is suspected. Lack of timely arrival of well trained, community based teams, fully equipped with state-of-the-art equipment could cost thousands of lives. In most communities today across the nation, these casualties would include unacceptable numbers of irreplaceable emergency personnel.

FEMA's modern day "civil defense" efforts are embedded in a comprehensive, all-hazard, risk based approach. These efforts in concert with its partners in the Federal Response Planning community build upon civil defense expertise developed during the "cold war" era and are concentrated on strengthening the capability of first responders. These measures are designed to buy critical time in order that more extensive national technical expertise and resources (Technical Operations) can be brought to bear to assist State and local authorities.

- The equipment used by Federal Government Agencies is often too expensive for a local fire company to afford and maintain. NBC supplies (e.g. anti-toxins, chemical suits, etc.) in the DOD inventory cannot be readily provided by DOD because of limited numbers, and loss of readiness concerns.

- NBC equipment and supplies need to be distributed to major population centers throughout the US and maintained "On-Call" for use by state and local emergency responders.

(Note: If Federal agencies allocated sufficient funds to augment current procurement schedules for suits, masks, etc., these items could be made available in the very near term.
NBC detection equipment requires a high level of calibration and maintenance. If equipment is provided, annual calibration/maintenance costs must be factored in also.)

Another primary need, in regards to NBC response operations, lies with the provision of local level NBC training. Some specialized training is being provided by the Federal Agencies (FEMA, DOE, DOD) but it needs to be expanded to include such things as "Train the trainer" sessions on the operation of NBC detection and decontamination equipment, if that equipment is available, and identification, treatment, and transport of contaminated casualties.

Also, federal assistance might be provided to local organizations in development of their own training courses, curriculums, etc. Each state for example, has developed its procedures for responding to radiological emergencies, including establishment of state and local radiological response teams with assistance from DOE's Radiological Assistance Program (RAP) Regional Team.

A simple "heads up" by the 911 Operator might save some first responders their lives if he/she equates the report of multiple convulsion victims at multiple Metro Stations to a potential NBC attack. We need to safeguard those that put their lives on the line to safeguard us. (Note: By some accounts the first responder community numbers upward of 1 million personnel.)

TAB A - FEDERAL CONSEQUENCE MANAGEMENT[4] - AN EXAMPLE

The following actions would be taken, many concurrently, in response to a terrorist incident:

FEMA

Immediately after learning that an incident has occurred, FEMA would utilize its emergency authorities to notify the President, seek a Presidential declaration, notify the Federal Agencies, activate the Federal Response Plan, and begin coordinating the delivery of Federal assistance.

- The FEMA Director would consult with the Governor of the affected State to determine the scope and extent of the incident.

- Concurrently, the President, under the authority of the Robert T. Stafford Emergency Assistance and Disaster Relief Act, would declare an emergency and designate a Federal Coordinating Officer (FCO) to coordinate Federal emergency operations

- An emergency response team, made up of representatives from each of the primary Federal agencies, would be assembled and be deployed to the field to establish a Disaster Field Office and initiate operations.

- A Joint Information Center (JIC) would be established by representatives from each of the federal agencies. This center would be critical to getting the correct, coordinated information out to the public.

DHHS

The Department of Health and Human Services (DHHS), as the lead agency under the Federal Response Plan for health, medical, and health-related social services, would bring extensive capacities for patient care, disease prevention and control, and management of the health consequences of environmental contamination.

- Through its Public Health Service (PHS), DHHS would be primarily responsible for overall coordination of a number of critical activities in a chemical or biological terrorist incident. For example:

-- PHS would activate the National Disaster Medical System. This would include the provision of direct patient care in the field through the Disaster Medical Assistance Teams (DMATs).

[4] G. Clay Hollister, FEMA, remarks before the HNSC of 3/24/95 (excerpts)