



# Department of Defense MANUAL

NUMBER 3150.08-M

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ATSD(NCB)

SUBJECT: Nuclear Weapon Accident Response Procedures (NARP)

References: See Enclosure 1

1. PURPOSE. This Manual:

a. Reissues DoD 3150.8-M (Reference (a)) in accordance with the authority in DoD Directive (DoDD) 5134.08 (Reference (b)).

b. Implements policy, assigns responsibilities, and provides comprehensive procedures to ensure consistency with the National Response Framework (NRF) (Reference (c)) and compliance with DoD Instruction (DoDI) 3150.dd (Reference (d)).

2. APPLICABILITY. This Manual:

a. Applies to OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff (CJCS) and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the Department of Defense (hereafter referred to collectively as the "DoD Components").

b. May also be used by other Federal agencies when operating with the Department of Defense.

c. Addresses only U.S. nuclear weapon accidents. However, it may also be useful as a guide for the consequence management (CM) aspects of the response to a nuclear or radiological incident.

3. DEFINITIONS. See Glossary.

4. POLICY. It is DoD policy in accordance with Reference (c) and DoDD 3150.08 (Reference (e)) that:

a. The Department of Defense shall respond to and resolve U.S. nuclear weapon accidents while nuclear weapons are in DoD custody and all U.S. nuclear weapon accidents shall be considered to be hostile acts until proven otherwise. Additionally, when directed by the Secretary of Defense (SecDef) or when acting under immediate response authority (as defined in DoDD 3025.1 (Reference (f))) or emergency authority (as defined in DoDD 3025.12 (Reference(g))), the Department of Defense shall support the Department of Energy (DOE) in responding to U.S. nuclear weapon incidents in DOE custody in accordance with section 1535 of title 31, United States Code (U.S.C.) (Reference (h)), as applicable. DoD resources shall be made available when U.S. nuclear weapon accident response is coordinated by another Federal department or agency, consistent with operational availability and SecDef approval in accordance with References (c) and (f), National Security Presidential Directive (NSPD) 46/Homeland Security Presidential Directive 15 (Reference (i)), and consistent with applicable international nuclear accident-incident agreements, and in consultation with appropriate Federal, State, local, and host nation (HN) agencies and authorities.

b. U.S. personnel responding to an accident involving U.S. nuclear weapons or components on foreign territory will assist HN responders in saving lives, protecting property, and reestablishing U.S. custody and security of the weapon or component at the earliest possible time. In all aspects of response, DoD personnel will respect the sovereignty of the nation in which the accident occurs and cooperate fully with HN authorities.

5. RESPONSIBILITIES. Responsibilities are outlined in References (d) and (e). The Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs shall ensure compliance with this Manual

6. PROCEDURES. See Enclosure 2.

7. RELEASABILITY. UNLIMITED. This Manual is approved for public release and is available on the Internet from the DoD Issuances Website at <http://www.dtic.mil/whs/directives>.

8. EFFECTIVE DATE. This Manual is effective immediately.

Andrew C. Weber  
Assistant to the Secretary of Defense for  
Nuclear and Chemical and Biological  
Defense Programs

Enclosures

1. References
  2. Procedures
- Glossary

TABLE OF CONTENTS

ENCLOSURE 1: REFERENCES.....	7
ENCLOSURE 2: PROCEDURES.....	9
INTRODUCTION .....	9
Scope.....	9
Assumptions.....	11
COMMAND, MANAGEMENT, AND ORGANIZATIONAL STRUCTURES .....	12
General.....	12
Responsibilities .....	12
ICS .....	13
MACS .....	18
DoD Coordination and Response Organizations .....	19
Interagency Coordination and Response Organizations .....	22
SLT Coordination and Response Organizations.....	25
NGOs .....	26
Volunteer Organizations .....	26
Private Sector Organizations.....	26
CONCEPT OF OPERATIONS (DOMESTIC, MULTIJURISDICTIONAL RESPONSE) .....	27
Overview.....	27
Phase I: Notification and Deployment.....	29
Phase II: Initial Response.....	32
Phase III: Accident Site Consolidation .....	38
Phase IV: Weapon Recovery Operations.....	41
Phase V: SR .....	46
DoD SUPPORT TO DOE/NNSA.....	49
General.....	49
Authorities and Type of Support.....	49
Support to DOE.....	50
Funding .....	53
U.S. NUCLEAR WEAPON INCIDENT RESPONSE INVOLVING TERRORISM CONCEPT OF OPERATIONS .....	53
General.....	53
Authority.....	53
Organizational Structure .....	54
Operations .....	58
FOREIGN TERRITORY U.S. NUCLEAR WEAPON ACCIDENT OR INCIDENT RESPONSE CONCEPT OF OPERATIONS .....	59
Overview.....	59
Types of Accidents .....	59
Phase I: Notification and Deployment.....	60
Phase II: Initial Response.....	61
Phase III: Accident Site Consolidation .....	62

Phase IV: Weapon Recovery Operations and Disposition .....	63
Phase V: SR .....	64
SHIPBOARD ACCIDENT RESPONSE.....	64
General.....	64
Purpose and Scope .....	64
Location .....	65
TRAINING AND READINESS STANDARDS FOR RTF STAFF .....	73
Mandatory FEMA Training Courses (Found on the FEMA Website) .....	73
Suggested (Optional) FEMA IS Courses.....	73
DTRA Courses.....	73
Medical Education .....	74
National Guard JTF State Commanders Course.....	75
Exercises .....	75
Readiness .....	76
Conferences.....	76
WEBSITE .....	76
Functional Areas .....	76
Appendices.....	76
Radiation Data .....	77
Reference Documents .....	77
MANUAL REVIEW .....	77
Presidential Directives/New Legislation.....	77
Changes in Coordinating/Cooperating Structures .....	78
AARs.....	78
DTRU.....	78
GLOSSARY .....	79
ABBREVIATIONS AND ACRONYMS.....	79
DEFINITIONS.....	83
TABLES	
1. NRF Nuclear/Radiological Incident Annex Cooperating Agencies .....	13
2. Shipboard Accident Locations.....	65
FIGURES	
1. NIMS ICS .....	15
2. IRF Composition.....	16
3. RTF General Composition.....	17
4. Notional Coordination Structure.....	19
5. Sample JFO Organization .....	24
6. Domestic Nuclear Weapon Accident Notional DoD Response Decision Tree .....	27
7. Notional Phase Timeline.....	29
8. Nuclear Weapon Confirmation Guidelines.....	35

9. The SR Process .....47  
10. FBI Command Post.....55  
11. JOC .....56

ENCLOSURE 1

REFERENCES

- (a) DoD 3150.8-M, "Nuclear Weapon Accident Response Procedures (NARP)," February 22, 2005 (hereby cancelled)
- (b) DoD Directive 5134.08, "Assistant to the Secretary of Defense for Nuclear and Chemical and Biological Defense Programs (ATSD(NCB)), January 14, 2009
- (c) Department of Homeland Security, "National Response Framework," January 2008
- (d) DoD Instruction 3150.dd, "DoD Response to U.S. Nuclear Weapon Incidents," TBD
- (e) DoD Directive 3150.08, "DoD Response to Nuclear and Radiological Incidents," January 20, 2010
- (f) DoD Directive 3025.1, "Military Support to Civil Authorities (MSCA)," January 15, 1993
- (g) DoD Directive 3025.12, "Military Assistance for Civil Disturbances (MACDIS)," February 4, 1994
- (h) Section 1535 of title 31, United States Code
- (i) National Security Presidential Directive 46/Homeland Security Presidential Directive 15, "U.S. Strategy and Policy in the War on Terror," March 6, 2006
- (j) Department of Homeland Security, "National Incident Management System," December 18, 2008
- (k) Public Law 93-288, "Robert T. Stafford Disaster Relief and Emergency Assistance Act," as amended
- (l) DoD S-5210.41-M, "Nuclear Weapon Security Manual," July 13, 2009
- (m) Part 300 of title 40, Code of Federal Regulations
- (n) DoD Instruction 6055.17, "DoD Installation Emergency Management (IEM) Program," January 13, 2009
- (o) Title 32, United States Code
- (p) Homeland Security Presidential Directive No. 5, "Management of Domestic Incidents," February 28, 2003
- (q) Chairman of the Joint Chiefs of Staff Manual 3150.03B, "Joint Reporting Structure Event and Incident Reports," July 28, 2003, limited release
- (r) DoD Directive 5230.16, "Nuclear Accident and Incident Public Affairs (PA) Guidance," December 20, 1993
- (s) Section 1-521 of Public Law 104-191, "Health Insurance Portability and Accountability Act of 1996," August 21, 1996
- (t) DoD Instruction 5200.08, "Security of DoD Installations and Resources," December 10, 2005
- (u) Army Regulation 75-14, Chief of Naval Operations Instruction 8027.1G, Marine Corps Order 8027.1D, and Air Force Regulation 136-8, "Interservice Responsibilities for Explosive Ordnance Disposal," February 14, 1992
- (v) NUREG-1575, EPA 402-R-97-016, DOE/EH-0624, "Multi-agency Radiation Survey and Site Investigation Manual (MARSSIM)," August 2000
- (w) Sections 2011-2259, 6903, and 9601-9675 of title 42, United States Code
- (x) DoD Directive 3025.15, "Military Assistance to Civil Authorities," February 18, 1997
- (y) Sections 831, 1385, and 2332a of title 18, United States Code

- (z) DoD Directive 3020.40, "Defense Critical Infrastructure Program (DCIP)," August 19, 2005
- (aa) DoD Directive 5525.5, "DoD Cooperation with Civilian Law Enforcement Officials," January 15, 1986
- (ab) Sections 331-335, 375, and 382 of title 10, United States Code
- (ac) National Security Presidential Directive No. 28, "United States Nuclear Weapons Command and Control, Safety, and Security," June 20, 2003
- (ad) Technical Publication 20-11, "General Guidance and Materiel Hazard Information for Nuclear Weapons, Components and Nonnuclear Weapon Designations," April 24, 2009<sup>1</sup>
- (ae) Naval Ships Technical Manual, chapter 079, Volume II, "Damage Control-Practical Damage Control," February 25, 1999<sup>2</sup>
- (af) Part 165.20 of title 33, Code of Federal Regulations,
- (ag) Joint Publication 1-02, "Department of Defense Dictionary of Military and Associated Terms," as amended
- (ah) Section 2 of Public Law 107-296, "Homeland Security Act of 2002," November 25, 2002
- (ai) Part 171.8 of title 49, Code of Federal Regulations
- (aj) Sections 1601-1629h of title 43, United States Code

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<sup>1</sup> Available through DTRA/Combat Support Nuclear Logistics Branch , 1680 Texas Street SE, Kirtland AFB, NM 87117-5669

<sup>2</sup> Available through: Philadelphia Naval Business Center, Technical Manual Branch, Code 944, 5001 South Broad Street, Philadelphia, PA 19112-1403

ENCLOSURE 2

PROCEDURES

1. INTRODUCTION

a. Scope. This Manual provides the procedures and organizational templates for all the DoD Components responding to accidents involving U.S. nuclear weapons. The additional information and resources listed in section 9 of this enclosure can be found at <http://www.acq.osd.mil/ncbdp/narp>.

(1) General. This Manual is consistent with Reference (c) and the National Incident Management System (NIMS) (Reference (j)) published by the Department of Homeland Security (DHS). The response organizational templates in this Manual are based on the NIMS incident command system (ICS) that is used nationwide by Federal, State, local, and tribal (SLT) government entities. For domestic U.S. nuclear weapon accidents or incidents, DoD responsibilities are defined in accordance with the Nuclear/Radiological Incident Annex and the Terrorism Incident Law Enforcement and Investigation Annex of Reference (c). This Manual is designed for use by all DoD Components involved in the response to U.S. nuclear weapon accidents, as well as for the information of other Federal agencies (hereafter referred to as “interagency”) and SLT and host nation (HN) entities that respond to such accidents. The underlying premise of this Manual is that the responding DoD Components will integrate with other responding entities for maximum unity of effort.

(a) NIMS. NIMS (Reference (j)) represents a core set of doctrine, concepts, principles, terminology, and organizational processes to enable effective, efficient, and collaborative incident management at all levels. NIMS integrates existing best practices into a consistent, nationwide approach to domestic incident management that is applicable at all jurisdictional levels and across functional disciplines in an all-hazards context. NIMS is based on an appropriate balance of flexibility and standardization to enable interoperability and compatibility.

(b) NRF. The NRF (Reference (c)) is an all-discipline, all-hazards comprehensive framework for the management of domestic incidents. It provides the structure and mechanisms for the coordination of Federal support to SLT incident managers and for exercising direct Federal authorities and responsibilities. As the NRF is always in effect and the activation of any of its elements is not dependent upon any type of declaration, e.g., Public Law 93-288 (Reference (k)), these NRF structures and mechanisms apply to all U.S. nuclear weapon accidents, regardless of scope, magnitude, or severity. The Nuclear/Radiological Incident Annex of Reference (c) describes the Federal coordinating structures and processes used during an incident requiring a coordinated Federal response involving nuclear and/or radiological materials. Together, References (c) and (j) integrate the capabilities and resources of various governmental jurisdictions, incident management and emergency response disciplines,

nongovernmental organizations (NGOs), and the private sector into a cohesive, coordinated, and seamless framework for domestic incident management.

(2) Domestic Accidents

(a) U.S. nuclear weapon accidents are considered domestic if they occur in any of these geographic areas: any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, the Republic of the Marshall Islands, or any waters within the jurisdiction of the United States.

(b) In a domestic accident involving a U.S. nuclear weapon in DoD custody, the responding DoD Components shall apply the procedures identified in this Manual. In situations where this Manual conflicts with NIMS (Reference (j)), the NRF (Reference (c)), or legislated authorities, then those documents or authorities shall apply.

(3) Foreign Accidents

(a) U.S. nuclear weapon accidents that occur in an area not listed in subparagraph 1.a.(2) of this enclosure shall be considered foreign accidents. The U.S. Department of State (DOS) leads the Federal response to U.S. nuclear weapon accidents that occur within the territorial boundaries or waters of a foreign nation. Accidents occurring outside the boundaries or waters of a foreign nation will be considered single-jurisdictional accidents and will be the responsibility of the Combatant Command in whose area of responsibility (AOR) the accident takes place. Foreign accidents are addressed in greater detail in section 6 of this enclosure.

(b) Foreign accidents fall into two categories: those occurring on a U.S. occupied installation in a foreign country or those occurring off of a U.S. occupied installation in a foreign country. Regardless of the foreign location, DOS will lead the U.S. response.

(c) In foreign accidents involving a U.S. nuclear weapon, responding DoD Components shall use the basic initial response force (IRF) and response task force (RTF) organizational structures and applicable procedures identified at <http://www.acq.osd.mil/ncbdp/narp>; measures outlined in host nation agreements; applicable joint operating plans; and other applicable accident response agreements. DOS employs a “playbook” in those countries with which no other accident response agreements exist.

(4) Control Over the Accident Site. Controlling access to an accident site is imperative to maintain security of any classified materials, protect against personal injury and property damage, and prevent disturbance of evidence.

(a) DoD Installations. For nuclear weapon accidents that occur on a DoD installation involving weapons in DoD custody where the U.S. has exclusive jurisdiction, security will be established by DoD forces in accordance with DoD Manual S-5210.41-M (Reference (l)). For domestic DoD installations where the U.S. Government does not exercise exclusive jurisdiction

within the installation boundary, it may be advisable for the incident commander (IC) to establish a national defense area (NDA).

(b) Outside DoD Installations

1. For domestic accidents involving weapons in DoD custody, the IC will establish an NDA for most situations.

2. For domestic accidents involving weapons in Department of Energy (DOE) custody, the DOE IC can establish a national security area (NSA) to secure the accident site. Weapons in DOE custody are located only in the continental United States (CONUS).

(c) Foreign Territory. For accidents occurring on foreign territory either on or off a DoD installation, the HN may declare a weapons restricted area (WRA) to facilitate some degree of security and temporary U.S. control over the immediate vicinity of the weapon(s) to expedite weapon safing and weapon recovery procedures. See subparagraph 6.c.(2) of this enclosure for more information on foreign accidents.

(d) DOE/National Nuclear Security Administration (NNSA) Custody. Similar to the NDA, DOE can establish an NSA to help secure the location of an accident involving a weapon in DOE/NNSA custody. Weapons in the custody of DOE/NNSA are located only in CONUS.

b. Assumptions

(1) To ensure that DoD Component plans and training fully prepare DoD personnel for response to a U.S. nuclear weapon accident, the organizational structures and procedures in this Manual are based on the following assumptions:

(a) Although extremely unlikely, a radiological release may occur as a result of a U.S. nuclear weapon accident and a detectable degree of contamination may be present.

(b) The accident site may be multijurisdictional. It is probable that the effects of a nuclear weapon accident resulting in the spread of radioactive contamination or other hazardous materials (HAZMAT) will affect both military and civilian jurisdictions. In addition, it is likely that the public affairs (PA) aspects of an accident involving contamination will transcend jurisdictions, even if the physical effects do not.

(c) For accidents occurring outside the boundaries of a Federal installation, local civilian emergency responders and law enforcement officials may arrive on scene before any DoD emergency response resources or DoD security augmentation personnel.

(d) The response time for resources based in CONUS will be protracted for accidents that occur outside the continental United States (OCONUS). Depending on the location of the accident and the distances to be traveled, the initial DoD responders (the IRF) should plan to manage the DoD response without CONUS-based special team assistance for as long as 36 to 48 hours.

(e) The apparent accident could be a terrorist-initiated incident. All nuclear weapon accidents shall be investigated as terrorist incidents until proven otherwise. Thus, planners shall make provisions for the inclusion of the Federal Bureau of Investigation (FBI) in the response. Also see section 5 of this enclosure.

(2) The Nuclear/Radiological Incident Annex to Reference (c) contains assumptions that should be considered in developing plans for, and responding to, a nuclear weapon accident or incident:

(a) The contamination effects of nuclear weapon accidents may not immediately be recognized as such until the radioactive material is detected or the effects of radiation exposure have manifested in the population.

(b) A radiological incident may include chemical or biological contaminants, which may require concurrent implementation of the National Oil and Hazardous Substances Pollution Contingency Plan, also known as the National Contingency Plan (NCP), part 300 of title 40, Code of Federal Regulations (CFR) (Reference (m)).

(c) An accident involving the potential release of radioactivity may require implementation of protective measures.

(d) An expeditious and integrated Federal response is required to mitigate the consequences of any nuclear weapon accident. Radiological accidents that result in significant impacts may trigger implementation of the Catastrophic Incident Annex to Reference (c).

(e) If appropriate personal protective equipment (PPE) and capabilities are not available and the area is contaminated by radioactive material, response actions in a contaminated area may be delayed until the material has dissipated to a safe level or until appropriate PPE and capabilities arrive, whichever is sooner. IC authorities will make appropriate decisions regarding the amount of acceptable risk to be taken for life-saving measures.

## 2. COMMAND, MANAGEMENT, AND ORGANIZATIONAL STRUCTURES

a. General. Command relationships and structures are based on the command and Multiagency Coordination System (MACS) promulgated in NIMS and the NRF, which have been mandated within the Department of Defense by DoDI 6055.17 (Reference (n)).

b. Responsibilities. Federal department and agency responsibilities for response to a domestic nuclear weapon accident are described in the Nuclear/Radiological Incident Annex to Reference (c). Within this annex, Federal departments and agencies are designated as coordinating or cooperating agencies.

(1) Coordinating Agency. The role of the coordinating agency is to lead the Federal response. DHS may assume overall responsibility for Federal coordination of the response, while the coordinating agency would be responsible for supporting DHS in this mission. The Department of Defense is the coordinating agency for domestic accidents involving U.S. nuclear weapons in DoD custody. As the coordinating agency, the Department of Defense is responsible for orchestrating a coordinated delivery of those functions and procedures identified in the Nuclear/Radiological Incident Annex to Reference (c).

(2) Cooperating Agency. A cooperating agency supports the accident management effort by providing expertise in appropriate functional areas. When the Department of Defense is the coordinating agency for a domestic nuclear weapon accident, cooperating agencies are those shown in Table 1. Cooperating agencies are responsible for:

(a) Conducting operations, when requested by DHS or the coordinating agency, using their own authorities, subject matter experts (SMEs), capabilities, and resources.

(b) Participating in planning for accident management and recovery operations and development of supporting operational plans, standard operating procedures, checklists, or other tools.

(c) Furnishing available personnel, equipment, or other resource support as requested by DHS or the coordinating agency.

(d) Participating in training and exercises aimed at the continuous improvement of prevention, response, and recovery capabilities.

(e) Nominating new technologies or procedures to improve performance.

Table 1. NRF Nuclear/Radiological Incident Annex Cooperating Agencies

Department of Agriculture	Department of Commerce
Department of Energy	Department of Health and Human Services
Department of Homeland Security	Department of Housing and Urban Development
Department of the Interior	Department of Justice
Department of Labor	Department of Transportation
Department of Veterans Affairs	Environmental Protection Agency
Department of State	Nuclear Regulatory Commission
General Services Administration	American Red Cross

c. ICS. The NIMS ICS defines the operating characteristics, interactive management components, and structure of the incident management and emergency response organizations engaged throughout the life cycle of an incident. It integrates facilities, equipment, personnel, procedures, and communications operating within a common organizational structure. The ICS is modular and scalable; has interactive management components; establishes common

terminology, standards, and procedures; and directs incorporation of measurable objectives in response operations.

(1) Command. The IC has direct tactical and operational responsibility for conducting incident management activities. The DoD IC is normally the senior ranking military official at the accident site. The DoD IC does not have directive authority over non-DoD personnel or assets that are outside the exclusive DoD jurisdiction. In cases where management crosses jurisdictional or functional agency boundaries, a single IC can also be designated if all parties agree to such an option. In all cases, establishment of a Unified Command (UC) with affected jurisdictions should be considered if the PA aspects of the accident might have an impact outside the boundaries of an exclusive DoD jurisdiction.

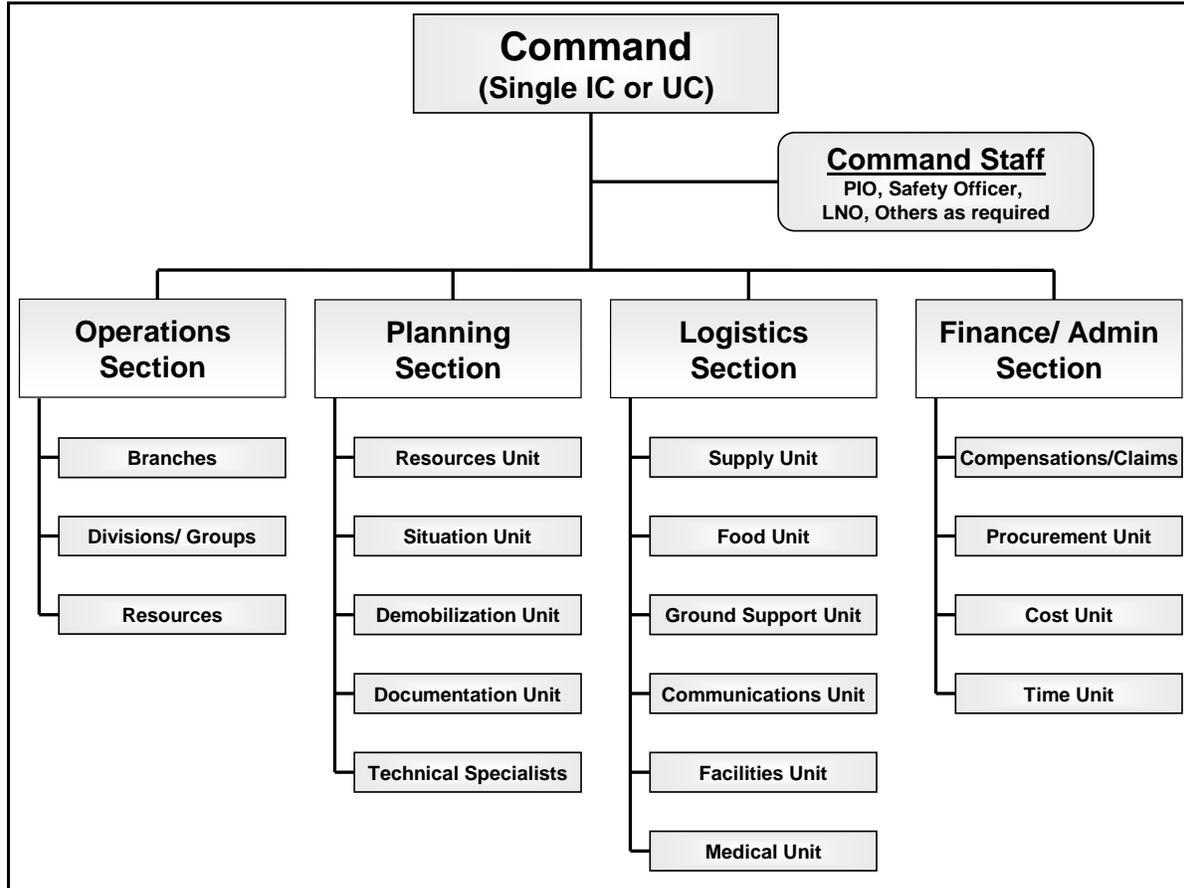
(2) UC. The term UC, when used within the NIMS ICS construct, differs from the term as traditionally used by the FBI and DOE. Under the NIMS ICS, UC is a collaborative command process conducted by designated officials from agencies with jurisdictional authority or functional responsibility for any or all aspects of an accident. UC ensures the effective integration of tactical operations and coordinated approval, commitment, and use of assigned resources. Because any incident serious enough to warrant implementation of NARP will generally involve response by the FBI and DOE, as well as State and local authorities, the Department of Defense will always operate in a UC environment rather than a single incident command.

(3) NIMS ICS Structure The NIMS ICS structure has five major sections as shown in Figure 1, with a potential sixth functional area to cover the intelligence function if it is required by the situation.

(a) The command comprises the IC and the command staff, including positions such as the public information officer (PIO), safety officer, legal officer (LO), and liaison officers (LNOs), and others (such as a medical officer) as required and assigned by the IC.

(b) The functional staff comprises the incident management personnel who represent the major functional elements of the ICS that include the operations section chief, planning section chief, logistics section chief, and finance/administration section chief.

Figure 1. NIMS ICS

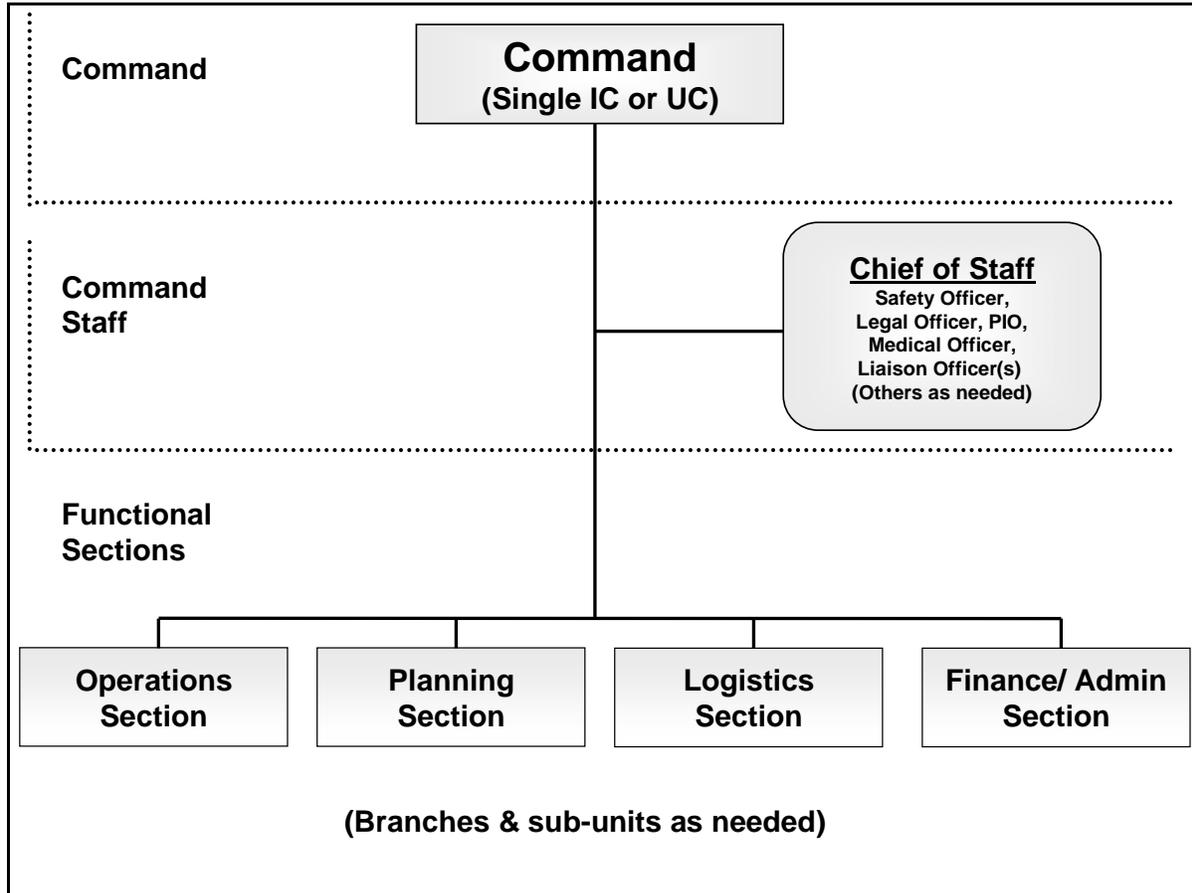


(4) IRF General Organizational Structure. Consistent with the NIMS ICS, the IRF shall be structured in accordance with the general organization illustrated in Figure 2. It will normally be the first DoD response element at the accident site.

(a) IRF Commander. The IRF commander is the DoD IC upon arrival at the accident site. Since most accidents will require a multijurisdictional and multiagency response, the DoD IC shall form a UC with the designated officials from agencies with jurisdictional or statutory authority for aspects of the accident. The DoD IC will have single incident command authority over DoD assets in any security zone that is under exclusive DoD jurisdiction; other members of the UC will retain authority over their personnel within the DoD security zone as well as authority for areas outside the DoD security zone that are under their jurisdiction.

(b) IRF Command Staff. The IRF command staff reports directly to the DoD IC. Command staff positions shall include a PIO, a Safety Officer, an LO, a Medical Officer, and LNOs, and may include other positions identified by the commander.

Figure 2. IRF Composition



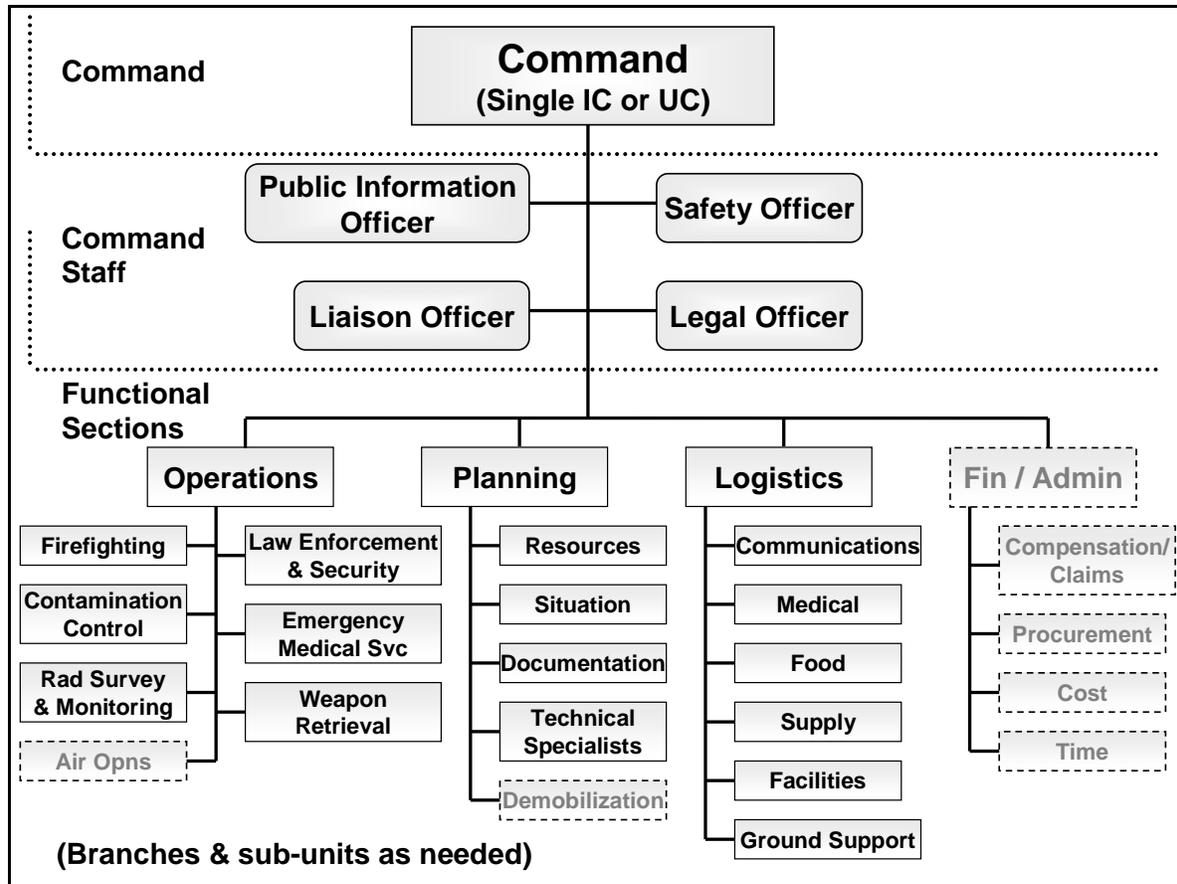
(c) IRF Functional Staff. Specific organization of the elements under each section is flexible and will be based on the situational requirements at the accident site. The finance/administration section will be needed if the accident is multijurisdictional and involves non-DoD response resources but may not be required in an accident is under exclusive DoD jurisdiction. The inclusion of a separate air operations branch under the operations section is optional and will be decided by the UC based on the extent of air operations associated with the response. In addition, the demobilization unit may not be required in the early phases of the response.

(d) IRF Integration and Staffing. Command and functional staffs shall fully integrate the personnel and resources of all concerned jurisdictions and agencies that are participating in the response outside any security zone under exclusive DoD jurisdiction. The IRF shall be staffed for 24-hour operations.

(5) RTF General Organizational Structure. The RTF, since it will deploy from a greater distance, will arrive at the accident site after the IRF. It will be commanded by a flag officer who will assume the role of IC. Upon assumption of IC responsibilities, the RTF commander will integrate the incoming RTF staff members into the existing IRF structure, maintaining

consistency with the general NIMS ICS as illustrated in Figure 3. The RTF shall be staffed for 24-hour operations.

Figure 3. RTF General Composition



(a) After transfer of command from the IRF, the RTF commander becomes the DoD IC. Since most incidents will require a multiagency response, if a UC has not been established, the DoD IC shall form a UC with the designated officials from agencies with jurisdictional and statutory authority for aspects of the accident.

(b) The RTF shall contain the same four functional staff sections as those of the IRF, and the RTF shall have additional command staff positions for a chief of staff and a medical advisor, and it may have a protocol officer. The specific organization of the elements under each section is flexible and will be based on the situational requirements at the accident site.

(c) RTF command and functional staffs shall fully integrate the personnel and resources of all concerned jurisdictions and agencies that are participating in the response outside any security zone that is under exclusive DoD jurisdiction.

d. MACS. The primary functions of MACS are to support incident management policies and priorities, facilitate logistics support and resource tracking, inform resource allocation

decisions using incident management priorities, coordinate incident-related information, and coordinate interagency and intergovernmental issues and strategies. MACS may contain multiagency coordination centers/emergency operations centers (EOCs) and multiagency coordinating groups.

(1) General. Following a U.S. nuclear weapon accident, the Department of Defense and other Federal agencies are represented at all levels – field, regional, and national. At each level, multiagency coordination centers/EOCs coordinate resources to support accident management activities and provide situational awareness for Federal and SLT officials. At field and national levels, multiagency coordination groups facilitate accident management and policy coordination. Figure 4 depicts this coordination structure for an accident response operation managed by DHS.

(2) Multiagency Coordination Centers/EOCs. These centers provide central locations for operational information sharing and resource coordination in support of on-scene efforts. Their capabilities normally include the core functions of coordination; communications; resource deployment and tracking; and information collection, analysis, and dissemination.

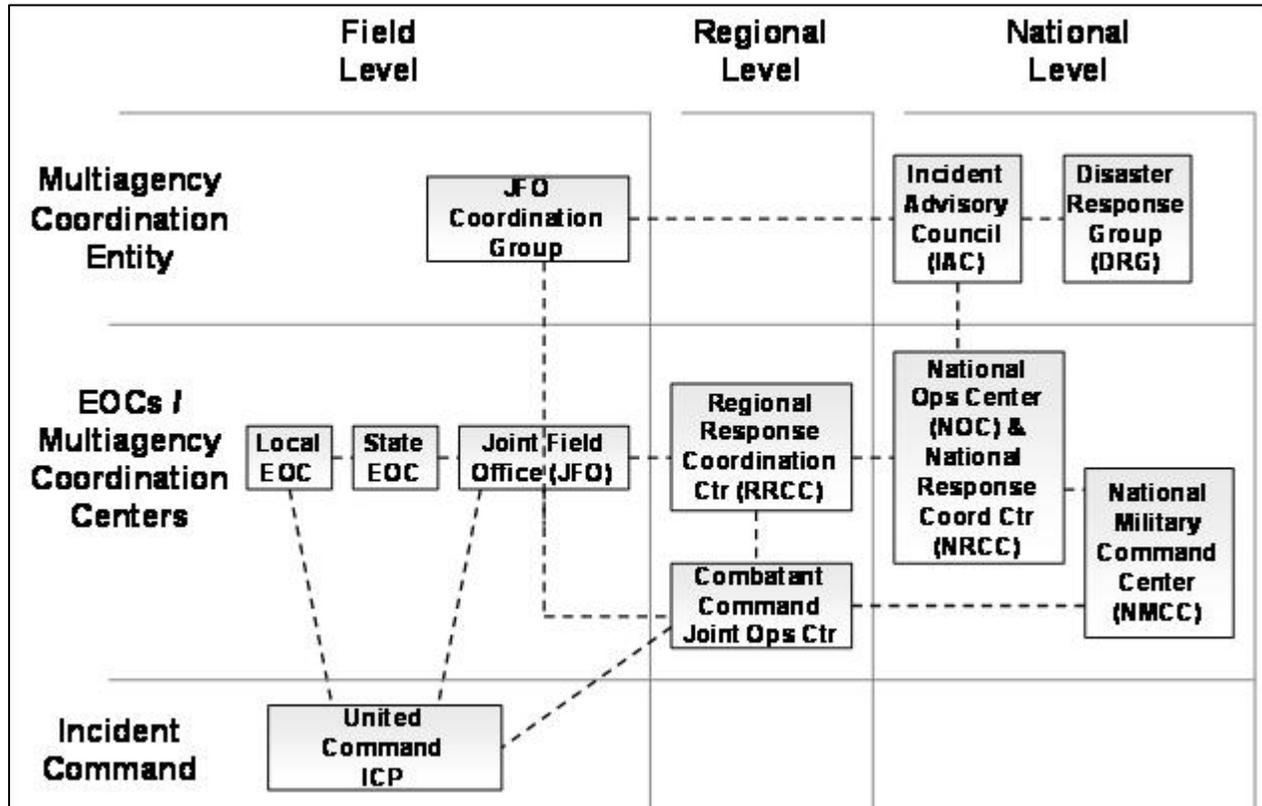
(3) Multiagency Coordination Entity. Groups in this level aid in establishing priorities among the incidents and associated resource allocations, resolving agency policy conflicts, and providing strategic guidance to support incident management activities.

e. DoD Coordination and Response Organizations

(1) National Level. At the national level, the Department of Defense is the coordinating agency for domestic accidents involving U.S. nuclear weapons in DoD custody. Under these circumstances, the Department of Defense would support DHS incident management or lead the response, depending on whether DHS assumes overall coordination responsibility. The National Military Command Center (NMCC) is the DoD primary supporting national multiagency coordination center.

(a) NMCC. The NMCC provides continuous, worldwide situation monitoring and crisis management for the Department of Defense. The NMCC on-duty operations team is likely to be the first national-level organization that is notified of an accident involving a U.S. nuclear weapon. The NMCC may activate the joint nuclear accident/incident response team (JNAIRT) to provide subject matter expertise.

(b) The OSD Crisis Management Team (OSD CrMT). The OSD CrMT is the forum for OSD staff to exchange information and coordinate on policy matters that may arise as accident details become known. The NRG consists of nuclear weapon SMEs and LNOs from the Defense Threat Reduction Agency (DTRA), Armed Forces Radiobiology Research Institute (AFRRI), FBI, and DOE.

Figure 4. Notional Coordination Structure

(c) JNAIRT. The JNAIRT is a Joint Staff crisis management element that assists in carrying out the responsibilities assigned to the Chairman of the Joint Chiefs of Staff for response to a nuclear weapon accident. The JNAIRT is headed by the Joint Staff Operations Directorate (J-3) and composed of all staff elements that are likely to have a role in the DoD response to the accident. The JNAIRT continues to operate until deactivated by appropriate Joint Staff authority. The JNAIRT works closely with the OSD NRG.

(d) Joint Director of Military Support (JDOMS). The JDOMS is a designated flag-grade position in the J-3. The JDOMS is responsible for processing requests for DoD assistance (above and beyond IRF and RTF response) and preparing an execution order, if required.

(2) Regional Level. The geographic Combatant Commanders (CCDRs) are designated the supported CCDRs for the DoD response to a U.S. nuclear weapon accident that occurs within their respective AORs. The operations center designated by the CCDR is the regional coordination center for the Department of Defense. The supported CCDR is responsible for executing the DoD response mission and exercises operational control (OPCON), as specified by the Secretary of Defense (SecDef), over military forces responding to the accident. Such forces will include the IRF, the RTF, the defense coordinating officer (DCO) and supporting defense coordinating element (DCE), and any other assigned or attached forces or individuals that are supporting the local response.

(3) Field Level. At field level, the majority of DoD response forces will be at or near the accident site as members of the IRF, RTF, or forces that are supporting the DoD local response.

(a) Defense Senior Official (DSO). The DSO is a flag-grade military officer, or DoD civilian equivalent, appointed by the Secretary of Defense, to manage and represent DoD coordinating agency statutory responsibilities and policy equities in a joint field office (JFO). When DHS exercises overall incident management responsibilities in a U.S. nuclear weapon accident or incident, DSO responsibilities include:

1. Representing the Secretary of Defense in the JFO coordination group.
2. Using existing authorities, expertise, and capabilities to aid in coordinating the accident response, working in coordination with other members of the JFO coordination group.

(b) DCO. The DCO is a DoD military member or civilian employee who has been appointed by the geographic CCDRs to coordinate, process, and forward through the designated chain of command all local requests by civil authorities for DoD support. The DCO serves as the Combatant Command's single point of contact for defense support of civil authorities (DSCA) at the field level multiagency coordination center (the JFO). DCO responsibilities include coordinating and processing applicable requests for DoD assistance from Federal and SLT agencies, facilitating requests for forces to the CCDR from the IRF/RTF, orchestrating completion of approved mission assignments using available resources, and facilitating required communications and reports between the IRF/RTF and the Combatant Command. Specific responsibilities of the DCO are subject to modification by the CCDR based on the situation. The DCO is generally located at the JFO/regional response coordination center (RRCC) or joint task force (JTF) headquarters (HQ) (if present) and may have a supporting staff known as the DCE. Specific DCO functions and responsibilities include:

1. Validating DSCA requirements requested by the Federal coordinating officer (FCO), State coordinating officer (SCO), and the emergency support function (ESF) representatives.
2. Working with the FCO and SCO to integrate the taskings of National Guard State status (title 32, U.S.C. (Reference (o)) or State active duty status) with active units to maximize responses while avoiding duplication of effort.
3. Assigning and supervising DoD liaison personnel for the ESF staffs at the JFO.
4. Coordinating the use of all DSCA resources provided in response to the nuclear weapon accident.
5. Serving as the DoD single point of contact for DSCA resources. Receiving requests for assets and passing them through the Combatant Command to JDOMS and the Office of the ASD(HD&ASA) if they cannot be filled at the DCO level.

6. Establishing and supervising the DCE. The DCE consists of a staff and military LNOs that facilitate coordination and support to activated ESFs. The ability to anticipate requirements, determine needs, allocate assets, and coordinate support is inherent in this organization. LNOs and the DCE organization should remain under the control of the DCO at all times to prevent disjointed military-civilian support efforts.

(c) IRF. If a DoD response element is not already on-scene, the NMCC or JNAIRT shall direct (through the parent Service operations center or the Combatant Command to whom the forces are assigned) the closest DoD installation having an emergency response capability to deploy an IRF. The IRF commander is designated the DoD IC and, although desirable, the tasked installation is not required to have nuclear expertise. However, the IRF must have the capability to establish command and control and contact with HQ; these minimum functions are explained in greater detail in subparagraph 3.c.(3) of this enclosure. The IRF will likely be deployed via verbal orders of the commanding officer (VOCO) to be followed by an actual written SecDef execute order (EXORD). The general organizational structure of the IRF is discussed in subparagraph 2.c.(4) of this enclosure.

(d) RTF. The NMCC will direct that the RTF be deployed under the supported CCDR. The NMCC vocal directive pertaining to the RTF will be followed by a SecDef EXORD. Upon transfer of responsibility from the IRF, the RTF will subsume the IRF, and the RTF commander will become the DoD IC.

(e) Other DoD Teams. Depending on the location and severity of the nuclear weapon accident, a wide range of additional DoD teams may be deployed. These DoD teams will be placed under the OPCON of the RTF commander, as appropriate.

f. Interagency Coordination and Response Organizations. As the Department of Defense will have many responsibilities during the response to a U.S. nuclear weapon accident, it is important that all levels of DoD understand how to interface with interagency partners.

(1) National-Level Multiagency Coordination Groups and Multiagency Coordination Centers/EOCs

(a) Multiagency Coordination Groups. Pursuant to Homeland Security Presidential Directive 5 (Reference (p)), DHS will have overall incident management responsibility for any domestic U.S. nuclear weapon accident. The Department of Defense will work closely with DHS directly and with the following groups to manage U.S. nuclear weapon accident response.

1. National Security Staff (NSS). The NSS is an Executive Branch body that is the President's principal forum for considering national security and foreign policy matters with his senior national security advisors and cabinet officials. In the event of a U.S. nuclear weapon accident, the NSS will advise and assist the President in all aspects of the situation.

2. Domestic Readiness Group (DRG). The White House will convene the DRG on a regular basis with DoD participation from the Under Secretary of Defense for Policy (USD(P)) to develop and coordinate implementation of preparedness and response policy, to

address issues that cannot be resolved at lower levels in anticipation of or during crises, and to provide strategic policy direction for the Federal response. The DRG can also be convened at any time at the request of one of its members.

3. National Response Team (NRT). The NRT is an organization of 16 Federal departments and agencies responsible for coordinating emergency preparedness and response to oil and hazardous substance pollution incidents. The Environmental Protection Agency (EPA) and the United States Coast Guard (USCG) serve as Chair and Vice Chair, respectively. A domestic U.S. nuclear weapon accident that produces radioactive contamination must be reported to the NRT through the National Response Center (see subparagraph 2.f.(1)(b)5. of this enclosure).

(b) Multiagency Coordination Centers/EOCs. EOCs of all the cooperating agencies will be notified and active following a U.S. nuclear weapon accident and the Department of Defense will have to interface with these EOCs through the sharing of information to maintain a common operating picture for the U.S. Government (USG). All EOCs are expected, at a minimum, to monitor the situation. Since these EOCs are single agency EOCs, they are not mentioned here, but it is important to note that the DOE HQ EOC would be fully active in any U.S. nuclear weapon accident, as would the FBI Strategic Information and Operations Center (SIOC), at least until the event was proven to be an accident and not an intentional act. The following operation centers are the core group the Department of Defense will have to interface with during an accident.

1. National Operations Center (NOC). The DHS NOC is a multiagency coordination center and the primary national hub for domestic incident management, operational coordination, and situational awareness. The NOC facilitates homeland security information sharing and operational coordination with other Federal, SLT, and nongovernmental EOCs. NOC staffing includes representatives from all Federal departments and agencies and, depending on the type of incident, additional representatives from specific agencies may be added. In a nuclear weapon accident, one of the NOC responsibilities is to act as the primary conduit for the White House Situation Room (WHSR) and IAC for situational awareness.

2. National Response Coordination Center (NRCC). The DHS NRCC is a multiagency coordination center that is a functional component of the NOC and supports multiagency coordination of incident management operations. It provides overall Federal response coordination for DHS emergency management program implementation. In a nuclear weapon accident, the NRCC will support the efforts of regional and field components in providing Federal resources to Federal and SLT responders.

3. SIOC. The FBI SIOC is the focal point and OPCON center for all Federal intelligence, law enforcement, and investigative law enforcement activities related to domestic terrorist incidents or credible threats, including leading attribution investigations. The SIOC serves as an information clearinghouse to help collect, process, vet, and disseminate information relevant to law enforcement and criminal investigation efforts in a timely manner. The SIOC maintains direct connectivity with the NOC and IAC. The SIOC will support any FBI investigation pertaining to a nuclear weapon accident.

4. DOE Operations Center. The DOE Operations Center is the focal point for DOE operations and information in a nuclear weapon incident.

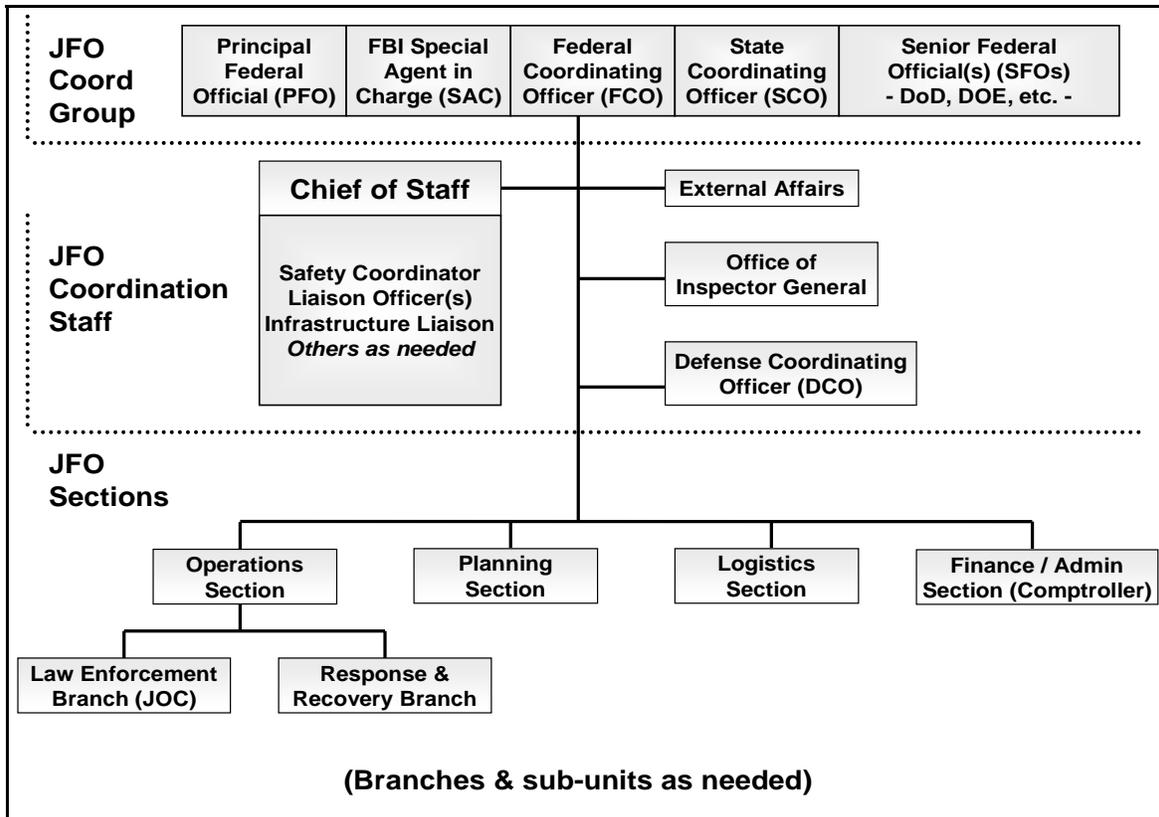
5. National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting all oil, chemical, radiological, biological, and etiologial discharges into the environment anywhere in the United States and its territories. In addition to gathering and distributing contamination data for Federal on-scene coordinators and serving as the communications and operations center for the NRT, the National Response Center maintains agreements with a variety of Federal entities to make additional notifications regarding incidents that meet established trigger criteria. Federal law requires the responsible party to report radiological releases to the National Response Center.

(2) Regional Level. The DHS RRCCs are multiagency coordination centers that are standing facilities operated by the Federal Emergency Management Agency (FEMA). They are activated to coordinate regional response efforts, establish Federal priorities, and implement local Federal program support. In each region, the RRCC is an interim body activated for the period of time between the accident occurrence and establishment of a JFO near the accident site. If a JFO is not established, the RRCC may be activated to assist the Department of Defense in coordinating non-DoD Federal support.

(3) Field Level. Per Reference (p), DHS will have overall management responsibility for domestic U.S. nuclear weapon accidents and the Department of Defense should be prepared to interact with the following groups in the field. If DHS determines that they do not need to coordinate the Federal response to an accident involving a nuclear weapon in DoD custody, the Department of Defense will coordinate the Federal response.

(a) JFO. The JFO is a multiagency coordination center established locally. It provides a central location for coordination of Federal, SLT, nongovernmental, and private-sector organizations with primary responsibility for accident support. The JFO uses the scalable organizational structure of the NIMS ICS to enable effective and efficient coordination of Federal accident-related response and recovery actions. The JFO organization adapts to the magnitude and complexity of the situation at hand, and incorporates NIMS principles regarding span of control and organizational structure. Although the JFO uses an ICS structure, the JFO does not manage on-scene operations. Instead, the JFO focuses on providing support to on-scene efforts and conducting broader support operations that may extend beyond the accident site. The Department of Defense has appointed 10 Defense Coordinating Officers (DCO) and assigned one to each FEMA region. If requested and approved, the DCO serves as the DoD single point of contact at the JFO for requesting assistance from the Department of Defense. Figure 5 provides a sample JFO organizational structure.

Figure 5. Sample JFO Organization



(b) Emergency Response Team (ERT). An ERT is maintained at each FEMA region and is deployed by the affected region to the area of the accident. It is the principal interagency group that provides staffing for the JFO and ensures Federal resources are available to meet Federal and State accident management requirements. The size and composition of the ERT is scalable depending on the scope and magnitude of the event. For large-scale, high-impact events, the Secretary of Homeland Security may deploy a national emergency response team. The two component elements that deploy in advance of the main body are the Federal incident response support team (FIRST) and the ERT – advance element (ERT-A).

1. FIRST. The FIRST is a forward component of the ERT-A, and provides on-scene support to the local UC structure in order to facilitate an integrated inter-jurisdictional response. It is designed to be a rapidly deployable resource to support the Federal response. The FIRST arrives on-scene within 12 hours of notification and is responsible for providing technical assistance to assess the situation, identify critical and unmet needs, make protective action recommendations (PARs), and establish support facilities.

2. ERT-A. The ERT-A is the advance element of the ERT and deploys during the early stages of an accident to State operating facilities and the accident site. The ERT-A

assesses the impact of the situation, collects damage information, identifies specific State requests for Federal accident management assistance, gauges immediate Federal support requirements, and makes preliminary arrangements to set up Federal field facilities.

(c) DHS Situational Awareness Team (DSAT). The DSAT provides timely and accurate information to the Secretary of Homeland Security and departmental leadership when directed by the Secretary. DSAT personnel are under the tasking authority of the DHS Office of Operations and administrative control of DHS/Immigration and Customs Enforcement. The DSAT is an early entry capability and will report simultaneously to the NOC and principal Federal official (PFO) to ensure that the Secretary and PFO have early situational awareness.

(d) Nuclear Incident Response Team (NIRT). The NIRT consists of specialized Federal response teams drawn from DOE and/or EPA. These teams may become DHS operational assets providing technical expertise and equipment when activated during a crisis or in response to a nuclear/radiological incident as part of the DHS Federal response.

(e) Other Federal Teams. Depending on the location and severity of the nuclear weapon accident, there is a wide range of additional interagency teams that can be deployed. Examples include damage assessment teams, disaster medical assistance teams, the Department of Health and Human Services (DHHS) emergency response team, Department of Labor/Occupational Safety and Health Administration specialized response teams, veterinarian medical assistance teams, disaster mortuary operational response teams, national medical response teams, scientific and technical advisory and response teams, donations coordination teams, urban search and rescue (US&R) task forces, US&R incident support teams, Federal type 1 and type 2 incident management teams (IMTs), domestic animal and wildlife emergency response teams, EPA emergency advisory teams, and mitigation assessment teams.

g. SLT Coordination and Response Organizations

(1) General. In a domestic U.S. nuclear weapon accident, SLT governments probably have some jurisdictional authority at, or in the vicinity of, the accident site. The elected, appointed, or designated officials of these governments represent both the legal authorities that are applicable and the citizens that are impacted by the accident. SLT governments also have the capabilities and resources of various emergency management functions – fire, police, public health, emergency medical service (EMS), National Guard, public works, and environmental response – that may be involved in the response to a nuclear weapon accident. It is also likely that personnel from these various SLT organizations will be the first responders at an accident that occurs outside the boundaries of a DoD installation. Therefore, to ensure a successful DoD response, DoD officials and responders at all levels will establish a full partnership with affected SLT officials and responders.

(2) SLT. The State's chief executive is the Governor. The local chief executive is normally the mayor or the city or county manager. Tribal chief executive officers fulfill a corresponding function, as authorized by the tribal government, for their respective tribes. Within their respective jurisdictions, each of these officials is responsible for the public safety and welfare of the people, as well as the coordination of applicable resources to prevent, prepare

for, respond to, and recover from nuclear weapon accidents. These individuals, furthermore, provide leadership; play a key role in communicating to the public; and help people, businesses, and organizations cope with the consequences of nuclear weapon accidents.

h. NGOs. NGOs are nonprofit entities that are based upon the interests of members, individuals, or institutions. NGOs are not created by a government but serve a public purpose rather than a private benefit. They collaborate with first responders, governments at all levels, and other agencies and organizations that provide relief services to sustain life, reduce physical and emotional distress, and promote recovery of disaster victims when assistance is not available from other sources. The American Red Cross and faith-based charity organizations, such as the Salvation Army, are examples of NGOs and community-based organizations that may receive government funding to provide essential public health services. NGOs may have a role in nuclear or radiological incidents with widespread or long-term effects.

i. Volunteer Organizations. The National Voluntary Organizations Active in Disaster is a consortium of more than 30 recognized national organizations of volunteers active in disaster relief. Such entities provide significant capabilities to accident management and response efforts at all levels. For example, the wildlife rescue and rehabilitation activities conducted during an accident are often carried out by private, nonprofit organizations working with natural resource trustee agencies. The Volunteer and Donations Management Support Annex to Reference (c) discusses these organizations in detail.

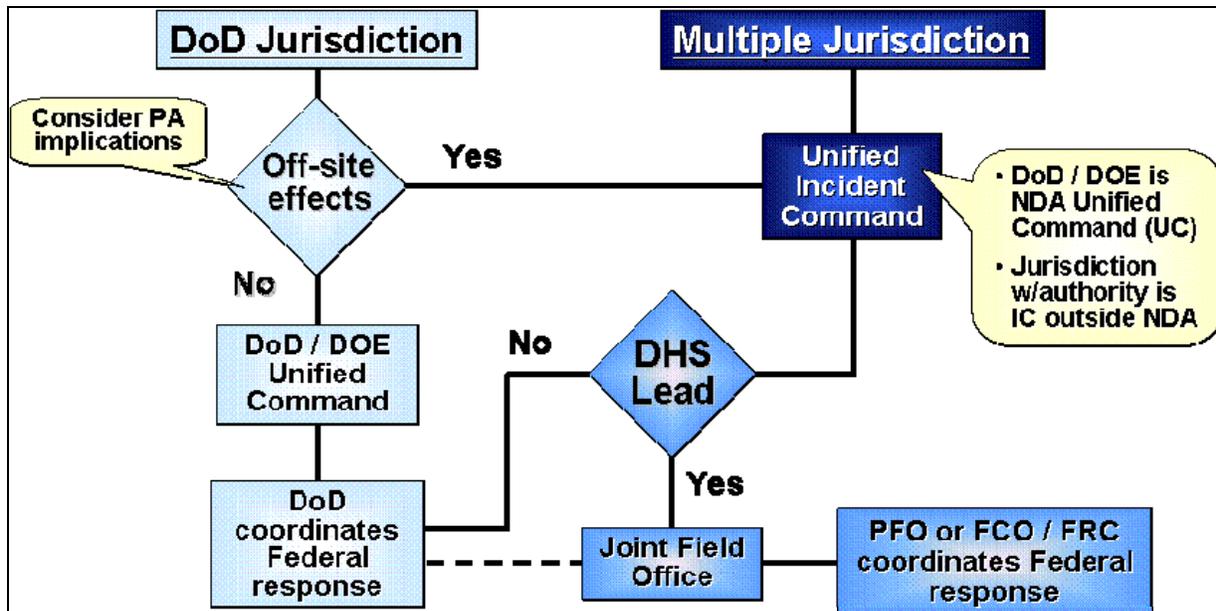
j. Private Sector Organizations. Private sector organizations may support accident management by sharing information, identifying risks, performing vulnerability assessments, developing emergency response and business continuity plans, enhancing overall readiness, implementing appropriate prevention and protection programs, and donating or otherwise providing goods and services through contractual arrangement or government purchases to assist in response to and recovery from an accident. Private-sector organizations provide response resources including specialized teams, equipment, and advanced technologies. The Private-Sector Coordination Support Annex to Reference (c) discusses these relationships in greater detail.

### 3. CONCEPT OF OPERATIONS (DOMESTIC, MULTIJURISDICTIONAL RESPONSE)

a. Overview. Each nuclear weapon accident or incident is unique; however, they will occur in one of four areas: domestic, multijurisdictional; domestic, single jurisdictional; foreign territory; or aboard ship. Foreign territory responses and shipboard responses are discussed in sections 6 and 7 of this enclosure. In determining what type of incident command structure to establish (single jurisdictional or UC), the IC may find the decision tree in Figure 6 useful. Incidents involving multiple jurisdictions are more complex; as such, they require a more complex organizational structure and operational response tactics. The concept of operations detailed in this section will discuss this more complex type of organization—domestic, multijurisdictional response to an accident or incident involving a U.S. nuclear weapon in DoD custody at the time of the accident or incident. While the command structure will differ between a single incident command and a UC, the response phases and procedures discussed in this

section will also apply to an IRF and RTF in a single jurisdiction response—an accident in which the Department of Defense has exclusive jurisdiction over the accident site and none of the physical effects of the accident transcend the boundaries of the exclusive jurisdiction of the Department of Defense. While the IRF and RTF are not required to establish a UC for a single jurisdiction response, this is an exception rather than the rule since DoD response activities will be integrated with those of the DOE and FBI in almost all situations.

Figure 6. Domestic Nuclear Weapon Accident Notional DoD Response Decision Tree



(1) The primary mission of the DoD response to U.S. nuclear weapon accidents is the protection of lives and property; the location, security, and recovery of the weapon; and remediation of the site. To accomplish these tasks, the DoD response process can be categorized into five phases that begin when the accident occurs and continue until site remediation (SR) activities are completed. Due to the dynamic nature of the response, there are no solid lines of demarcation between phases; phases will often overlap. Depending upon the severity of the nuclear weapon accident, SR activities could become protracted. The Department of Defense would likely request that the SR responsibility be transitioned to a cooperating agency better equipped to handle long-term remediation and recovery efforts. The five phases of nuclear weapon accident management are:

(a) Phase I – Notification and Deployment. Personnel with knowledge of a U.S. nuclear weapon accident will notify the NMCC through OPREP reporting procedures immediately. Response forces, initially comprising first responders, will deploy to the accident site as appropriate.

(b) Phase II – Initial Response. Initial response activities begin when the accident occurs. This phase chiefly comprises actions by first responders – fire, emergency medical, and law enforcement and security personnel – whose response actions focus on extinguishing fires, rescuing victims, treating casualties, and securing the nuclear weapon. The first responders may

be civilian, military, or a combination of both. The IRF, in consultation with other initial response elements, should determine the necessity for additional assets/personnel and make appropriate requests through the chain of command.

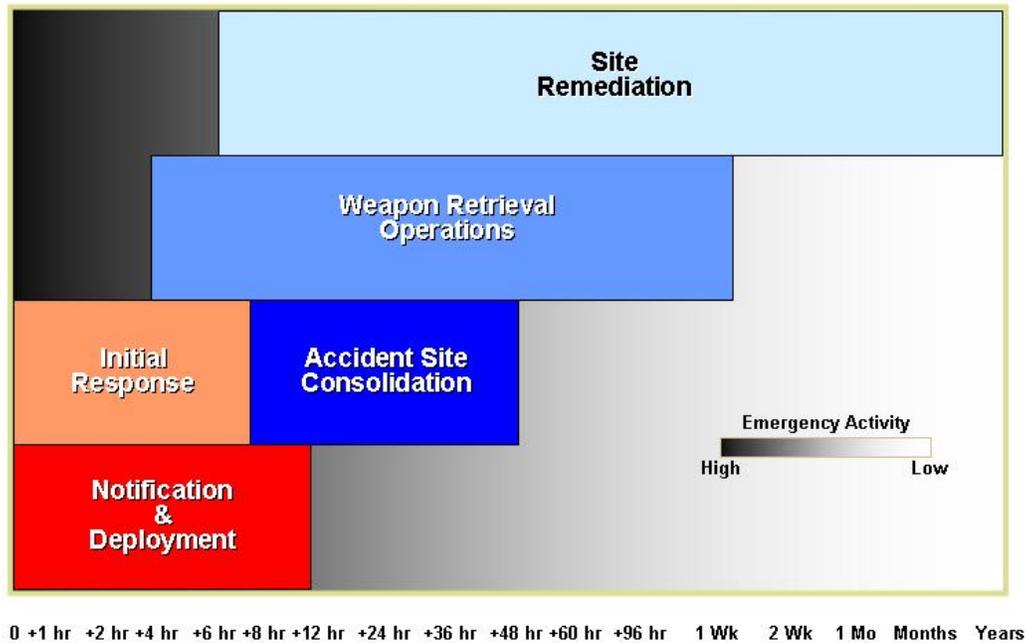
(c) Phase III – Consolidation. During consolidation, the accident site stabilizes and transitions from the first responder activities in Phases I and II to the deliberate response activities in Phase III. This phase is marked by the evolution of a large response capability at the accident site and the establishment of a robust Federal coordination capability in the area of the accident. The RTF commander would most likely arrive during this phase, if not earlier, and assume the IC role. Activities in this phase include controlling contamination, continuing actions to minimize health and safety risks to the public and response personnel, consolidating accident site security, preparing for recovery of the nuclear weapon, and initiating SR operations and planning.

(d) Phase IV – Weapon Recovery Operations. Weapon recovery operations are those measures taken to assess the damage to the nuclear weapon, stabilize the weapon, and prepare and package the weapon and its components for transportation from the accident site. The Department of Defense and DOE will jointly determine the final disposition of the weapon. The term “recovery” as used in this Manual does NOT apply to long-term restoration efforts of the affected area as outlined in the NRF (Reference (c)).

(e) Phase V – SR. SR concerns are addressed in all phases of the DoD response and begin with actions to contain or reduce the spread of contamination on the weapon and in the immediate surrounding area. During this final phase of the response to a U.S. nuclear weapon accident, the Department of Defense will likely request transfer of coordinating agency responsibility to another agency that will manage long-term remediation efforts.

(2) Figure 7 gives a general sequence of events for a nuclear weapon accident response operation. The Synchronization Matrix available at <http://www.acq.osd.mil/ncbdp/narp> provides a more specific timeline for the sequence of events.

Figure 7. Notional Phase Timeline



b. Phase I: Notification and Deployment

(1) Overview. The notification and deployment phase of a U.S. nuclear weapon accident begins once the accident has occurred and voice reports are provided to the NMCC. This phase ends as the organizations required for response to the accident are alerted and deploy. Actions taken during this phase include notification of appropriate Federal and SLT authorities, coordination and communication between the coordinating agency and all cooperating agencies identified during the initial NMCC conference call and their subordinate organizations, and execution of plans to deploy assets to the accident site. Depending on the circumstances of the accident, the first notification may come from the local response community or from civilian bystanders who witnessed the accident.

(2) DoD Notification. In accordance with CJCS Manual 3150.03B (Reference (q)), any U.S. nuclear weapon accident shall be reported to the NMCC by the lowest level of command having knowledge of the accident, via an operational report (OPREP)-3 PINNACLE voice report within 15 minutes of accident occurrence. A hard copy message report shall be sent to the NMCC within 1 hour of accident occurrence to amplify conditions at the accident site and to give an updated status of response actions. The reporting agency shall use the format specified in Reference (q). It is imperative that both the voice report and the follow-up hard copy message not be delayed while unit and Service chain of command notifications are made. Parallel notification protocols, i.e., notifying the chain of command while simultaneously following OPREP-3 PINNACLE procedures, are encouraged.

(a) The NMCC, on receipt of the voice report, shall convene a conference call with all appropriate national-level agencies, including operations centers of the Military Services; the

appropriate Combatant Commands, including United States Joint Forces Command (USJFCOM); DTRA; the DHS NOC; DOS; DOE; the Department of Justice (DOJ) (the FBI); and other Federal agencies as appropriate. This conference call activates the national-level response, as well as appropriate nuclear accident response plans and organizations. During the conference call, the NMCC will designate the geographic CCDR in whose AOR the accident occurred as the supported CCDR, direct the CCDR and appropriate Service to deploy an IRF and RTF, and request deployment of the DOE Accident Response Group (ARG) and Federal Radiological Monitoring and Assessment Center (FRMAC).

(b) Following standing guidance, the NMCC shall also notify the Secretary of Defense, the Deputy Secretary of Defense, the WHSR, the ASD(HD&ASA), and other OSD offices as appropriate.

(c) The NMCC or the JNAIRT, in close coordination with the Combatant Commands and through the Service operations centers, shall immediately activate and deploy an IRF (if a local military installation has not already done so) to take immediate life-saving actions and to establish safety and security controls at the accident scene. The NMCC or the JNAIRT shall also direct a Service to deploy an RTF to the accident scene to manage the DoD accident site response. In determining which Service will be tasked with deploying an RTF, the NMCC or JNAIRT shall consider: the Service with custody of the weapon at the time of the accident; the proximity of each Service's RTF to the accident site; any special considerations, e.g., the damaged weapon is submerged in water or weather conditions at an RTF's location preclude a rapid response to the accident site; and the overall readiness of each Service's RTF. The supported CCDR shall exercise OPCON, as specified by the Secretary of Defense, over the IRF and the RTF.

(d) The NMCC maintains open communications with the reporting accident site and other interested parties that wish to stay informed, such as the DOE HQ/EOC, the DHS NOC, and Combatant Command operations centers.

### (3) DoD Activation and Deployments

(a) Joint Staff. In a U.S. nuclear weapon accident involving military and civilian jurisdictions, the JNAIRT and JDOMS work together in processing requests for DoD forces and assistance as well as preparing execute orders (EXORDs), if required. Ideally, a warning order will be issued prior to the issuance of deployment orders (DEPORDs) and EXORDs. However, the seriousness of the accident may dictate forces being notified and deployed simultaneously via VOCCO. In this case, affected units will move out on voice authority of the NMCC with the understanding that hard copy DEPORD and EXORD will follow.

(b) OSD. The OSD CrMT will exchange information and coordinate on policy matters that may arise as details become known and Federal response plans are put into effect. Additionally, following a domestic accident, the Secretary of Defense may appoint a DSO to represent DoD statutory responsibilities and policy equities at a JFO. If a JFO is not established, the DSO will operate in the FEMA RRCC in accordance with the NRF (Reference (c)). The DSO shall not have directive authority over the IRF, RTF, interagency, and SLT officials or

personnel. The DSO shall report to the Secretary of Defense or designated representative. The DSO shall not be dual-hatted as the IRF/RTF commander or the DCO.

(c) DTRA. When notified of the U.S. nuclear weapon accident, DTRA activates its consequence management advisory team (CMAT). In addition to deploying to advise the DoD IC on technical issues, the Federal response mechanism, and specialized teams' capabilities, the CMAT independently or with DTRA reachback resources will generate hazard area predictions based on confirmed source term information and release characteristics using a 5-day forecast or observed weather data. DTRA shall forward these hazard area predictions as quickly as possible to the DoD IC to assist in setup of the response management area and for protective action decision making by SLT or HN authorities. For domestic accidents, DTRA will coordinate with the Interagency Modeling and Atmospheric Assessment Center (IMAAC) under DHS to receive the interagency-coordinated hazard area model. The NRF designates the IMAAC as the single Federal source of airborne hazard predictions in domestic incidents requiring Federal coordination.

(4) Interagency Notification. The NMCC conference call (see subparagraph 3.b.(2)(a) of this enclosure) will normally be the initial notification of selected Federal departments and agencies, including the DHS NOC. Department and agency representatives at the NOC may also inform their parent organizations.

(a) SLT officials may also report the accident to the NOC using established reporting mechanisms.

(b) Civilian or military officials having knowledge of radiological contamination shall report this information to the NRT National Response Center. The National Response Center will, in turn, notify the NOC and the NRT's 16 Federal departments and agencies.

(c) Upon notification that a domestic accident involving a nuclear weapon has occurred, the NOC will report the situation to the Secretary of Homeland Security and/or senior staff as delegated by the Secretary. The Secretary of Homeland Security will determine the need to activate components of the NRF (to include the IAC, the NRCC, JFO and/or PFO, and ESFs). If activated, the NRF components may then be directed to conduct further assessment of the situation, initiate emergency coordination, share information with affected jurisdictions and the private sector, and/or initiate deployment of resources.

(d) The Governor of the affected State can request Federal assistance when a U.S. nuclear weapon accident occurs in U.S. territory and exceeds the response capabilities of the SLT governments. If the President invokes Reference (k), the President will appoint an FCO to manage and coordinate Federal resource support activities. FCOs are not appointed in non-Stafford Act situations, so the responsibilities of the FCO are undertaken by a Federal resource coordinator (FRC). For an accident in which a PFO is not designated, the FCO or FRC will provide the Federal lead.

(5) Interagency Activation and Deployments. Depending on the location and scope of the nuclear weapon accident, a wide range of Federal resources may be activated and deployed.

The departments and agencies involved could include all of the cooperating agencies, as well as Federal agencies such as the National Transportation Safety Board that may have statutory authority and responsibility to deploy. DOE, FBI, and DHS will be primary partners for the Department of Defense in the accident response.

(a) DOE. DOE will be a key partner in any nuclear weapon incident due to its unique knowledge of nuclear weapons and its unique response capabilities and resources. The NNSA, a semiautonomous agency within DOE, is responsible for managing the nation's nuclear weapons program and the immediate DOE response to any type of radiological accident anywhere in the world. Requests for DOE/NNSA radiological emergency response asset support are forwarded to the DOE HQ/EOC in coordination with the NOC. The DOE HQ/EOC then notifies the program emergency response officer and the Director of the Office of Emergency Response. Once notified, the Director of the Office of Emergency Response decides whether an HQ/emergency management team is necessary, assesses the situation, and ensures that the appropriate radiological emergency response assets are notified.

(b) DHS. Upon notification by the NOC of a domestic accident, the NRCC begins interagency operations by coordinating the activation and initial deployment of special teams, as required by the situation. FEMA activates the RRCC to coordinate the regional response efforts, establish Federal priorities, and implement local Federal program support. The RRCC deploys the FIRST, the ERT-A, and the ERT. FIRST and the ERT-A are components of the ERT that deploy in advance of the main body. The ERT, headed by the FCO or FRC, works with the affected State to ensure that Federal resources are available to meet State and Federal incident management requirements identified by the SCO. The ERT also provides staffing for the JFO.

(c) FBI. Upon notification by the NMCC of an accident involving a U.S. nuclear weapon, the FBI SIOC will notify the applicable regional FBI office. Regional offices and FBI HQ will initiate appropriate investigative actions to determine if the event is an accident or intentional act. As part of this determination, the FBI will send a team to the accident scene to work with the DoD IC and local law enforcement officials. Depending upon the magnitude of the accident and criminal investigation, the FBI may establish a joint operations center (JOC) near the site.

c. Phase II: Initial Response

(1) Overview. The initial response phase to a domestic nuclear weapon accident begins when the accident occurs. It centers on first responder activities that may include, but are not limited to, performing life-saving and firefighting activities, establishing incident command, providing public protection measures (SLT responsibility), providing for operational security, and controlling the spread of contamination. The first responders may be civilian, military, or a combination of both. These first responders will use NIMS ICS procedures to establish a UC that appropriately represents the Federal and SLT agencies having jurisdictional authority. DoD actions during this phase in order of precedence are to preserve and protect life; prevent additional damage to property and the environment; secure the weapon, related classified components and materials; and preserve evidence. The Department of Defense provides the

DoD IC, who is responsible for accident management of these security activities and for the establishment and declaration of an NDA, if required.

(2) DoD Accident Site Command. The command function must be established and clearly understood from the beginning of accident response operations. The Department of Defense has the primary responsibility for the security of the weapon and related classified components or materials; hence, the Department of Defense has exclusive jurisdictional authority within the NDA. The accident UC is composed of officials who collectively represent both the NDA (the DoD IC and DOE representatives) and affected jurisdictions outside the NDA.

(a) The DoD IC has directive authority over all DoD forces and individuals at the accident site and has tactical and operational responsibility for accident management activities within the NDA. The DoD IC may also establish a temporary UC within the DoD security area or NDA based on functional responsibilities (e.g., firefighters in command of efforts to fight fires and save lives while the DoD IC is in command of the perimeter or NDA security).

(b) The DoD IC will operate out of the incident command post (ICP), which shall be established immediately outside the NDA to ensure command of the NDA and access for all members of the UC.

(c) When command is shared or transferred, the process shall be announced to all concerned parties. Transfer of command must include a formal or informal briefing that captures all essential information for continuing safe and effective operations.

(d) The IRF commander fulfills the DoD IC role until command is transferred to the RTF commander, at which time the IRF is incorporated into the RTF.

(e) The reporting chain for the DoD IC shall be in accordance with CJCS and Combatant Command authorities and responsibilities specified by the Secretary of Defense.

(3) DoD IC Phase II Functions. The DoD IC should ensure that the following tasks are completed during the initial response phase of the accident and that efforts to complete the tasks are conducted concurrently whenever possible.

(a) Establish Command and Control. Upon arrival at the accident site, the DoD IC shall establish command of the security area around the weapon and classified components, as well as command of all on-scene DoD forces. This requires establishing a UC with the representatives of any entities having jurisdiction outside the security area or NDA. It may also require a functional UC for critical response activities within the security area or NDA.

(b) Establish Contact with HQ. The DoD IC shall establish and maintain contact with the Combatant Command.

1. The IRF shall initiate and continue periodic reporting to the Combatant Command in accordance with Reference (q) until relieved by the RTF. Reports shall not be delayed to gather more information.

2. After communication is initiated by the IRF, the responsible Combatant Command may maintain the needed contact by keeping open-line communications with the IRF and immediately reestablishing this link if it is broken.

(c) Extinguish Fires. Local firefighting capabilities may be used. If the weapon is exposed to high temperatures and local firefighters are unfamiliar with radiological firefighting procedures, the DoD IC shall obtain and provide to the firefighters information from a knowledgeable source on potential hazards and advise them on the proper treatment of the weapon.

(d) Rescue, Stabilize, and Evacuate Casualties. Local ambulances and hospitals may be used to evacuate and treat accident-related casualties. Casualties need not be decontaminated before evacuation, transport to medical facilities, or treatment. These actions may spread contamination to a medical facility, but the actions are appropriate when serious or life-threatening injuries exist and the level of contamination is unlikely to pose a significant threat to medical personnel. However, care should be taken to reduce the spread of contamination whenever possible and to avoid unnecessary contamination of medical resources when injuries are minor and adequate first aid is available.

1. Casualty decontamination should be accomplished once casualties are medically stabilized. Ambulances departing with casualties shall not be decontaminated prior to departure from the accident area.

2. Responding medical personnel should be immediately integrated into the incident command and operate in areas appropriate to their training and protection level. While radiological hazards at an accident site should not prevent immediate life-saving procedures, where possible victims should be rescued by properly trained and equipped responders and moved to a casualty collection area free of significant hazards. When necessary to save lives and whenever possible, medical personnel unfamiliar with site hazards and entering into hazardous (radiological, explosive, toxic) areas at the direction of the IC should be accompanied by explosive ordnance disposal (EOD) personnel to identify weapon and explosive hazards at the incident site. If EOD is not available during the initial entry to save lives, the team must be accompanied by responders trained in the identification of explosive materials avoidance. All operations associated with assessment of the weapon status should be conducted from a distance greater than 50 feet. Once EOD arrives on scene, EOD personnel will enter the site to determine the specific condition of the weapon(s) involved.

(e) Presence of Contamination. The first responders shall determine if contamination is present and then identify the nature and extent of contaminated areas. The Combatant Command shall be advised whether contamination is detected, and the Combatant Command shall immediately forward this information to the NMCC.

1. In accordance with confirmation guidelines (Figure 8), notify Federal and SLT officials of potential hazards and recommend that appropriate public health and safety actions are

taken outside the NDA. If necessary, issue PARs to the SLT authorities for them to consider what actions must be taken by the public to avoid or reduce exposure to radiation.

Figure 8. Nuclear Weapon Confirmation Guidelines

CONFIRMATION GUIDELINES FOR THE DoD IC
<p>In accordance with DoDD 5230.16 (Reference (r)), it is DoD policy to neither confirm nor deny the presence of nuclear weapons at any particular installation or location. There are two exceptions to this policy:</p> <ol style="list-style-type: none"> <li>1. The DoD IC is required to confirm the presence of nuclear weapons or radioactive nuclear components in the interest of public safety if the public is, or may be, in danger of radiation exposure or other danger posed by the weapon. The Office of the Assistant Secretary of Defense for Public Affairs (OASD(PA)) or the DOE/NNSA Office of Public Affairs shall be advised of this confirmation as soon as possible.</li> <li>2. The DoD IC may confirm or deny the presence of nuclear weapons to reduce or prevent widespread public alarm. The Combatant Command PA Office and the OASD(PA) shall be advised before or as soon as possible after such notification.</li> </ol>

2. Identify and decontaminate, as necessary, persons who may have been contaminated. Ensure accurate records are established and maintained of personnel who have been exposed to radiation. These records will be turned over to the documentation unit of the planning section of the incident command once the unit is operational). These records must be maintained in accordance with section 1-521 of Public Law 104-191 (1996) (Reference (s)).

3. Ensure personnel entering an area that is contaminated, or is suspected of containing contamination, wear personal protective clothing and respiratory protection until contamination levels are determined.

4. Request, receive, and use IMAAC, National Atmospheric Release Advisory Center plots, or hazard prediction and assessment capability modeling predictions. Use any of these plots until IMAAC plots are available. Once available, IMAAC plots supersede all others.

(f) Establish an NDA. The DoD IC shall establish and declare an NDA in accordance with DoDI 5200.08 (Reference (t)) in any accident or incident in which the Department of Defense does not have exclusive jurisdiction of the area containing the weapon and related classified components or materials. The DoD IC shall:

1. If military security forces are insufficient or unavailable, request local law enforcement officials or personnel to assist in securing the area, preventing unauthorized entry, and removing unauthorized personnel.

2. Provide appropriate protective equipment for perimeter guards who are posted in a contaminated area. When posting perimeter guards, consider the potential for new contamination due to wind shift and the re-suspension of contaminants.

3. Query local weather history and current forecasts to ascertain the best location for assets and minimize relocation of key activities due to changes in wind direction.

4. Secure the airspace over the accident site through cooperation with the Federal Aviation Administration.

(g) Status of Weapons. Assess the status of weapons and report this information to the Combatant Command.

(h) Render Safe Procedures (RSPs). If EOD assets are available, initiate weapon recovery operations by performing necessary RSPs. EOD personnel should not be denied access to the accident site for reasons of security. RSPs take priority over security and Personnel Reliability Program (PRP) requirements. However, to the maximum extent possible, comply with security and PRP requirements before performing RSPs. If loss of control of a weapon has occurred, additional consideration may be required.

(i) PA. Initiate PA procedures to include establishing a JIC and establish direct communications with the Combatant Command PA office and the OASD(PA).

1. Immediately develop a coordinated public message between the Federal Government and SLT officials. The White House expects a senior Washington official (Secretary level) to make a public statement on any incident within 1 hour of occurrence, in accordance with the NRF (Reference (c)). In conjunction with this statement, a similar message should be delivered by the DoD IC with SLT officials soon after arriving on scene (within minutes). Information should include that discussed in subparagraph 3.c.(3)(b)5. of this enclosure. To alleviate panic, the message should be factual and synchronized with the message distributed by SLT officials. Consider having a medical professional present at the press conference.

2. Ensure mechanisms are established to regularly provide the JIC with scientific and medical data for inclusion in external public affairs operations. If available, consider assigning medical and scientific representatives to the JIC.

(j) Transition Briefing. Prepare a transition briefing for presentation to the RTF commander prior to the transfer of DoD IC responsibility from the IRF to the RTF (see subparagraph 3.d.(2) of this enclosure for additional information).

(k) MACS. Identify a suitable site for establishing the multiagency coordination entity.

(l) Interagency Coordination. Consult with DOE and DHS advance elements to determine the necessity for additional assets/personnel and make appropriate requests through the chain of command.

(m) Additional Tasks. If the situation and time permit, the DoD IC shall accomplish the following additional tasks before the arrival of the RTF:

1. Protect the public and lessen health and safety hazards. Objectives include determining the status and location of all hazardous or classified material; researching and

analyzing weather conditions to determine how they will affect the public and the response; placing air samplers upwind and downwind of the accident site; establishing a temporary contamination control line (CCL), if required; and establishing the accident site health group (ASHG).

2. Provide necessary operational security. Objectives include having a security element for perimeter security, entry and exit control, and protection of classified information and property; coordinating with the principal legal advisor, FBI, and civilian law enforcement officials to ensure procedures are in place to preserve the accident as a potential crime scene; and properly maintaining any evidence.

3. If no radioactive material was released during the accident, prepare to respond in the event of a release during weapon recovery operations.

4. Ensure that information conduits are established and provide appropriate news releases as approved and directed by the Combatant Command PA office and the OASD(PA). Objectives include, if necessary, confirming the presence of nuclear weapons according to Reference (r). USG policy is to neither confirm nor deny the presence or absence of nuclear weapons at any specific location, but exceptions under Reference (r) are allowed when it is necessary to administer public safety actions or to reduce or prevent public alarm.

5. Establish an operations area, base camp, and contamination control area.

6. Identify a forward operating location, staging area, and reception center for follow-on forces.

(4) EOD

(a) All four Services have EOD assets. All of these assets have the capability to fulfill the initial response requirements of weapons verification, damage assessment, and electrical RSPs, in accordance with Army Regulation 75-14/Chief of Naval Operations Instruction 8027.1G/Marine Corps Order 8027.1D/Air Force Regulation 136-8 (Reference (u)). However, to ensure response by the most qualified and knowledgeable personnel, follow-on RSPs and disposal procedures on Service-unique nuclear weapon systems should be performed by EOD personnel of that Service, in conjunction with the DOE ARG. The RTF EOD support will come from the Service associated with the weapon(s) involved in the accident. Initial EOD support in areas OCONUS shall come from the nearest EOD unit, with follow-on support coming from the Service that has custody of the weapon. The IRF EOD personnel may become part of the RTF.

(b) The supported CCDR shall provide, or request, qualified EOD teams to perform required procedures on the weapon(s). "Qualified EOD teams" refers to those that have received EOD nuclear training, either in initial training at the Naval School of Explosive Ordnance Disposal or some other recurring/advanced training venue. The deployment time frame is 30 minutes during normal duty hours and 1 hour after normal duty hours, weekends, and holidays.

(c) As the primary element responsible for weapon recovery, the EOD element shall conduct weapon damage assessments, initiate systematic searches to reestablish accountability of weapons and components, and stabilize the site from nuclear and conventional hazards. During the weapons recovery phase, weapons recovery operations are a combined effort of EOD and the ARG.

(d) U.S. Navy EOD are the only EOD personnel trained in underwater recovery techniques and will be the only EOD personnel to recover weapons located underwater.

d. Phase III: Accident Site Consolidation

(1) Overview. This phase evolves out of the initial response as imminent life-saving and firefighting activities are completed and the accident site begins to stabilize. It is marked by the arrival of a robust cadre of DoD and interagency response assets at the accident site, as well as a maturing Federal coordination capability in the local area. Actions taken during this phase may include, but are not limited to, establishing a JFO, controlling contamination, reducing the health and safety risk to the public and response personnel, removing hazards, continuing security measures, performing initial and follow-on RSPs, addressing PA issues, and initiating planning activities for SR.

(2) Transfer of DoD IC Responsibilities. The DoD IC responsibilities shall transfer from the IRF commander to the RTF commander after RTF arrival at the accident site. The change in command shall occur at the conclusion of the transition briefing and IRF personnel shall be incorporated into the RTF.

(a) Transition Briefing. In accordance with NIMS ICS procedures, the transition briefing will capture all essential information for continuing safe and effective operations. It should include the information in subparagraphs 3.d.(2)(a)1 through 3.d.(2)(a)13 of this enclosure, as well as the information required to complete forms ICS 201, "Incident Briefing;" ICS 202, "Incident Objectives;" ICS 203, "Organization Assignment List;" ICS 204, "Assignment List;" ICS 205, "Incident Radio Communications Plan;" ICS 206, "Medical Plan;" and ICS 215, "Operational Planning Worksheet."

1. Introduction. Introduction and general situation discussion.

2. Command Relationships. The command relationships briefing should identify the various response elements, organizations, and specialized teams on scene, as well as who is in command of local civilian response elements.

3. Weather. The weather briefing should discuss how weather has affected recovery operations, detail the impact on downwind contamination, and provide a forecast that includes wind direction, precipitation, severe weather activity, and lightning. The impact of the weather on personnel should also be included.

4. Safety. A general safety briefing should be included in the transition briefing, to include a brief description of primary hazards and actions being taken to mitigate them.

5. Intelligence. The intelligence briefing should include information about any hostile collection or exploitation efforts.

6. Operations. The operations briefing should begin with a diagram of the accident scene to include the location of the weapon(s). Discuss the applicable RSPs, known or estimated magnitude of contamination, the status of any implemented PARs, the contamination control procedures in place, and the status of all specialized teams and capabilities present.

7. Security. The security briefing should state whether an NDA has been established, any interactions with State or local law enforcement, any badging and access (credentialing) issues, and the current rules for the use of force (RUF) under which the security force is operating.

8. Medical. The medical briefing should detail any issues relating to fatalities, casualties, contaminated persons, and any additional potential safety and health hazards. The casualty information should be provided within the construct of its impact on available medical facilities, as well as the response operation. The brief should include preventive medicine considerations.

9. Legal. The legal briefing should discuss any significant or unusual legal activity and give an overview of the relationship between Federal and State authorities. The briefing should explain the RUF in place and provide the legal basis for establishing the NDA.

10. Logistics. The logistics briefing should give an overview of personnel currently on site and the timelines for those expected to arrive in the future. The briefing should also cover messing, billeting, support infrastructure, staging areas, transportation, and the availability of critical resources.

11. PA. The PA briefing should give a report of any media on-site, the level of public awareness and their concerns, and whether a statement has been issued concerning the disclosure of nuclear weapon information. This briefing should also provide the press conference schedule.

12. Communications. The communications briefing should list the communications assets available, the status of establishing secure communications, and the extent of any reports made thus far to HQ elements.

13. Relevant Presentations by Other Federal and SLT Elements. Other involved organizations or agencies should brief on specific aspects of the response.

(b) DoD IC Responsibilities During Consolidation. During Phase III of the response, the DoD IC should:

1. Maintain UC with SLT officials representing other jurisdictional authorities at the accident site.

2. Maintain or establish secure communications with the Combatant Command.
3. Initiate or continue reporting according to Reference (q) and Combatant Command and DoD Directives.
4. If not previously accomplished and such is in the best interest of public safety and public order, confirm the presence of nuclear weapons according to Reference (r). If a JFO is established, transfer oversight for PA and the Federal JIC to the JFO external affairs officer.
5. Continue IRF activities, as required, and accomplish any IRF tasks that are not yet completed.
6. Establish priorities for recovering weapon(s) and weapon components, classified radiological material, and radioactive and other hazardous items.
7. Prioritize all NDA-related requests for emergency support, secondary emergencies, and logistic requirements.
8. Establish a combined ASHG.
9. Establish the joint security coordination center.
10. Establish or continue liaison with the JFO.
11. Coordinate actions with any accident investigation board (AIB) or team and work with the President/Chair of the AIB to assist in the conduct of its investigation while maintaining the safety and security of the accident site.

  - a. In all cases, the safety and/or security of the accident site shall take precedence over accident investigation activities.
  - b. Weapon recovery and security operations shall consider the safety of the public and the response forces and, to the greatest extent possible, coordinate their actions with the President/Chair of the AIB or team to preserve evidence necessary to the accident investigation.
12. Help the involved SLT government ensure the health and safety of civilians.
13. Coordinate actions with the FBI criminal investigation team through the JOC, if criminal or terrorist acts are suspected.
14. Provide required medical, logistical, and administrative support as needed by NDA forces.
15. Assess force protection requirements and provide for long-term impacts on DoD forces.

16. Begin planning for disestablishment of the NDA and orderly transfer to appropriate SLT authorities; ensure DoD/DOE long-term support during the SR phase is provided.

17. Plan, direct, coordinate, and administer the NDA response elements.

e. Phase IV: Weapon Recovery Operations. The term “recovery” as used in this Manual does NOT apply to long-term restoration efforts of the affected area as outlined in the NRF (Reference (c)).

(1) Overview. Weapon recovery involves myriad technical disciplines and supporting infrastructure to reduce and minimize hazards to the public and the environment. Weapon recovery begins once any existing fires have been extinguished, weapons have been cooled, exposed personnel have been removed or stabilized, and initial reconnaissance of the area has been conducted by EOD personnel to locate weapon(s) and debris, as well as to prioritize future actions. The principal resources available to meet weapon recovery responsibilities are EOD teams and the DOE/NNSA ARG. The DoD IC may request additional support as required.

(a) The DoD IC should consider the following safety, health, and security factors before initiating any activities related to weapon recovery:

1. Explosive ordnance and accident debris are inherently dangerous, but some minimum number of personnel may have to be exposed to hazards to complete the mission.

2. Consequences should be evaluated before exposing personnel to hazards.

3. The high priority given to weapon recovery operations does not inherently imply a need for rapid action. Personnel and public safety must always be the highest priority.

(2) Nuclear Weapon Security. The two-person rule must be strictly enforced when working with nuclear weapons. The DoD IC should ensure that all personnel are familiar with the concept. Reciprocity between the DoD PRP and DOE Human Reliability Program should be accepted by the DoD IC and security authorities during a joint response. Physical security safeguards required to prevent unauthorized access to classified information and proper control and disposition of classified material must be strictly enforced during all operations involving the weapon(s) or weapon components. Because of the technical information requirements during nuclear weapon operations, some documents at the accident scene may contain critical nuclear weapon design information (CNWDI). The sensitive information in these documents requires that security measures be implemented consistent with the highest classification assigned. Personnel working in an area containing CNWDI should be properly cleared and authorized until recovery discussions are complete and the applicable items have been covered or removed. The DoD IC has CNWDI waiver authority during an actual emergency but not during drills or exercises. The DoD IC will maintain a credentialing system to process personnel into the accident site.

(3) Weapon Recovery Steps. The basic steps of weapon recovery operations are initial entry, locating weapons and weapon components, development and approval of the recovery plan, performing RSPs, and temporary storage, packaging, transport, and disposal of the weapon and components.

(a) Step 1: Initial Entry. The initial entry shall determine the preliminary weapon(s) status and hazards in the area. During the initial entry into a nuclear weapon accident site, many hazards will be present, not just from the nuclear weapon, but from the associated delivery system and the transportation mechanism, if applicable. Nuclear weapons and delivery system components may contain conventional explosives and other HAZMAT. Radiological material may have been dispersed by mechanical disruption, fire, or detonation. Weapons may need stabilizing to prevent further damage or explosions. Other explosive items that may be encountered include conventional munitions, aircraft fire extinguisher cartridges, engine starter cartridges, pyrotechnics, and egress or extraction devices. Leaking fluids, liquid oxygen, propellants, oxidizers, shredded or torn metals, and composite materials and/or fibers present additional hazards. Initial responders will mark these hazards and a clear pathway and/or entryway to the weapon(s). In initial site stabilization, IRF EOD teams, if available, determine weapon condition and, if required, perform electrical RSPs.

(b) Step 2: Locating Weapons and Weapon Components. After initial site stabilization is accomplished, a deliberate search is initiated by EOD personnel to locate all recoverable nuclear weapons and components. All reasonable efforts must be made to accomplish this task and, depending on the accident circumstances, weapon(s) and weapon components may be scattered and/or buried over a large area. A systematic search may be required until all weapon(s) and weapon components are located and identified. The search may be time consuming and may require many personnel. The search method used by the DoD IC depends on many factors including the number of personnel available, topography, and environmental conditions. Metal detectors and radioactivity detection, indication, and computation (RADIAC) equipment may be needed to find all weapons and components; consider the use of DoD or DOE unmanned aerial systems if available. As components are found, their location should be marked, recorded on a map using Global Positioning System coordinates, if possible, and photographed. If all components are not found, the EOD team leader should coordinate with the ARG team leader and recommend to the DoD IC additional procedures to be incorporated during the remediation phase of operations. Search techniques are:

1. Creeping Line Search. A search in loose crisscrossing patterns designed to find weapon components rapidly. This technique is used by EOD and radiological monitoring personnel to search the accident area soon after the accident has occurred.

2. Aerial Radiological and Photographic Survey. Used to identify areas of significant radioactive intensity to help find missing weapon components and provide high resolution photography. DOE/NNSA aerial radiological surveys provided by the aerial measuring system can help in this regard.

3. Visual Line Search. A search usually conducted by a slow moving line of personnel positioned abreast at various intervals depending on the object to be located.

4. Instrument Search. Metal and radiation detector monitoring of those areas where weapons or components were found before. This method may supplement the visual search.

5. Scarifying Procedure. Used to locate components that may have been buried during the accident or subsequently covered by wind action. A road grader equipped with scarifiers (large steel teeth) is used to plow a surface. Search teams follow the graders and conduct a visual and/or instrument search for missing components. Coordination must be made with the ASHG before implementing such techniques, in order to assess personnel protection requirements due to re-suspension and the potential impact on site decontamination and remediation.

(c) Step 3: Development and Approval of Recovery Plans. If the weapon is in a stable environment, no immediate actions should occur until a coordinated weapon recovery plan has been developed by EOD personnel and the DOE/NNSA ARG weapon recovery team. The approval of these plans is the responsibility of the DoD IC in consultation with the DOE/NNSA senior energy official (SEO). In order to assume timely response, the approval of plans with minimal worst-case consequences should be delegated to the EOD team chief and ARG field team leader. The elements of a Weapon Recovery Plan are:

1. Operational objectives.

2. Detailed procedures. RSPs and continuation of render safe procedures (CRSPs) developed by EOD and the DOE/NNSA ARG shall be reviewed and approved by the joint DoD/DOE weapon recovery safety evaluation team (WRSET), an independent safety review team, before presentation to the DoD IC or designated representative.

3. Special instructions.

4. Hazards.

5. Equipment.

6. Personnel.

7. PPE. For EOD operations in airborne radiological areas, some consideration should be provided for scaled-back personal protective gear if it can significantly reduce other more significant risks, like those from high explosives (HEs).

8. Staging, decontamination, packaging, as well as the method, type, and transportation of the shipment.

(d) Step 4: Conducting RSPs. The DoD IC is ultimately responsible for the proper implementation of any RSPs/CRSPs. DoD military EOD personnel are tasked to perform RSPs,

limited by what procedures the EOD personnel are trained to perform, on damaged weapons in DoD custody. EOD will be directly supported and advised by DOE/NNSA ARG scientific and technical personnel. The initial responding EOD team may be authorized by the DoD IC to perform CRSPs given they have the equipment and capabilities to do so. The EOD team evaluates and analyzes the accident situation and advises the DoD IC of the safest and most reliable means for neutralizing weapon-associated hazards. RSPs may begin once the reconnaissance has been completed. In an accident, nuclear materials must be handled according to written procedures.

1. When available, DOE/NNSA radiographic equipment is used to assess internal damage and aid standard EOD procedures. DOE/NNSA radiographic capabilities are available for the field diagnostics of damaged weapons in the event of an accident. The ARG deploys with high-energy radiography equipment with digital imaging capability. DOE/NNSA ARG capabilities and knowledge, combined with EOD team procedures and experience in RSPs and CRSPs under hazardous conditions, provide the best method of determining a weapon's condition and providing for its safe recovery.

2. The EOD team's actions, by priority are:

a. Preventing nuclear detonation.

b. Preventing nuclear contribution or an HE detonation.

c. Detecting, identifying, containing, and reducing the hazards of explosives and external and internal radiation hazards resulting from the accident.

d. Protecting personnel against the hazards noted in subparagraphs 3.e.(3)(d)2.a.-c. of this enclosure.

1. After completion of the RSPs/CRSPs and coordination with accident investigators, the weapon and weapon components should be removed to an interim storage area.

(c) Step 5: Temporary Storage, Packaging, Transport, and Disposal

1. Hazard Removal. The final step in weapon recovery begins with the removal of identified hazards. The DoD IC establishes priorities for removing all hazards so that other response personnel may conduct operations. It is unsafe for anyone but task-trained personnel under EOD supervision to clear an area of broken, scattered, or re-solidified HE.

2. Temporary Storage. After EOD personnel and the DOE/NNSA determine the weapons to be safe for movement, they are moved to a designated interim storage area, in coordination with accident investigators.

a. Consolidation of large amounts of fissile material in confined areas must take criticality safety into consideration. Large pieces of Special Nuclear Material (SNM) should not be stored in close proximity to each other.

b. If weapons and weapon components are to be stored outside, they must be protected from the elements and information sensors, including satellite surveillance.

c. The distances that explosives storage areas must be separated from other operations are determined by the type and amount of explosives stored. An isolated and segregated area should be set aside for the exclusive storage of exposed or damaged explosives. If explosive items cannot be stored separately, a balance of safety and practical considerations requires assigning each item to a storage group based on compatibility characteristics. In some situations, on-site disposal of HE may be possible. However, safety is always the primary consideration, and major factors in an on-site disposal decision are the space available and the hazards presented, including re-suspension of contaminants. The explosives storage area or disposal sites should be large enough to reduce hazards to personnel in the event of a detonation.

3. Custody. Each Service has publications that address the storage, security, and safety aspects associated with nuclear weapons. These publications also address requirements for the custody of nuclear weapons and weapon components. To provide the DoD IC with the full authority and responsibility for all actions at the scene of an accident, the Services' publications shall address the transfer of physical custody of the nuclear weapons to the DoD IC when assuming command of the accident in accordance with Reference (1). Ultimate disposition of damaged weapon(s) and/or components involves returning these devices to DOE/NNSA; therefore, close coordination between the DoD IC and the DOE/NNSA SEO is necessary throughout the weapon recovery phase. Custody of the damaged weapon(s) and components is transferred to DOE/NNSA at a point decided jointly by the Department of Defense and DOE/NNSA.

4. Packaging and Marking. The DOE/NNSA ARG maintains the expertise to safely package damaged nuclear weapon(s) and weapon debris associated with an accident involving nuclear weapons. Transportation specialist consultation is required for weapon(s), weapon components, and/or explosives damaged or subjected to extreme forces during accidents. Before weapon(s), weapon components, and/or explosives are shipped, they must be packaged to ensure that no contamination breaches the container and that the environment experienced during shipment will not cause further damage. To meet this requirement, special packing, shipping, marking, and safety instructions should be obtained from DOE to comply, as much as feasible, with transportation regulations of the Department of Defense, DOE/NNSA, and the Department of Transportation (DOT), as applicable. The DOE/NNSA is prepared to provide unique containers that are designed to safely transport damaged nuclear weapons, their components, and/or associated debris.

5. Shipment and Final Disposition. When the initial disposition decision has been made, the IC may assign the Department of Defense or DOE/NNSA the primary responsibility for moving the weapons. Nuclear weapons shall be moved by the safest means and over the safest routes to minimize the potential overall risk to the population and environment. Movement should be kept to a minimum. Shipments of weapons and/or weapon components shall be eventually routed to a DOE/NNSA facility for examination, analysis, and

final disposition. Security of the shipment should be considered when deciding the mode and route of transportation.

6. Redeployment. While many accident site resources may be released by the DoD IC for redeployment after packaging and transportation of the weapon(s) and/or components is completed, others will have a continuing role at the accident site. The DoD IC should assess which forces can be released and which forces need to remain. Additionally, the DoD IC should prepare for transitioning responsibilities for long-term management of the accident scene to the appropriate authorities. These actions include disestablishment of the NDA/NSA, and coordinating measures for Federal support for site security and remediation activities, if requested, to SLT governments. For those redeployed assets, the final step of the response is reconstitution of response capability to reestablish readiness for a subsequent deployment.

f. Phase V: SR

(1) Overview

(a) SR is the phase of accident response that addresses cleanup of contamination that may have occurred as a result of the accident and restoration of the affected area to conditions agreed upon by the stakeholders. SR activities are closely integrated into other phases of accident response, and preventing or mitigating the spread of contaminants is a high priority for the IC or UC throughout the response. Recovery planning that includes SR is initiated at the request of the SLT governments, and generally does not take place until the accident site has stabilized and immediate actions to protect public health, safety, and property are accomplished. Upon request, the Federal government assists SLT governments in the development and execution of recovery plans (the term “recovery,” as used in this section, encompasses any action dedicated to the continued protection of the public and resumption of normal activities in the affected area).

(b) Personnel responsible for SR activities may refer to the Multi-agency Radiation Survey and Site Investigation Manual (Reference (v)), which was developed jointly by the Department of Defense, DOE/NNSA, EPA, and the Nuclear Regulatory Commission, to provide a consistent approach in investigating and remediating radiologically contaminated sites, regardless of the cause – routine operations or accident. Additionally, sections 9601-9675 of title 42, United States Code (U.S.C.), (Reference (w)) assigns strict liability to the coordinating agency during and following a nuclear weapon accident response. As outlined in section 9607(a) of Reference (w), the potentially responsible party (the coordinating agency) will be responsible for any other necessary costs of response. Specifically, the coordinating agency will be liable for damages or injury to, destruction of, or loss of natural resources and the costs of any health assessment or health effects study carried out under sections 9601-9675 of Reference (w).

(2) Responsibilities. In a U.S. nuclear weapon accident, the Department of Defense is responsible for managing the Federal technical radiological cleanup activities after a DoD custody accident.

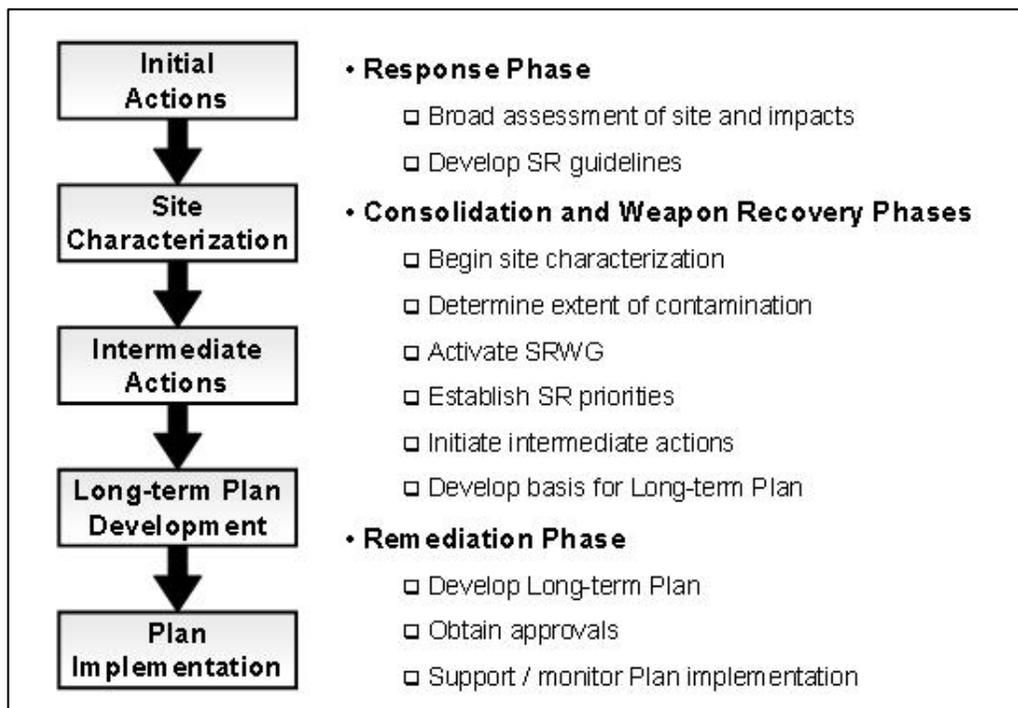
(a) The DSO shall establish an SR subgroup within the response and recovery branch of the JFO/multiagency coordination center operations section to coordinate SR environmental remediation and cleanup in concert with cognizant SLT governments. SR support and expertise can be requested from DOE, the EPA, the Army Corps of Engineers, and other Federal agencies having SR expertise and capabilities (e.g., advisory team for food and animal health matters).

(b) SLT governments are primarily responsible for planning the recovery of the affected area. Upon request, the Federal Government assists SLT governments with developing and executing recovery plans.

(c) The Department of Defense may transfer responsibility for remediation to another Department or agency to manage long-term cleanup efforts.

(3) SR Process. SR has five fundamental steps: initial actions, site characterization, intermediate actions, long-term plan development, and plan Implementation (Figure 9). The SR process is initiated during the early phases of the response. The complete SR process may last for years after the nuclear weapon and its radioactive components are recovered from the site. Many actions within the process overlap from one step to the next as stakeholders address the complex problems associated with remediating contaminated land, buildings, and property to agreed-upon safe levels.

Figure 9. The SR Process



(a) Initial SR Actions. This step begins during the initial response phase and focuses on actions and short-term planning to prevent or mitigate the spread of contamination and on an initial assessment on the degree and extent of contamination. Contamination prevention and

mitigation actions might include wetting down the contaminated components to prevent suspension or re-suspension and blocking runoff of contaminated liquids. The initial contamination assessment assists in identifying the scope of the problem, the stakeholders, and the range of expertise required. DOE, through the FRMAC or DOE consequence management home team and consequence management response team, provides information and support to IC or UC radiological monitoring and assessment activities for the initial phases of the response.

(b) Site Characterization. Site characterization begins during the consolidation phase. A comprehensive and complete characterization of the contamination problem is essential to an effective SR effort. The characterization should provide sufficient information on the physical characteristics of the site, including soil surface features, meteorology and climatology, surface water hydrology, geology, demography and land use, and hydrogeology. Emphasis should be placed on surface soils since this is the predominant source of exposure. Characterization should also address environmental conditions that could affect the rate and direction of contaminant transport in the environment. Results of the characterization survey should include identification and distribution of contamination in buildings, structures, and other site facilities; the concentration and distribution of contaminants in surface and subsurface soils; the distribution and concentration of contaminants in surface water, ground water, and sediments; and the distribution and concentration of contaminants in other impacted media such as vegetation or paint. The key actions in this step are highly technical and a full site characterization may take weeks or months to complete. Current Service and DOE/NNSA guidance addresses this step in detail.

(c) Initiate Intermediate Actions. Intermediate actions are initiated during the weapons recovery phase and focus on achieving three principal goals: protect public health and the environment, restore essential services, and develop the basis for a long-term plan. Actions in this step should concentrate on those problems that are most important or can be accomplished quickly and easily. Planning and prioritizing these actions should include the early and full participation of SLT stakeholders, as well as the general public. Openness and transparency ensure questions are answered and gain public confidence in both the process and the SR plan that will be developed. These actions may be time consuming but will have a significant long-term effect.

1. During this SR step, the DSO shall formally establish a Site Remediation Working Group (SRWG), with representation from Federal and SLT agencies.

a. The SRWG will assess the type and extent of contamination; develop the long-term SR plan; obtain Federal and SLT government approval for the plan; provide the plan to the DoD IC for execution; and monitor the results.

b. Membership, size, and location of the SRWG are flexible and dynamic. The SRWG will expand and contract with changing conditions at the accident scene. Once the radiological material and classified components have been removed from the accident site, the Department of Defense transfers responsibility for remediation to another department or agency to manage long-term cleanup efforts. The Department of Defense will initially lead the SRWG, but leadership will transfer once remediation responsibilities are transferred.

(d) Long-Term SR Plan Development. The major goals in developing the long-term SR plan are the long-term protection of the public health and environment and restoration of the affected area to a level that is technically and economically achievable within socially and politically acceptable guidelines. This step involves extensive coordination and approval at all levels before a final plan evolves and may take months, or perhaps years, to complete. While a budget should be developed, the cost of remediation should not be the driving factor in developing a plan.

(e) Plan Implementation. Once all plans have been approved, the Federal agency responsible for managing long-term cleanup efforts will work with the other involved jurisdictional entities to implement the plan. Responsibility for long-term Federal radiological monitoring and assessment coordination will have transitioned from the FRMAC to the EPA and will be terminated when DHS, in consultation with the Department of Defense, other participating agencies, and SLT governments, determines that:

1. There is no longer a threat to public health and safety or the environment.
2. SLT resources are adequate to manage the requirements of the situation.
3. There is mutual agreement among the agencies involved to terminate monitoring and assessment.

#### 4. DOD SUPPORT TO DOE/NNSA

a. General. Under the NRF (Reference (c)), after an accident or incident involving a U.S. nuclear weapon in DOE/NNSA custody, DOE/NNSA will be the coordinating agency and the Department of Defense will serve as a cooperating agency. The general procedures and resources outlined in this section are designed to support the DOE planning guidance and procedures contained in DOE nuclear weapon accident program plans and to be consistent with the NIMS (Reference (j)) ICS. This Manual is focused primarily on procedures by the DoD Components to execute a unified response to a nuclear weapon accident when the Department of Defense has custody of the weapon. When supporting DOE, DoD organizations will apply the same basic procedures contained in this Manual. In so doing, the Department of Defense will provide immediate assistance and, in its role as a cooperating agency, provide support to the technical weapon recovery operation, as requested. If requested, the Department of Defense will provide other support, such as security forces (within legal limits), EOD actions, radiological monitoring, safe haven, fire, rescue, and logistics resources.

b. Authorities and Type of Support. The support by the DoD Components to DOE/NNSA can be provided under different authorities as described in subparagraphs 4.b.(1)- 4.b.(2) of this enclosure.

(1) Reference (e). This DoD Instruction directs the Chairman of the Joint Chiefs of Staff to initiate and manage the DoD response to a nuclear or radiological incident, including support

to DOE/NNSA after an accident involving a weapon in DOE/NNSA custody. DoD support may include the use of communications capabilities of the NMCC and response forces as requested.

(2) DSCA. Reference (f) and DoDD 3025.15 (Reference (x)) describe the process by which the Department of Defense responds to requests by civil authorities (e.g., DOE/NNSA, DHS, National Aeronautics and Space Administration (NASA), and SLT authorities) for assistance.

(a) Immediate Response Authority. This authority, as part of DSCA, is intended for use under imminently serious conditions resulting from any civil emergency that may require immediate action to save lives, prevent human suffering, or mitigate great property damage. When such local conditions exist and time does not permit prior approval from higher HQ, local military commanders and responsible officials from the DoD Components are authorized, subject to any supplemental direction that may be provided by their DoD Component, to respond to requests of civil authorities. All such necessary action is referred to as “immediate response.” Local commanders who receive the request determine whether to authorize such a response and the initiation of such action will very likely precede any guidance from a superior authority. Accordingly, the DoD “immediate response” to a nuclear weapon accident involving a weapon in DOE custody would likely be in the vicinity of a military base. Due to the urgency of the situation, support provided under “immediate response authority” should not be denied if Secretarial approval is not immediately available. Approval should be sought as soon as possible. DOE is still the coordinating agency and if an immediate DoD response is locally required, the Department of Defense shall inform DOE Operations Center of this action and be responsive to DOE guidance once DOE forces are established at the scene.

(b) Mutual Aid Agreements. The Department of Defense may also provide firefighting and other emergency support under existing local mutual aid agreements.

(c) General DSCA Response Authority. Subsequent to the immediate and mutual-agreement actions addressed in subparagraphs 4.b.(2)(a)-4.b.(2)(b) of this enclosure, nuclear weapon accident or incident situations may require additional support. For DoD support to DOE/NNSA, the guidelines and process for DSCA will be followed for all additional requests beyond any support rendered under immediate or mutual-agreement responses. Unless approved in separate established authorities, the provision of the DoD Component resources to support requests for assistance is subject to the prior approval of the Secretary of Defense.

c. Support to DOE. Given long-standing statutory and policy requirements, and their history of interdepartmental cooperation, the Department of Defense generally will honor all requests for assistance from DOE/NNSA. Because the Department of Defense has more installations than DOE/NNSA and these installations are distributed across the country, the Department of Defense likely will be closer than DOE to an accident scene and more capable of rapidly providing support before DOE can mobilize and move its full response forces to the accident scene. DoD support may provide an interim capability to supplement existing DOE capabilities and to establish an NSA until long-term assets from DOE and other Federal departments and agencies can be deployed through the NRF ESF structure. DoD support may continue until joint weapon

recovery operations are complete. At all times, the Department of Defense will be in a supporting role as a cooperating agency.

(1) Phases of Support. DoD response forces may be deployed in one of two phases. If Phase 1 is not necessary, Phase 2 is the only phase that will apply.

(a) Phase 1 (“DOE Requests Substantive Support”). Phase 1 consists of the immediate support as described in subparagraphs 4.b.(2)(a) and 4.b.(2)(b) of this enclosure and covers the situation in which DOE forces are essentially disabled. Pursuant to Reference (e), the Chairman of the Joint Chiefs of Staff, on behalf of the Secretary of Defense, will initiate and manage the response by the Department of Defense.

1. Under immediate response authority, the local commander may initiate response without approval of higher command. In this instance, a DoD command element will be established as quickly as possible and will support whatever DOE command element exists, if any.

2. “De-facto DoD Control.” If the commander of DoD forces is requested to act initially as the IC (until DOE can exercise effective control), then the initial DoD response will be the same as when DoD is the coordinating agency. Pursuant to Reference (e), response by DoD forces may be initiated by the Chairman of the Joint Chiefs of Staff (on behalf of the Secretary of Defense) through the NMCC, and DoD forces would carry out their responsibilities until the commander is relieved by the SEO. The DoD response may require coordination with SLT agency representatives already on-site and securing the area.

3. This phase ends when DOE is able to exercise full control.

(b) Phase 2 (“DOE Exercises Effective Control”). If incident command has not passed to DOE during Phase 1, it will be passed at the commencement of Phase 2. Phase 2 is the most likely scenario for DoD support to DOE. In this phase, DoD support would be in response to DOE/NNSA requests for assistance. This support typically will be handled in Phase 2 as a DSCA response, based on requests from DOE/NNSA to the Department of Defense. A standing EXORD will be established by the Joint Staff to expedite the process.

(2) DoD resources that may be deployed to support DOE (in either support phase) may include, but are not limited to:

(a) Command and Control. The DoD commander will initially exercise command and control of all DoD forces on scene and coordinate all DoD support activities with the DOE IC. The DoD commander will report through the normal chain of command until other command arrangements are established.

(b) Security. DoD forces will assist DOE as required to secure an accident location. The Secretary of Defense will approve requests by DOE for security forces. The EXORD will contain RUF. This support may have to be authorized by the Attorney General. Documents

governing the use of DoD forces include References (g) and (w), sections 831 and 1385 of title 18, U.S.C. (Reference (y)), and DoDDs 3020.40 and 5525.5 (References (z) and (aa)).

(c) HAZMAT. The location and nature of an accident may require assistance from HAZMAT professionals to conduct initial site radiation or HAZMAT monitoring to develop information to support PARs. While this capability likely will come from nearby SLT resources, the Department of Defense may be asked to supplement this type of support when DOE and SLT resources are overwhelmed or unavailable.

(d) Medical. Accident circumstances may require assistance from DoD medical personnel to conduct initial rescue and life-saving steps. The Department of Defense may be asked to supplement this support when SLT resources are overwhelmed or unavailable.

(e) EOD. A DoD EOD team may be required to conduct initial RSPs on a nuclear weapon, or other EOD support, depending on the nature of the accident.

(f) Communications. The Department of Defense may be requested to provide communication support, such as the U.S. Air Force HAMMER Ace package when requirements exceed DOE capabilities.

(g) Logistics. DOE does not inherently possess the range of logistics capabilities that may be required to fully support the response to a nuclear weapon accident. DoD support could include transportation, material handling equipment, and lodging.

1. DOE transportation assets may or may not be available to move the DOE ARG. The Department of Defense may provide transportation if an appropriate DOE request is approved by the Secretary of Defense. DoD assistance will be required to airlift DOE resources to a foreign accident site. However, the DOE personnel and equipment to be moved to a foreign location will likely be limited to the ARG and tailored to the specific situation. Thus, DOE foreign deployment requirements will likely be considerably smaller than the preceding numbers.

2. If the arrival airport is a DoD airbase, the Department of Defense should be prepared to assist in off-loading DOE assets and transporting them to the accident scene.

3. Lodging/shelter/berthing for 200 personnel, including command and control facilities, may be requested at the closest military installation, or pre-packaged kits could be requested for remote sites.

(h) PA. A DoD public affairs officer (PAO) from the responding DoD facility will travel to the ICP or to the JIC to address DoD response force activities in close coordination with DOE PA officials.

(3) The Department of Defense may also deploy a DSO, if a JFO is established, to be the SecDef representative in the JFO. The geographic Combatant Command will also deploy a DCO for the appropriate FEMA region to plan, coordinate, and integrate DSCA with Federal and SLT agencies through the PFO.

d. Funding. Pursuant to Reference (q), the DoD Components shall comply with legal and accounting requirements for the expenditure of DoD resources to ensure reimbursement of costs incurred by the Department of Defense when providing support under Reference (h), Reference (k), or other applicable authority. However, because the Department of Defense and DOE share the responsibilities associated with the nuclear weapon stockpile, each department will normally resource for the use of its respective capabilities.

## 5. U.S. NUCLEAR WEAPON INCIDENT RESPONSE INVOLVING TERRORISM CONCEPT OF OPERATIONS

a. General. One of the main assumptions of this Manual is that all nuclear weapon incidents will be investigated as terrorist acts (“incidents” vice “accidents”) until proven otherwise. It is assumed that eliminating terrorism as a cause of the incident will take some time. An actual or attempted terrorist act involving a nuclear weapon in DoD custody may initially appear as a type of accident. Therefore, the procedures and protocols outlined throughout this Manual will also be a useful guide in the response to these types of incidents. However, a malevolent act adds complexity to incident response operations due to the additional agencies participating in the response effort.

b. Authority. Pursuant to Reference (p), the Attorney General has coordinating responsibility for criminal investigations of terrorist acts or terrorist threats inside the United States, or directed at U.S. citizens or institutions abroad, where such acts are within the Federal criminal jurisdiction of the United States, as well as for related intelligence collection activities within the United States. The Attorney General generally executes this responsibility through the FBI. This Manual assumes the FBI is the lead agency and will have lead criminal investigative authority for terrorist incidents involving nuclear weapons in DoD custody. While the Department of Defense functions as the coordinating agency for accident response operations, it will additionally assist the FBI as a cooperating agency in supporting terrorism-related law enforcement and investigative operations.

(1) FBI Priorities. The law enforcement and investigative priorities of the FBI in responding to a nuclear weapon accident are similar to those of the Department of Defense: extinguishing fires, preserving life, minimizing risk to health, and securing the weapon(s). Therefore, the actions of the FBI and the DoD IC will be complementary. The DoD IC must be cognizant, however, of additional FBI priorities – preventing existing terrorist acts from being expanded or aggravated and apprehending the perpetrators – while accomplishing life-saving, property protection, and weapon recovery operations.

(2) DoD Law Enforcement and Investigative Activities. Although the DoD IC has overall responsibility and authority over activities occurring on property where DoD has exclusive jurisdiction, including establishing an NDA, the FBI still has overall authority over the Federal law enforcement and investigative activities occurring in these areas. The DoD IC should expect to support the FBI with DoD law enforcement, security, and investigative personnel.

(a) The Posse Comitatus Act (PCA) (2002) (section 1385 of Reference (y)). This act prohibits the use of the Army or the Air Force for domestic law enforcement purposes, except as otherwise authorized by the Constitution or statute; the substantive provisions of the PCA were extended to the Navy and Marine Corps with enactment of section 375 of title 10, U.S.C. (Reference (ab)). The PCA does not apply to the USCG in peacetime or to the National Guard in State status. Examples of prohibited law enforcement activities include interdicting vehicles, vessels, and aircraft; conducting surveillance, searches, pursuit, and seizures; or making arrests on behalf of civilian law enforcement authorities.

(b) Exceptions to the Posse Comitatus Act (PCA) (2002) (section 1385 of Reference (y)). The U.S. Congress has enacted a number of exceptions to the PCA that allow the military, in certain situations, to assist civilian law enforcement agencies in enforcing the laws of the United States. One applicable exception to the PCA is assistance in the case of crimes involving nuclear materials (section 831 of Reference (y)). DoD personnel are permitted to assist the DOJ in enforcing prohibitions regarding nuclear materials, when the Attorney General and the Secretary of Defense jointly determine that an “emergency situation” exists that poses a serious threat to U.S. interests and is beyond the capability of civilian law enforcement agencies. These authorities include “arrest, search, and seizure.”

### c. Organizational Structure

#### (1) Overview

(a) The nuclear weapon incident management operation involving actual or suspected terrorist acts is organized as outlined in section 2 of this enclosure. However, involvement of the FBI as lead agency for criminal investigations of potential terrorist acts necessitates incorporation of FBI functions into the overall incident management structure. The FBI manages all investigative functions from an FBI command post (see Figure 10) that is established by the FBI special agent in charge (SAC) of the local field office. This FBI command post generally consists of three functional groups: command, operations, and operations support. This command post is designed to accommodate the participation of other agencies and coordinate the Federal law enforcement assets required to respond to and resolve the threat or incident with SLT law enforcement agencies.

(b) When the threat or incident exceeds the capabilities and resources of the local FBI field office, the SAC can request additional assistance from regional and national assets to augment existing capabilities. In such circumstances, the traditional FBI command post will transition to a JOC (see Figure 11), which may temporarily incorporate a fourth functional entity—the consequence management group—in the absence of an activated JFO. If a JFO is established, the JOC will become a section within the JFO, and the consequence management group disbands and is assimilated into the appropriate sections of the JFO (see subparagraph 5.c.(1)(d)). Similarly, if a JFO/multiagency coordination center is established, the JOC will become a section within it, and the consequence management group will assimilate into the appropriate sections of the JFO/multiagency coordination center (see subparagraph 5.c.(1)(d)).

Figure 10. FBI Command Post

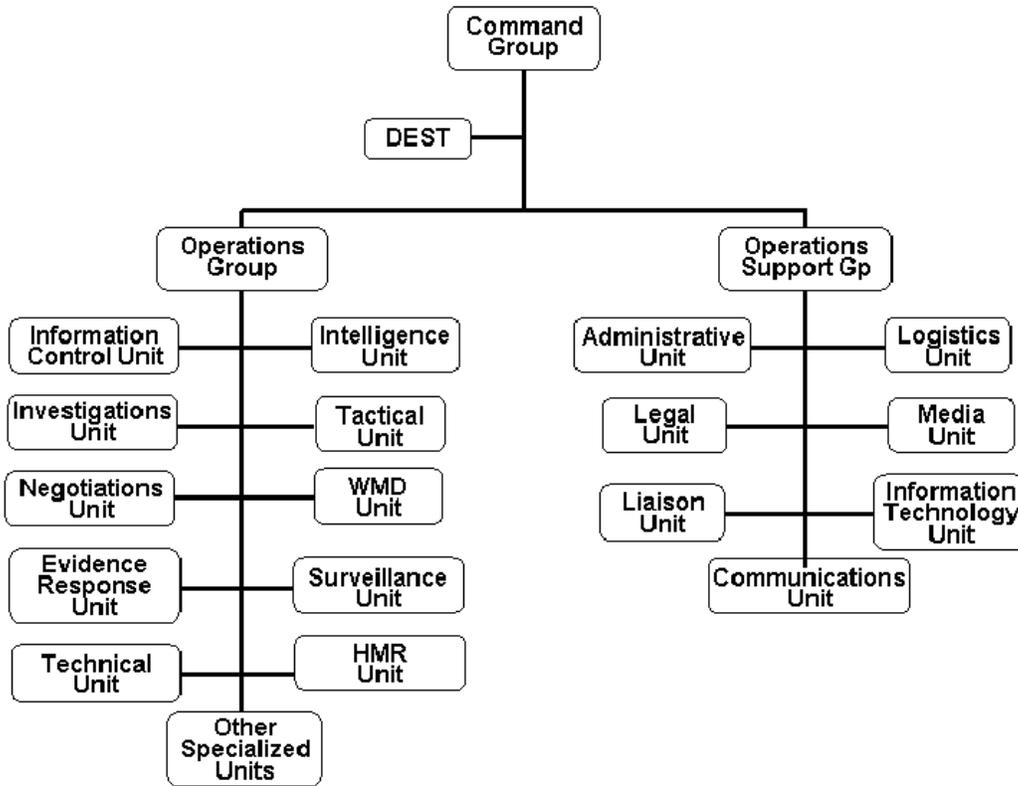
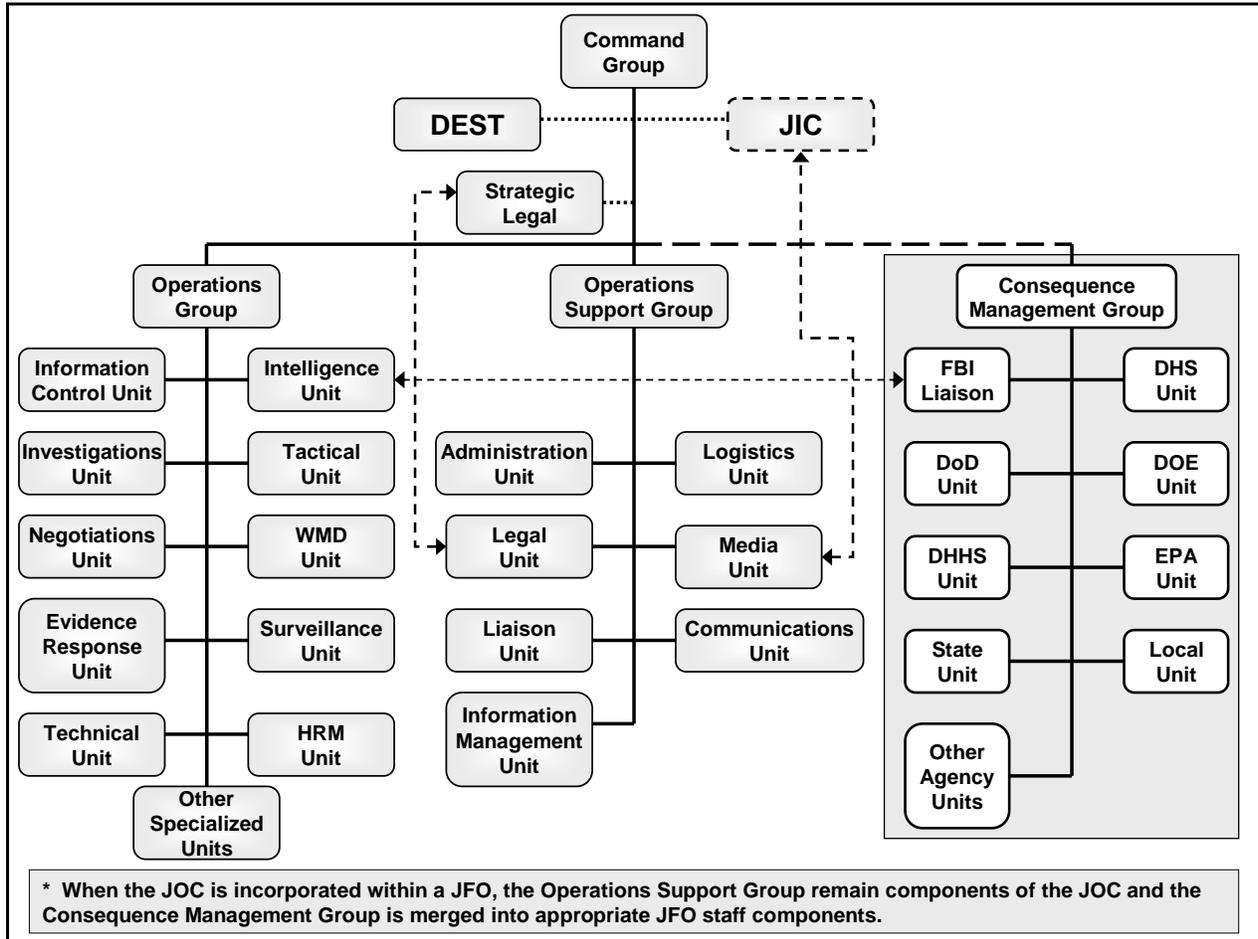


Figure 11. JOC



## (2) Command Group

(a) The command group provides recommendations and advice to the FBI SAC regarding the development and implementation of strategic decisions to resolve the situation. The command group is responsible for approving the deployment and employment of law enforcement investigative and intelligence resources. The Command Group maintains its advisory role to the FBI SAC when the JOC becomes a section of the JFO/multiagency coordination entity. Once a JFO/multiagency coordination entity is established, the FBI SAC becomes the senior Federal law enforcement official (SFLEO), and another senior FBI official, often the assistant SAC, will lead the JOC command group. The command group includes senior officials (SOs) with decision-making authority from Federal and SLT agencies. Law enforcement and investigative strategies, tactics, and priorities are determined jointly within the Command Group. While these are determined jointly, the FBI SAC has final authority to determine final law enforcement and investigative strategies.

(b) Three specialized teams of command group advisors provide guidance and expertise directly to the Command Group:

1. Strategic Legal Team. This team is composed of legal counsel from the FBI, U.S. Attorney's Office, and the District or State's Attorney's Office. It provides legal guidance to the Command Group concerning the strategies under consideration for resolution of the crisis.

2. JIC Team. This team is composed of PAOs from the participating Federal and SLT public safety agencies. It manages information to be released to the public through a coordinated, unified approach. A separate media unit within the JOC operations support group provides specific guidance and expertise to the FBI SAC and coordinates with the JIC to ensure the media strategy is consistent with the overall investigative strategy. The JIC team is integrated into the JFO when established.

3. Domestic Emergency Support Team (DEST). This specialized interagency team is composed of SMEs from the FBI, DHS/Emergency Preparedness and Response (EPR)/FEMA, the Department of Defense, DOE, DHHS, and EPA. They provide guidance to the FBI SAC concerning weapons of mass destruction (WMD) threats and actual incidents.

(3) Operations Group. The operations group handles all investigative, intelligence, and operational functions related to potential criminal aspects of the incident. Each unit within the Operations Group provides expertise in a specific functional area that is important in the overall resolution of the incident. The units within the Operations Group are shown in Figures 10 and 11.

(a) Information Control Unit. This unit is the central point for receiving and analyzing all information coming into the JOC. The information is checked for duplication, and is prioritized and entered into the information management system.

(b) Intelligence Unit. This unit manages the collection, analysis, archiving, and dissemination of relevant and valid investigative and strategic intelligence. It fuses historical intelligence from a variety of sources with new intelligence. It is normally divided into teams based on functional responsibility.

(c) Investigations Unit. This unit provides oversight and direction to all investigative activities related to the incident.

(d) Field Operations Unit. This unit is based on the specific needs of the incident and is staffed by functional experts in a number of specialized disciplines (negotiation, tactics, evidence response, technical, and WMD/chemical, biological, radiological, nuclear, and high-yield explosives). Activities are communicated between agents at the incident site, in the field conducting operations, and at the JOC in order to ensure situation awareness. During a WMD incident, the FBI's HAZMAT response unit (HMRU) provides the capability to safely and effectively respond to criminal acts and incidents involving HAZMAT, through an integrated effort involving specialized response teams. HMRU, in conjunction with the hazardous materials operations unit and the hazardous materials science unit, coordinates a national training program, interagency liaison, technical assistance to FBI field and HQ divisions, and the development of field response programs. These units develop the FBI's technical proficiency and readiness for crime scene and evidence-related operations in cases involving chemical,

biological, and radiological materials and wastes. (This unit would fall under the other specialized units in Figures 10 and 11).

(4) Operations Support Group. These units are based on the specific needs of the incident and are responsible for ensuring the activities of their units are consistent with the FBI SAC's overall strategy. Units may include administration, logistics, legal, media, liaison, communications, and information management (see subparagraph 7.c.(3)(c)). While the roles and responsibilities of these units are self-explanatory, an in-depth discussion of each can be found in the Terrorism Incident and Law Enforcement Investigation Annex to Reference (c).

(5) Consequence Management Group. This group consists of representatives of agencies that provide consequence-focused expertise in support of law enforcement activities. It does not manage consequence functions, but instead ensures law enforcement activities with emergency management implications are communicated and coordinated to appropriate personnel in a complete and timely manner. Early in incident management operations, this group monitors the law enforcement criminal investigation and provides advice regarding decisions that impact the general public or critical infrastructure. FBI requests for DoD law enforcement support are made by this group to the Attorney General, who in turn confers with the Secretary of Defense. Agencies assigned to this group may also have representatives in other JOC elements. This group is established prior to activation of a JFO/RRCC. Upon JFO/RRCC activation, this group is assimilated into the JFO structure or the RRCC in the absence of a JFO.

d. Operations. FBI personnel integrate into the ICP if an ICP is established after a nuclear weapon incident. The first FBI special agent or joint terrorism task force (JTTF) member responding receives a briefing from the DoD IC and works closely with the DoD IC as a member of the UC. This representative then informs the local field office and requests additional assets, if needed. Once a more senior special agent arrives, he or she assumes the FBI representative role within the UC.

(1) Integrating with the UC. Once a more senior special agent arrives, the first arriving special agent or JTTF member moves to the operations section as the deputy chief of operations; this position is responsible for managing the deployment and coordination of Federal law enforcement and investigative assets in support of the incident action plan (IAP). Additionally, a second special agent or JTTF member assumes the position of deputy chief of planning within the ICP. This position allows the FBI to maintain situational awareness and to serve as a conduit for requests for additional law enforcement and investigative assets. This individual also inputs Federal objectives into the IAP. FBI assets also form a unit in the operations section of the UC to assist with coordination and integration of activities. Throughout the incident, the actions and activities of the UC at the incident scene and the command group of the JOC (or JFO, if established) are continuously and completely coordinated.

(2) Terrorist Action Underway. During the actual occurrence of a terrorism incident involving a DoD nuclear weapon, classified plans and procedures take effect. NARP phases of the response may have to wait until successful resolution of the terrorist incident is achieved.

## 6. FOREIGN TERRITORY U.S. NUCLEAR WEAPON ACCIDENT OR INCIDENT RESPONSE CONCEPT OF OPERATIONS

a. Overview. This section applies only to accidents involving U.S. nuclear weapons based on or transiting foreign territory. Any nuclear weapon accident occurring in an area not listed in subparagraph 1.a.(2) is considered an international or foreign accident. The NIMS and ICS templates will be followed to the extent possible to ensure commonality between the DoD Components and interagency elements that may become involved with the response. As Reference (c) does not apply in foreign territory, some documents may use the term “lead Federal agency (LFA)” to refer to the coordinating agency. For consistency, the term “coordinating agency” will be used in this section. When dealing with nuclear weapon accidents occurring in foreign territory, the terms coordinating agency and LFA are synonymous.

(1) Differences from Domestic Response. Response to an accident involving a U.S. nuclear weapon on foreign territory differs from domestic nuclear weapon accident response in two basic ways. First, all response actions must be performed with due regard to the sovereign rights of the HN. Therefore, all U.S. command and response personnel must work closely with their HN counterparts to coordinate activities and ensure all aspects of U.S. response activities are conducted in accordance with applicable alliance and bilateral agreements. Second, DOS will be the coordinating agency for the U.S. response, in accordance with National Security Presidential Directive 28 (Reference (ac)). Although DoD assets will comprise most of the U.S. response, all activities of DoD and interagency response assets must be closely coordinated with the DOS Operations Center and the chief of mission (COM) at the U.S. Embassy in the affected country.

(2) Bilateral Agreements. The U.S. has bilateral basing agreements with all countries where U.S. nuclear weapons are stored. With some countries, the United States has general agreements regarding each nation’s roles and responsibilities should an accident occur involving those weapons. With some countries, the United States has very detailed agreements integrating U.S. and HN accident response plans and procedures from the highest levels of government to the first responder level. These agreements may direct response procedures that differ from those used domestically. Operational security considerations preclude identification of specific countries in this Manual, but applicable overseas IRF, RTF, and HQ staff personnel are to be made aware of specific agreements and details in their accident preparedness training.

(3) Accident Management Operations. Planners must recognize that the HN has primary responsibility and jurisdiction for managing the overall accident response. Therefore, the IRF and RTF concepts for U.S. domestic accidents will likely have to be adapted to the HN’s command structure and operating concepts. Also, while response phases may occur generally as outlined in this Manual, SR may or may not require the involvement or application of DoD resources. DOS and the U.S. Embassy in coordination with the host government will determine the need for and role of DoD resources in SR.

b. Types of Accidents. Accidents may occur on U.S.-occupied installations with possible off-installation contamination or effects, or they may occur off-installation.

(1) On-Installation Accidents. For on-installation accidents, the Department of Defense has more authority, based upon bilateral agreements. While the agreement provisions vary by country, DoD officials are likely to have more control of the accident scene and surrounding base area. Comprehensive emergency response plans should be coordinated and practiced with HN or host unit authorities. Regardless of the situation, the sovereign rights of the HN must be respected.

(2) Off-Installation Accidents. When no bilateral accident response agreement or integrated joint operating plans exist, off-installation accident management operations will require immediate close coordination between the DoD IC, U.S. Embassy Country Team, and HN officials at all levels of command. Especially for those countries where no bilateral agreements exist, DOS has published a U.S. nuclear weapon accident response “playbook.” The playbook has been distributed to U.S. embassies and appropriate HN government officials in all countries where U.S. nuclear weapons are stored. While neither a bilateral agreement nor joint operating plan, the playbook provides HN and U.S. Embassy officials an overview of accident response tasks to be accomplished, U.S. priorities, and a concept for mutual operations – a common starting point from which to coordinate response activities. The substance and content of the playbook are similar to the operating concepts and procedures in this Manual and supporting Web site at <http://www.acq.osd.mil/ncbdp/narp>.

c. Phase I: Notification and Deployment. The notification and deployment phase for a U.S. nuclear weapon accident in foreign territory begins once the accident has occurred and ends when response forces arrive at the accident site. Accident notification most likely will begin with submission of an OPREP-3 PINNACLE voice report from the nearest U.S. military installation with knowledge of, and communications capability to report, the accident to the NMCC in accordance with the CJCS U.S. nuclear weapon accident reporting procedures in Reference (q). The NMCC teleconference participants may include but are not limited to: the Service operations center, the WHSR, DOS, DOT, DOE, DOJ/FBI, DTRA, United States European Command (USEUCOM), United States Strategic Command, USJFCOM, USNORTHCOM, and DHS. Actions taken during this phase include notifying appropriate U.S. and HN military and civilian authorities and the interagency; coordinating initial U.S. response activities with local HN authorities; deploying a U.S. IRF; and executing plans to deploy the RTF, DOE ARG, and additional assets to the accident site, as requested by the CDR in coordination with the U.S. COM and HN authorities.

(1) Departmental Notification. As in a domestic accident, a U.S. nuclear weapon accident on foreign territory shall be reported as outlined in section 3 of this enclosure and as specified in appropriate Combatant Command directives and arrangements or agreements.

(2) Activation and Deployment. The U.S. COM (i.e., the ambassador or charge d’affaires) is the senior USG official within a HN where an accident might occur. As the NRF (Reference (c)) technically does not apply, DOS is essentially the coordinating agency, with the COM as PFO. The COM, the CDR, and DoD IC work in close coordination to ensure all political and military actions and U.S. PA activities are in the best interest of public health, safety, security, and international political stability. They will exchange LNOs to ensure close communications and situational awareness.

(a) The NMCC tasks the Combatant Command to provide the RTF and designate a flag officer to command the RTF and serve as the DoD IC responsible for all DoD assets. The IC may request technical assets from any Federal agency using the protocols outlined in section 3 of this enclosure. The support may be requested in the form of deployed forces or in the form of reachback assistance, which may be accomplished telephonically, electronically, or through video teleconferencing. In the case of deployed forces or equipment, the HN must grant approval prior to any specialized forces or equipment entering into the country. DOS will work with the HN to obtain such approvals.

(b) The HN manages the activities outside of any WRA, and may request, through the DOS or the COM, technical and logistical support from U.S. agencies as required. On-site management of any WRA will be consistent with appropriate Combatant Command and Service directives or specific U.S. and/or HN arrangements or agreements. In either instance, the United States will work closely with HN national and local authorities to ensure a fast, efficient, and coordinated response.

(c) The U.S. Embassy Special Action Group may receive crisis supplementation through the interagency consequence management support team (CMST). This team of chemical, biological, and radiological and/or nuclear experts advises the COM on accident management issues and may serve as the COM's designated coordinator of the USG accident response. The CMST may also deploy liaison elements to the Combatant Command HQ, the RTF HQ, and the HN crisis management centers. Because the weapon was in DoD custody at the time of the accident, the IRF will be drawn from the nearest in-theater military organization capable of handling the mission.

d. Phase II: Initial Response. The initial response begins with emergency response activities of first responders: fire and rescue, emergency medical, and law enforcement personnel whose actions focus on treating and rescuing casualties, securing the area, and fighting fires. If the IRF must enter the country, it will coordinate its deployment with the COM. The IRF IC and the initial response resources will immediately establish contact with the HN civil or military authorities on-site to gain situational awareness, establish a modus operandi, and reestablish U.S. custody and control of the nuclear weapon(s) and components. Initial emphasis is to assist first responders with life-saving, hazard identification, and safing and security of the weapons and/or components. The DoD IC must ensure that U.S. security personnel are aware of and abide by the RUF applicable in the country where the accident has occurred.

(1) The Department of Defense and the USG, according to their current plans and policies, notify and mobilize response assets for deployment and to support the NMCC, the JNAIRT, and HN embassies in Washington, D.C., as necessary. For the specifics of Phase II activities, refer to U.S. and HN arrangements or agreements and appropriate Combatant Command and Service directives.

(2) The initial deployment of each interagency asset will be governed by individual plans that recognize each agency's responsibilities. However, the deployment should also be tailored to reflect the capabilities of HN emergency response services. In nearly all cases, the unique

expertise and specialized equipment of the U.S. DOE ARG will be required. The deployment of additional U.S. response forces should be carefully managed such that sufficient assets are on hand to perform incident response actions but do not overwhelm HN support capabilities or offend HN sensibilities.

e. Phase III: Accident Site Consolidation. The arrival of the RTF and the full cadre of U.S. response assets to the incident site marks the beginning of Phase III. The U.S. Embassy coordinates the entry of all U.S. assets into the country with the HN government. The COM will coordinate with HN authorities to establish a UC modeled after the one described in section 2 of this enclosure. If they exist, command arrangements will be in accordance with arrangements or agreements. The IC will lead the DoD response efforts but will work closely with the COM and HN authorities. For a complete listing of Phase III activities, see paragraph 3.d. Following a U.S. nuclear weapon accident in foreign territory, the DoD IC should:

(1) Conduct the transfer of IC responsibilities in accordance with the guidelines in subparagraph 3.d.(2), recognizing HN roles. This transfer will include a briefing to HN officials, emphasizing the legal relationship between U.S. and HN personnel and officials and relevant presentations by HN officials involved in the response.

(2) Maintain liaison with the U.S. Embassy/COM and the HN authorities.

(3) Establish a working and coordinating relationship with HN authorities at the scene, integrating with the HN command structure to the extent possible or required by bilateral agreements.

(4) Coordinate with the U.S. Embassy PAO to ensure consistency among COM, HN, and IC information releases. A combined information bureau modeled after the domestic JIC may be established. In conjunction with a coordinated public message from the USG and the HN government, a similar message should be delivered by the DoD IC with HN officials soon (within minutes) after arriving on scene. This message will be released to the public at the discretion of HN authorities.

(5) In coordination with HN authorities, develop a plan to locate and ensure perimeter security is established and maintained at a safe distance around the nuclear weapon(s) or components involved. The Department of Defense has the primary responsibility for the security of the weapon and related classified components or material and has exclusive jurisdictional authority within the NDA and the WRA, as agreed with the HN.

(6) Focus attention and resources toward developing weapon recovery plans as soon as the safety of personnel is ensured, the weapon(s) and components are located, a security perimeter is established, and initial RSPs are accomplished. Weapon recovery procedures beyond initial RSPs should not be conducted until the arrival and concurrence of the DOE ARG.

(7) If requested and approved by DOS, assist HN authorities in developing and coordinating an SR plan. (See paragraph 3.f.)

(8) Coordinate with the DoD Principal Legal Advisor to ensure actions of U.S. Military security personnel do not violate applicable status-of-forces agreements (SOFAs) or HN laws. Ensure the rules of engagement (ROE) and RUF are developed, if not already established by the CCDR, and ensure the ROE/RUF are consistent with all applicable HN and U.S. laws, as well as applicable SOFAs. All U.S. personnel, including security personnel, must have an in-depth knowledge of the ROE/RUF.

(9) In accordance with confirmation guidelines (see Figure 8), notify the HN officials of potential hazards and recommend appropriate public health and safety actions to take outside the NDA or WRA. If necessary, issue PARs to the HN authorities for them to consider what actions must be taken by the public to avoid or reduce exposure to radiation.

f. Phase IV: Weapon Recovery Operations and Disposition. During the weapon recovery operations and disposition phase, responders will gain access to the weapon(s) and EOD teams will perform RSPs and diagnose weapon damage to determine or develop safe procedures for packaging and transport of the involved weapon(s) and weapon debris. For additional information about operations during this phase, see paragraph 3.e. Special considerations for a response on foreign territory include:

(1) The weapons recovery team will likely consist of DoD EOD, DOE/NNSA (ARG), and perhaps HN representatives as specified in bilateral agreements. To protect classified information in countries where no bilateral agreements exist, HN participation in weapon recovery operations is discouraged. However, if the IC realizes that precluding HN participation in this operation will negatively impact the entire accident management operation, ICs are authorized to allow HN participation. This authorization is based upon the IC's professional judgment and is made after consultation with the COM, DOE/NNSA SEO, and the CCDR. Any and all disclosures of weapon design information must be accomplished within the constraints of the Atomic Energy Act of 1954, as amended (sections 2011-2259 of Reference (w)). This authority does not include granting foreign nationals access to restricted data (RD).

(2) In coordination with HN officials, and after EOD personnel and the DOE/NNSA determine the weapons to be safe for movement, the weapons are moved to a designated interim storage area. The DOE/NNSA ARG maintains the expertise to safely package damaged nuclear weapon(s) and weapon debris associated with an accident involving nuclear weapons. Before weapon(s), weapon components, and/or explosives are shipped, they must be packaged to ensure that no contamination breaches the container and that the environment experienced during shipment shall not cause further damage. To meet this requirement, special packing, shipping, marking, and safety instructions should be obtained to comply, as much as feasible, with transportation regulations of the HN and DOE/NNSA.

(3) A WRSET may be formed of U.S. DoD and DOE/NNSA personnel. When authorized in applicable agreements or joint operating plans, the WRSET and a representative from the HN will conduct an independent appraisal of weapon recovery plans to ensure nuclear detonation safety and that the risk of radioactive release is minimized. Any and all disclosures of weapon design information must be accomplished within the constraints of sections 2011-2259 of Reference (w).

(4) The IC will have overall responsibility at the accident site for technical operations, command of DoD personnel, and coordination with HN authorities on scene. The COM has overall responsibility for coordinating U.S. efforts. However, depending upon existing bilateral agreements and laws of the HN, the sovereign rights of the HN will likely result in an HN authority having overall incident command.

g. Phase V: SR. Phase V of the nuclear weapon accident response primarily deals with environmental management activities in the affected area. Remediation is closely integrated with other phases of accident response. Many of the response teams that arrive early on to support the emergency response and recovery phases may stay at the accident site in some capacity to support remediation. Ideally, the work of remediation begins when response organizations (to include the HN) develop plans to integrate their forces at an accident site. Paragraph 3.f. outlines the RTF responsibilities during this phase of the operation. For foreign nuclear weapon accidents, SR is initiated at the request of the HN. The HN will also receive assistance with development and execution of recovery plans, if requested. The Department of Defense and DOS will work with the HN to transfer remediation responsibilities to an agency with more expertise in this area. This transfer can only occur, however, with the concurrence of the HN.

## 7. SHIPBOARD ACCIDENT RESPONSE

a. General. A shipboard nuclear weapon accident differs from land-based scenarios in several aspects. Results of shipboard fires are well known and documented in repair party training and procedures manuals. Explosions, whether from a nuclear weapon or some other source (e.g., petroleum fuels or conventional weapons), may cause severe damage affecting the safety and seaworthiness of a vessel. Although the initial response by shipboard personnel will be the same whether an accident occurs at sea or in port, the frequent lack of immediate assistance at sea increases the importance of correct and adequate response by shipboard personnel. A significant difference between a shipboard nuclear weapon accident and a land-based nuclear weapon accident is that the vessel may, depending on the damage sustained, be directed to another location for weapon recovery operations and decontamination, if needed. As with a land-based accident, the location of the vessel will affect the level and extent of interagency involvement. The procedures and processes outlined in this section are applicable and may have some utility for an accident involving a nuclear weapon in a body of navigable water (i.e., a DoD aircraft carrying a nuclear weapon that crashes in a body of water).

b. Purpose and Scope. In a nuclear weapon accident, the commanding officer (CO) of the vessel will focus attention on saving the vessel and crew, protecting the public and crew from health hazards, and keeping the chain of command informed of the situation. The procedures and processes outlined in this section apply to incidents involving nuclear weapons in DoD custody while aboard a vessel; the term “vessel” refers to any waterborne craft – surface or subsurface. The procedures in this section do not apply to nuclear materials owned or operated by the Department of Defense that are being transported over water by a third party, or to nuclear

propulsion systems found on many U.S. Navy vessels; procedures for these accidents are governed by the Nuclear/Radiological Incident Annex to Reference (c).

c. Location. The location of the vessel will determine the level of interagency involvement and will affect response activities. Regardless of location, however, the operational phases identified in section 3 of this enclosure will be followed. Table 2 identifies the possible locations of a shipboard incident, determines NRF (Reference (c)) applicability, and gives basic guidance on where to find response procedures in this Manual. The procedures outlined in subparagraph 7.c.(1) apply to all incidents. Subsequent subparagraphs (7.c.(2) – 7.c.(5)) address differences or additional considerations.

Table 2. Shipboard Accident Locations

LOCATION	NRF APPLICABILITY	PROCEDURES
Underway – International Waters	NO	Enclosure 2, section 7
Underway – Foreign Waters	NO	Enclosure 2, section 6
Underway – Domestic Waters	YES	Enclosure 2, sections 3 and 7
Moored – Domestic Waters	YES	Enclosure 2, sections 3 and 7
Moored – Foreign Waters	NO	Enclosure 2, section 6

(1) Underway in International Waters. When a nuclear weapon accident occurs on a vessel in international waters, the Department of Defense will be the coordinating agency. As Reference (b) does not apply outside of the domestic territory of the United States, its protocols and procedures do not apply. Nevertheless, the scope of the accident may dictate the significant involvement of other Federal agencies, specifically DOE, DOS, and DOJ (until terrorism as a cause is disproved). Therefore, the organizational structure outlined in section 3 of this enclosure will apply for the Department of Defense. The CO of the vessel is the IC and should expect little assistance from follow-on forces, particularly during Phases I and II of the accident management operation. Subsequently, the IC and the crew of the vessel will serve as the IRF.

(a) Phase I: Notification and Deployment. The notification protocols are outlined in section 3 of this enclosure. The possibility of rapid supplementation by an RTF or interdepartmental response forces is unlikely, and action by the vessel's crew in the response will be critical. Some additional assistance by specialized units may be provided by vessels in the vicinity. Also, EOD detachments may be deployed into the area by any of several transportation methods.

(b) Phase II: Initial Response. These procedures are the most crucial in gaining control of a U.S. nuclear weapon accident. Accordingly, all vessel crew, who by the nature of their official duties may become directly or indirectly involved in an accident, shall be trained to perform the procedures in subparagraphs 7.c.(1)(b)1. through 7.c.(1)(b)5. When a nuclear

weapon accident occurs, the senior person present will take charge at the scene and direct available personnel to:

1. Attempt to save the lives of personnel involved.
2. Attempt, when required, to extinguish any fire involving weapons or radioactive material. In addition to the guidance provided in subparagraphs 7.c.(1)(b)1.a. through 7.c.(1)(b)1.j., more in-depth guidance is provided in Technical Publication 20-11 (Reference (ad)). Standard damage control procedures will be used to limit damage and the spread of any possible contamination. Fire boundaries will be set and maintained to prevent the spread of fire. Additionally, the vessel should be maneuvered, if possible, so the wind is on the beam and carrying any contamination away from the vessel. Normal shipboard firefighting and damage control procedures shall apply to fires involving nuclear weapons with these provisions:
  - a. Extinguishing the fire has priority.
  - b. Any weapons involved in, or near, the fire should be cooled to the maximum extent that fire hoses allow.
  - c. Cooling should be continued after the fire is extinguished until the weapon is at ambient temperature.
  - d. The primary suppressant for a fire involving a nuclear weapon is narrow-angle fog (wide-angle fog for submarines). The propellants used in any weapon, conventional or nuclear, produce oxygen once ignited. They may not be extinguished with smothering agents, and some may cause heat retention within the weapon. This factor does not prevent the use of foam, carbon dioxide, Purple K (fire extinguisher), aqueous film forming foam, or other suppressants on aircraft fuel, Navy Standard Fuel Oil, or other petroleum fuel fires that involve a nuclear weapon.
  - e. Narrow-angle fog or a firefighting agent should be sprayed over the complete length of the weapon(s) and/or both sides in a sweeping motion to cool the weapon and its HE contents until the weapon is at ambient temperature. When using foam to fight a fire surrounding an intact weapon, water should not be used to cool the weapon because water floats the foam away, which might allow the fire to re-ignite.
  - f. For below-deck fires, all response personnel going below decks shall wear a self-contained breathing apparatus (e.g., oxygen breathing apparatus and Scott Air Pack); top-side personnel shall wear gas masks. Any firefighters initially responding without respiratory protection should be relieved as soon as possible. Repair party personnel shall wear protective clothing as specified in Naval Ships Technical Manual 079, Volume II (Reference (ae)). Involvement of a nuclear weapon does not require additional protective clothing for firefighting personnel. A backup firefighting team, with appropriate respiratory protection, shall be prepared to relieve, or rescue, teams at the scene.
  - g. During firefighting actions, the flow of potentially contaminated water should be noted and the wetted surfaces considered contaminated until they can be monitored.

The flow of potentially contaminated water should be controlled to the extent possible, and dewatering operations should not be performed in port until testing determines if the water is contaminated. The best method of controlling the potentially contaminated water will be vessel- and situation-unique.

h. Fires involving nuclear weapons in enclosed shipboard spaces should be vented to the atmosphere as soon as practical to deplete the presence of toxic, caustic, and radioactive gases. When venting shipboard spaces, care should be taken to reduce the possible contamination of the exterior of the vessel. In the event of a magazine accident, the normal exhaust system shall be secured and emergency ventilation procedures used. Portable blowers (e.g., Red Devil Blowers) should be used if there is no installed blowout system. The use of “snorkel hosing” with high-capacity filters in conjunction with portable blowers is recommended to reduce possible contamination to portable blowers and to ensure contamination in exhausted smoke is directed outside the skin of the vessel. In all cases, the exhaust vent should be on the leeward side of the vessel. After the fire is extinguished and when in port, unfiltered venting should not be done if it results in contamination being spread to nearby shore establishments or communities.

i. When extinguishing a fire involving a nuclear weapon, a reflash watch shall be set to provide an immediate response to any recurrence of the fire.

j. Potentially contaminated equipment used to fight the fire should be placed in a designated area until monitoring and necessary decontamination can be performed.

3. Establish a security perimeter surrounding the accident scene, limiting access to authorized personnel only. The security perimeter aboard a vessel may be defined by securing hatches to a compartment or posting passageway guards. In all cases, once the hatches have been secured, only personnel authorized by the senior person present will be allowed into the incident scene.

4. Direct all personnel at the scene to take emergency breathing precautions. Personnel will at least cover their noses and mouths with a handkerchief or similar item to reduce inhalation of HAZMAT and smoke.

5. Notify the officer of the deck (OOD) or the command duty officer (CDO) as quickly as possible that an incident has occurred in a compartment. Upon notification, the OOD or CDO will:

a. Initiate routine announcements over the shipboard intercom as follows: “No eating, drinking, or smoking is allowed until further notice.”

b. Initiate standard shipboard damage control procedures including initiating a radiation plot; identifying route(s) to the decontamination station; and recommending changes to the vessel’s heading to vent smoke, toxic gases, and contaminated firefighting water. Near-shore releases – regardless of nation – should be done as a last-resort action.

c. Prepare to initiate decontamination station procedures.

- d. Begin initial OPREP-3.
- e. Notify the CO (if not already completed).
- f. Prepare to receive and assist any follow-on forces.
- g. Continue OPREP-3 situation reports, as required.
- h. Request, if required, helicopter and/or parachute insertion of nearest EOD detachment.

(c) Phase III: Incident Site Consolidation. These procedures are an extension of the initial response procedures; however, they include more detailed procedures for providing positive control of an incident scene. The vessel's CO shall be responsible for executing these procedures.

1. Radiological Monitoring. As soon as possible after notification of an incident, damage control radiological control (RADCON) should conduct beta and/or gamma detection operations. RADCON gamma radiation monitors should then proceed to the extremities of the accident scene, maintaining constant surveillance of the instrument to detect increases in gamma radiation. Any radiation reading above normal background will be reported immediately in accordance with standard Type Commander procedures. If radioactivity is found, monitoring continues to determine the extent of the contaminated area. Personnel monitors identify contaminated personnel who require decontamination and prevent the spread of radioactive material to uncontaminated parts of the vessel.

2. Vessel Monitoring. If contamination was released during the accident, it should be confirmed that parts of the vessel thought to be uncontaminated are in fact "clean." Monitors should be initially directed to check passageways at hatches, doors, ladders, and other locations where most personnel place their hands or feet. If contamination is found, its location should be marked for decontamination and re-monitoring. Contamination tracked or carried onto hard surfaces can usually be removed with soap and water, or by wiping with a clean, damp cloth. Then monitors should be directed toward the expected contaminated area. The boundaries of the contaminated area should be defined. Personnel should be advised of these boundaries and the procedures for crossing them, if required, for essential vessel operations.

3. Air Monitoring. Airborne radiological monitoring shall be conducted to the extent instrumentation allows; however, many vessels are not equipped with air samplers. Monitoring surfaces for loose surface contamination is the most reliable indicator of airborne contamination. If Table 6, "Protective Devices for Emergency Workers as a Function of Surface Contamination," found at <http://www.acq.osd.mil/ncbdp/narp>, is used, table values should be divided by 100 to correct for the higher re-suspension factors (0.001 in place of the 0.00001 used to develop the table) that may be expected from shipboard surfaces.

4. RADCON. RADCON is achieved largely through rigid decontamination procedures. A decontamination station will be established; it is usually located at a compartment entrance. Most vessels have insufficient RADIAC instruments to support more than one decontamination station. If potentially contaminated personnel are both above and below decks, routes to reduce their movement through clean areas should be established. Access to the decontamination station must be possible from both contaminated and uncontaminated areas. A shower and washbasin should be designated for use in decontamination procedures. The wash facilities need not be in the immediate vicinity of the decontamination station, although such a location is preferable.

5. PA. PA will be the responsibility of the fleet commander. The CO informs the vessel's crew on PA releases and, before they debark or use any non-official off-vessel communications, on procedures for responding to requests for information from the news media or from families.

6. Security. Unless accident damage to the vessel and/or weapon(s) has destroyed the normal security provisions for the weapon(s), additional security is not needed. Additional security is provided, if required, to ensure continued weapon protection and to prevent unauthorized access.

7. Debriefings. All the vessel's crew members with information as to the cause of the accident, and particularly those personnel who observed the extent of damage to the weapon(s), should be identified to assist in the accident investigation and debriefed to assess potential internal damage to the weapon.

(d) Phase IV: Weapon Recovery Operations and Disposition. Weather and sea conditions, the extent of damage to the vessel, remaining hazards to the vessel and crew, and the time required to get either expert assistance on board or move the vessel to suitable facilities affect the specific follow-on response actions that the CO might direct while at sea. The CO is limited to the resources on board; the CO's priority is using those resources to best reduce hazards to the vessel's personnel and damage to critical equipment, including RADIACs.

1. RTF Assignment. After receiving damage estimates of the vessel and the weapon, the fleet commander will provide guidance on recovery operations. This guidance will include the port the affected vessel is to make way for, and the deployment of an RTF. The tasked RTF will be assigned to the Combatant Command having responsibility for the port where the affected vessel is directed to report. Upon arrival at the port, the CO will transfer incident command to the RTF IC as outlined in section 3 of this enclosure. Upon receipt of incident command, the RTF IC will perform all actions outlined in section 3 for Phases IV and IV of the accident management operation.

2. Vessel Decontamination. During preparation for recovery operations (i.e., while the vessel is underway to a designated port or while waiting for the arrival of follow-on forces), decontamination actions should begin, if possible. The amount of decontamination that the vessel's personnel are able to perform will be limited by the number of RADIACs available to monitor and re-monitor surfaces being decontaminated and to operate the decontamination

station. Simple cleaning techniques are frequently effective in reducing, if not removing, contamination from many of the surfaces on a vessel.

(e) Phase V: SR. Once the weapon has been transferred to DOE custody and transported to an appropriate DOE facility, remediation operations must be planned and executed. The protocols outlined in section 3.f. will be followed as practicable.

(2) Underway in Foreign Waters. Response to a nuclear weapon accident in foreign waters is very similar to the response to an accident in international waters, with one notable exception – inclusion of the foreign government. Adherence to the procedures and considerations outlined in section 6 of this enclosure is imperative. Above all, the CO must remember the sovereignty of the HN and coordinate all response activities in accordance with all applicable agreements and HN laws.

(a) Phase I: Notification and Deployment. The processes and procedures outlined in sections 3 and 6 of this enclosure apply. DOS through the embassy in the HN will play a key role in notifying the HN and eliciting their support and cooperation. It is conceivable that required follow-on forces will need to enter the HN prior to deploying to the affected vessel; HN authorities must grant permission for all forces and equipment transiting their borders.

(b) Phase II: Initial Response. All procedures and protocols outlined in subparagraph 7.c.(1)(b) apply to nuclear weapon accidents occurring in foreign waters. However, the CO should be prepared to accept assistance from HN forces, if warranted. While the situation may not require HN support, maintenance of harmonious relations with the HN – relations that may be critical during subsequent phases of the accident management operation – may necessitate the CO accepting HN assistance. The DoD IC should confer with the fleet commander and use professional judgment in making this determination.

(c) Phase III: Accident Site Consolidation. The procedures outlined in subparagraph 7.c.(1)(c) apply to nuclear weapon accidents occurring in foreign waters.

(d) Phase IV: Weapon Recovery Operations and Disposition. While the procedures outlined in subparagraph 7.c.(1)(d) apply to nuclear weapon accidents occurring in foreign waters, the level of HN coordination will determine the arrival time of the RTF. The fleet commander, in consultation with the affected CDR and the Secretary of Defense, may decide to route the affected vessel to a port outside of the HN, resulting in delayed RTF arrival or a decision that an RTF will not be deployed. Many variables, to include the severity of the incident and the level of HN cooperation, will dictate the actions occurring in this phase.

1. Directed to a HN Port. If directed to a HN port, it is assumed the HN has allowed this step and will also allow the transiting of the RTF. In this case, the HN will have a significant role in Phase IV and V operations. The CO and the RTF commander must maintain an atmosphere of cooperation and openness to ensure mission success. Close coordination between the CO, affected CDR, DOS, the fleet commander is necessary.

2. Directed to a Domestic Port. If directed to a domestic port, the procedures outlined in subparagraph 7.c.(1)(d) will apply, as will the provisions outlined in subparagraphs 7.c.(3) and 7.c.(4).

(e) Phase V: SR. Once the weapon has been transferred to DOE custody and transported to an appropriate DOE facility, vessel remediation operations must be planned and executed. The protocols outlined in paragraph 3.f. will be followed as practicable.

(3) Underway in Domestic Waters. A shipboard nuclear weapon accident occurring in domestic waters can be more complex than the scenarios outlined in subparagraphs 7.c.(1) and 7.c.(2) since the NRF (Reference (c)) is applicable. However, the procedures outlined in section 3 of this enclosure will apply.

(a) Phase I: Notification and Deployment. The notification protocols outlined in section 3 of this enclosure apply. The possibility of rapid supplementation by an RTF or interdepartmental response forces is likely, but the action by the vessel's crew in the response is still critical. Additional assistance by specialized units may be provided by vessels in the vicinity. Also, EOD detachments may be deployed into the area by several transportation methods.

1. USCG Safety Zone. Following an accident, it may be necessary or prudent to establish a USCG safety zone. The USCG declares a safety zone pursuant to part 165.20 of title 33, CFR, (Reference (af)) under the USCG's authority to control traffic on the navigable waters of the United States. The safety zone limits access to a specific area by people or vessels for safety or environmental reasons; the local captain of the port (COTP) or district commander activates the safety zone by issuing a local broadcast notice to mariners. Public notification through publication in the Federal Register is required, but the safety zone may be established prior to Federal Register publication. Only the COTP or a district commander may authorize entry into the established safety zone; other entry is prohibited except for authorized law enforcement agencies and DoD assets. For the purposes of DoD resources, establishing a safety zone will be similar to establishing an NDA. However, the USCG will have jurisdiction within the safety zone, not the Department of Defense.

2. NCP (Reference (m)). Depending upon the nature and severity of the nuclear weapon accident, it is conceivable that the NCP (Reference (m)) will be activated pursuant to sections 9601-9675 of Reference (w). In accordance with guidelines in Reference (m) and sections 9601-9675 of Reference (w), the EPA or the USCG may declare a spill of national significance. Additionally, DHS may decide to execute its overall accident management responsibilities. Regardless, the Department of Defense is still listed as the coordinating agency for shipboard incidents involving nuclear weapons. The NCP provides authority for both the NRT and regional response teams (RRTs) to provide assistance for specific accidents as needed, as well as preparedness and planning. While a detailed discussion of the NRT and RRT is beyond the scope of this Manual, it is important to note that both are interagency groups (16-member Federal agencies) who work with other interagency and SLT responders to provide advice and assistance, as well as coordinate the Federal response to an accident.

3. ESFs. Depending upon the severity of the nuclear weapon accident, and at the discretion of the Secretary of Homeland Security, certain ESFs may be activated. In addition to the ESFs outlined at <http://www.acq.osd.mil/ncbdp/narp>, ESF #10 – Oil and Hazardous Materials Response Annex to Reference (c), may be activated.

(b) Phase II: Initial Response. All procedures and protocols outlined in subparagraph 7.c.(1)(b) apply to nuclear weapon accidents occurring in domestic waters. However, the DoD IC should be prepared to accept assistance from the USG, particular if a USCG safety zone is established. The IC and the USCG COTP or district commander must work closely together to ensure the integrity of the safety zone and to facilitate entry by responding elements.

(c) Phase III: Incident Site Consolidation. The procedures outlined in subparagraph 7.c.(1)(3) apply to shipboard nuclear weapon accidents in domestic waters.

(d) Phase IV: Weapon Recovery Operations and Disposition. The procedures outlined in subparagraph 7.c.(1)(d) apply to nuclear weapon accidents occurring in domestic waters. The RTF IC will establish liaison with the JFO/multiagency coordination entity and the CCCR to execute weapon recovery operations, as outlined in section 3 of this enclosure.

(e) Phase V: SR. Once the weapon has been transferred to DOE custody and transported to an appropriate DOE facility, remediation operations must be planned and executed. The protocols outlined in paragraph 3.f. will be followed as practicable.

(4) Moored in Domestic Waters. The procedures and protocols for a nuclear weapon accident involving a moored vessel in domestic waters are nearly identical to those outlined in subparagraph 7.c.(3). The primary difference is the level of support available to the DoD IC. Upon occurrence of the accident, the CO of the affected vessel will immediately assume IRF IC duties and will be supported by the shore organizations, as necessary. If a nuclear weapon accident occurs during a logistics move, the entity having custody and/or accountability of the weapon(s) will assume IRF duties. The DoD IC will take all actions necessary to effectively contain and/or control the accident. The five phases of nuclear weapon accident management are identical to those outlined in section 3 of this enclosure.

(5) Moored in Foreign Waters. The procedures and protocols for a nuclear weapon accident involving a vessel moored in foreign waters are very similar to those outlined in subparagraph 7.c.(2). The primary difference is the level of support available to the DoD IC from the HN; this level of support will vary depending upon the situation. Further, HN laws and preexisting agreements between the HN and the United States will dictate the timing and tempo of accident management operations. As stated in subparagraph 7.c.(2), the sovereignty of the HN must be kept at the forefront of the DoD IC's actions. The level of cooperation established early in an accident will dictate the success of follow-on accident management phases. The five phases of nuclear weapon accident management operations as outlined in section 3 of this enclosure will apply to vessels moored in foreign waters.

8. TRAINING AND READINESS STANDARDS FOR RTF STAFF. Successful nuclear weapon accident or incident management relies on a high level of training and proficiency, as well as frequent exercising of response capabilities by all personnel involved in the operation. Comprehensive and standardized training, as well as regular exercise participation will ensure personnel operate with a common understanding and foundation. Subparagraphs 8.a.-8.h. of this enclosure outline the full spectrum of training required for all DoD personnel assigned to an RTF or assigned to a team responsible for responding to a nuclear weapon accident or incident.

a. Mandatory FEMA Training Courses (Found on the FEMA Website). The FEMA Website has multiple courses that will benefit all those having nuclear weapon accident or incident responsibilities. The following FEMA courses or certified service equivalent courses are MANDATORY for the following positions in CONUS-based RTFs: Deputy Commander, Senior Liaison Officer, RTF Manager, Operations Section Chief, Planning Section Chief, Logistics Section Chief, Finance Section Chief, and Legal Officer, or the respective equivalent positions.

(1) IS 100.A. Introduction to the Incident Command System (independent study, Web-based).

(2) IS 200.A. ICS for Single Resources and Initial Actions Incidents (independent study, Web-based).

(3) IS 300. Intermediate Incident Command System (in residence).

(4) IS 400. Advanced Incident Command System (in residence).

(5) IS 700.A. National Incident Management System, an Introduction (independent study, Web-based).

(6) IS 800.B. National Response Framework, an Introduction (independent study, Web-based).

b. Suggested (Optional) FEMA IS Courses. The FEMA Website has many courses tailored to specific aspects of emergency response operations. Nuclear weapon accident and incident response organizations are encouraged to review the course offerings and select courses they feel will be particularly suited to their specific roles; nuclear weapon accident and incident response organizations should particularly consider IS 301, "Radiological Emergency Response."

c. DTRA Courses. Pursuant to Reference (d), DTRA is responsible for providing or arranging collective training for U.S. nuclear weapon incident RTFs and other DoD Component nuclear or radiological response forces. DTRA is the DoD lead for nuclear weapons general interest training. The Defense Threat Reduction University (DTRU) combines the academic offerings of the Defense Nuclear Weapons School (DNWS) with the research capability of the Defense Threat Information Analysis Center. The DNWS offers courses from its five educational departments that categorize by instructional focus. These departments are incident command and control, incident response, health physics, nuclear weapons, and computer

modeling. Current DTRA training and exercise offerings are listed in subparagraphs 8.c.(1)-8.c.(3); mandatory courses are identified. For more information on DNWS courses, and for registration, refer to the school's Web site at <https://dnws.abq.dtra.mil/>.

(1) DNWS Nuclear Weapons Incident Command and Control Courses. The DNWS conducts training specifically designed for DoD and Federal personnel to address the mechanics and procedures associated with DoD response to WMD incidents. Completion of appropriate course work listed in subparagraphs 8.c.(2) and 8.c.(3) is essential to DoD CM and coordination of nuclear accident or incident response.

(2) Nuclear and Radiological Incident Management (NRIM) Course (MANDATORY). A 4-day resident course covering Federal, State, and local nuclear accident response roles and responsibilities, lessons learned, and key response issues. Media training and skill application exercises are included. This course (or the mobile version, Commander and Staff Nuclear Accident Response (CASNAR)) is mandatory and an annual requirement for RTF personnel. Service EOD teams attend the Joint EOD Advanced Nuclear Training formal training located at Sandia National Laboratories, Kirtland Air Force Base, NM, and the DTRA Joint EOD Improvised Nuclear and Radiological Dispersal Device Recognition Course in lieu of the NRIM course.

(3) CASNAR Workshop or Seminar (MANDATORY). There are three versions of this mobile training team course. The CASNAR can also be tailored to the needs of a specific audience and is mandatory for RTF personnel who have not attended the NRIM course.

(a) 1. A 2-day workshop is designed for supervisory-level RTF staff members. This version of the CASNAR contains a structured table top exercise that can fulfill the annual requirement for this evolution.

(b) A 1-day seminar is designed for other RTF members as a general overview.

(c) A 4-hour executive brief is designed for the RTF commander (flag officers, senior executive service, or equivalent).

d. Medical Education. Clinical military personnel must be well versed in radiation casualty management. The following courses provide the appropriate level of post-graduate medical, nursing, and health physics education for RTF and special team medical professionals.

(1) Medical Effects of Ionizing Radiation (MEIR). MANDATORY for RTF and military special team physicians, physician assistants, nurses, health physicists, and health physics technicians. OPTIONAL for medical planners; chemical, biological, radiological, and nuclear specialists; medics; corpsmen; and other military medical personnel. The MEIR course is a 5-day course taught by SMEs from AFRRI. The course focuses on radiation injury signs/symptoms, treatment, patient decontamination, nuclear weapon effects on humans, radiobiology, bioassay, and health physics.

(2) Radiation Emergency Assistance Center/Training Site (REAC/TS) Radiation Emergency Medicine. MANDATORY for radiological advisory medical team (RAMT) and medical radiobiology assistance team (MRAT) physicians, physician assistants, and nurses. OPTIONAL for other military medical personnel. This 3 1/2-day course is intended for physicians, nurses, and physician assistants who may be called upon to provide EMS in the event of a radiation emergency.

(3) REAC/TS Advanced Radiation Medicine. MANDATORY for RAMT and MRAT physicians, physician assistants, and nurses. OPTIONAL for other military medical personnel. This 4 1/2-day course, designed primarily for physicians, physician assistants, and nurses, presents an advanced level of information on the diagnosis and treatment of a wide range of ionizing radiation injuries and illnesses.

(4) REAC/TS Health Physics in Radiation Emergencies. MANDATORY for RAMT and MRAT physicists. OPTIONAL for other military medical personnel. This 4 1/2-day course is designed primarily for health physicists, medical physicists, radiation safety officers, and others who have radiation dose assessment and/or RADCON responsibilities.

e. National Guard JTF State Commanders Course. This O-6- to O-8-level course is presented by USNORTHCOM and provides extensive JTF leadership training for RTF commanders and their staffs in the areas of capability assessment, the NRF, and NIMS organizational structures. Practical exercises reinforce each day's lecture materials.

f. Exercises. In addition to the training requirements listed in paragraphs 8.a. through 8.c., each RTF will participate in one exercise per year. Further guidance can be found in Reference (d).

(1) High Demand/Low Density Assets. Several DoD Components participating in nuclear weapon accident response frequently perform like duties during nonnuclear weapon accident exercises or real-world events. With the approval of the Combatant Commands (USNORTHCOM, USEUCOM, and USPACOM), these components may petition the Nuclear Weapons Accident Incident Response Subcommittee (NWAIRS) for credit for the requirements listed in this Manual based upon participation in other nonnuclear weapon incident exercises or real-world events.

(2) Additional Exercises. In addition to these exercise requirements, the Combatant Commands and the Services may require additional exercises. The after action reports (AARs) for these exercises will be forwarded to the NWAIRS and the EA of this Manual to facilitate the required reviews outlined in section 10 of this enclosure.

(3) National Exercise Program. Nuclear weapon accident or incident exercises are a part of the National Exercise Program. Reference (ac) mandates the execution of one national-level nuclear weapon accident exercise each year as part of the DoD 5-year nuclear weapon accident incident exercise program. This national-level exercise will fulfill the requirements for a full-scale exercise set forth in paragraph 8.f.

g. Readiness. RTFs and other DoD Components tasked by this Manual will be considered mission-ready once they have met the requirements outlined in this section. Additionally, each Combatant Command may require the Services to undergo additional training and report readiness. These standards will be relayed by the Combatant Commands and the Services to the RTFs, as well as to the NWAIRS, for inclusion in future editions of this Manual. Readiness status of RTFs will be reported to the appropriate Combatant Commands in accordance with standard reporting protocols using the doctrine, organization, training, materiel, leadership and education, personnel and facilities construct.

h. Conferences. In addition to the training and exercise requirements listed in this section, RTF commanders, SEOs, counterpart senior FBI officials, and potential SOs should participate annually in a senior-level conference to establish working rapport; discuss respective departmental and agency roles and responsibilities and interagency coordination; and discuss current events and issues related to nuclear weapon accident response, lessons learned from Combatant Command exercises, and other relevant topics to aid in effective, efficient, and cohesive nuclear weapon accident response. Arrangements for this conference will be made by DTRA.

9. WEBSITE. Additional information on procedures, charts, and other resources can be found on the NARP supplement Website at <http://www.acq.osd.mil/ncbdp/narp>. This Website contains additional procedural information on these topics:

a. Functional Areas

- (1) Administration and logistics.
- (2) Communications.
- (3) Legal.
- (4) Medical.
- (5) Health and safety.
- (6) PA.
- (7) Security.
- (8) Contamination control.
- (9) Training and readiness standards.

b. Appendices

- (1) ICS functional appendix.

- (2) Inter-DoD functional annex.
- (3) Notional accident site.
- (4) Management of contaminated remains.

c. Radiation Data

- (1) Radiological monitoring equipment.
- (2) Specialized radiological monitoring and hazard assessment capabilities.
- (3) Radiation detection and measurement.
- (4) Area and resource surveys.
- (5) Environmental sampling.
- (6) Radiological monitoring, measurement, and control forms.
- (7) Conversion factors for weapons grade plutonium.

d. Reference Documents

- (1) References.
- (2) Definitions.
- (3) Abbreviations.

10. MANUAL REVIEW. The review process will mirror and supplement the review process for the NRF (Reference (c)). As Reference (c) is reviewed and reissued every 4 years, this Manual will also be reviewed. The NWAIRS will oversee this review. Upon revision, this Manual will be coordinated with all coordinating and cooperating agencies listed in the Nuclear/Radiological Incident Annex to Reference (c) through the NWAIRS Policy Working Group. In addition to the reissuance outlined in this section, as part of its standing duties, the NWAIRS will review this Manual periodically, as required. Particular attention will be paid to:

a. Presidential Directives/New Legislation. The enactment of Presidential directives or new legislation may significantly change the processes, procedures, and protocols outlined in this Manual. If so, this Manual will be modified to reflect these changes, and the interim change announced to all coordinating and cooperating agencies according to this section.

b. Changes in Coordinating/Cooperating Structures. Changes in the structures and responsibilities of coordinating and cooperating structures may significantly alter the content of this Manual. Reviews will ensure the structures and responsibilities in this Manual remain valid; changes will be incorporated via the interim change process outlined in this section. Interim changes will be incorporated during the next formal review.

c. AARs. A national-level nuclear weapon accident exercise is conducted annually. Additionally, Services and Combatant Commands often conduct nuclear weapon accident exercises as part of their training and certification requirements. Finally, any real-world nuclear weapon accident or incident will generate an AAR that will incorporate lessons learned and observations. The NWAIRS will review the lessons learned and observations from all of these AARs for possible refinement of this Manual. Changes will be made according to this section.

d. DTRU. The NWAIRS will receive a report from the DTRU annually on new course offerings. If a new course has particular benefit for the RTF, the NWAIRS will determine if the course should become a requirement for RTF training as outlined in section 8 of this enclosure.

GLOSSARYPART I. ABBREVIATIONS AND ACRONYMS

AAR	after action report
AFRRI	Armed Forces Radiobiology Research Institute
AIB	accident investigation board
AOR	area of responsibility
ARG	Accident Response Group
ASD(HD&ASA)	Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs
ASHG	Accident Site Health Group
CASNAR	Commander and Staff Nuclear Accident Response (Training Course)
CCL	contamination control line
CCS	contamination control station
CDO	command duty officer
CFR	Code of Federal Regulations
CJCS	Chairman of the Joint Chiefs of Staff (adjective only)
CM	consequence management
CMAT	consequence management advisory team
CMST	consequence management support team
CNWDI	critical nuclear weapon design information
CO	commanding officer
COM	chief of mission
CONUS	continental United States
COTP	captain of the port
CRSPs	continuation of render safe procedures
CrMT	crisis management team
DATSD(NM)	Deputy Assistant to the Secretary of Defense for Nuclear Matters
DCE	defense coordinating element
DCO	defense coordinating officer
DEPORD	deployment order
DEST	domestic emergency support team
DHHS	Department of Health and Human Services
DHS	Department of Homeland Security
DNWS	Defense Nuclear Weapons School
DoDD	DoD Directive
DoDI	DoD Instruction
DOE	Department of Energy
DOJ	Department of Justice
DOS	Department of State
DOT	Department of Transportation
DRG	Domestic Readiness Group

DSAT	DHS situational awareness team
DSCA	defense support of civil authorities
DSO	defense senior official
DTRA	Defense Threat Reduction Agency
DTRU	Defense Threat Reduction University
EA	Executive Agent
EMS	emergency medical service
EOC	emergency operations centers
EOD	explosive ordnance disposal
EPA	Environmental Protection Agency
EPR	Emergency Preparedness and Response (DHS)
ERT	emergency response team
ERT-A	emergency response team – advance element
ESF	emergency support function
EXORD	execute order
FBI	Federal Bureau of Investigation
FCO	federal coordinating officer
FEMA	Federal Emergency Management Agency
FIRST	Federal Incident Response Support Team
FRC	federal resource coordinator
FRMAC	Federal Radiological Monitoring and Assessment Center
HAZMAT	hazardous materials
HE	high explosive
HMRU	Hazardous Materials Response Unit (FBI)
HN	host nation
HQ	headquarters
HSC	Homeland Security Council
IAC	Incident Advisory Council
IAP	Incident Action Plan
IC	incident commander
ICP	incident command post
ICS	incident command system
IMAAC	Interagency Modeling and Atmospheric Assessment Center
IMT	Incident Management Team
IRF	initial response force
IS	independent study
J-3	Joint Staff Operations Directorate
JDOMS	Joint Director of Military Support
JFO	joint field office
JIC	joint information center
JNAIRT	joint nuclear accident/incident response team

JOC	joint operations center
JTF	joint task force
JTTF	joint terrorism task force
LFA	lead Federal agency
LNO	liaison officer
LO	legal officer
MACS	multiagency coordination system
MEIR	medical effects of ionizing radiation
MRAT	medical radiobiology assistance team
NARP	Nuclear Weapon Accident Response Procedures
NASA	National Aeronautics and Space Administration
NC2	nuclear command and control
NCP	National Oil and Hazardous Substances Pollution Contingency Plan, also known as the National Contingency Plan
NDA	national defense area
NGO	nongovernmental organization
NIMS	National Incident Management System
NIRT	nuclear incident response team
NMCC	National Military Command Center
NNSA	National Nuclear Security Administration
NOC	National Operations Center
NRCC	national response coordination center
NRF	National Response Framework
NRG	Nuclear Weapon Accident Incident Response Group
NRIM	nuclear and radiological incident management (Training Course)
NRT	National Response Team
NSA	national security area
NWAIRS	Nuclear Weapons Accident Incident Response Subcommittee
OASD(PA)	Office of the Assistant Secretary of Defense for Public Affairs
OCONUS	outside the continental United States
OOD	officer of the deck
OPCON	operational control
OPREP	operations report
PA	public affairs
PAO	public affairs officer
PAR	protective action recommendation
PCA	Posse Comitatus Act
PFO	principal Federal official
PIO	public information officer
PPE	personal protective equipment
PRP	Personnel Reliability Program

RA	restricted area
RADCON	radiological control
RADIAC	radioactivity detection, indication, and computation
RAMT	radiological advisory medical team
RCA	radiological control area
RD	restricted data
REAC/TS	radiation emergency assistance center/training site
ROE	rules of engagement
RRCC	regional response coordination center
RRT	regional response team
RSPs	render safe procedures
RTF	response task force
RUF	rules for the use of force
SAC	special agent in charge (FBI)
SCO	State coordinating officer
SecDef	Secretary of Defense (adjective only)
SEO	senior energy official
SFLEO	senior Federal law enforcement official
SIOC	Strategic Information and Operations Center
SLT	State, local, tribal
SME	subject matter expert
SNM	Special Nuclear Material
SO	senior official
SOFA	status-of-forces agreement
SR	site remediation
SRWG	Site Remediation Working Group
UC	Unified Command
US&R	urban search and rescue
U.S.C.	United States Code
USCG	U.S. Coast Guard
USD(P)	Under Secretary of Defense for Policy
USEUCOM	U.S. European Command
USG	U.S. Government
USJFCOM	U.S. Joint Forces Command
USNORTHCOM	U.S. Northern Command
USPACOM	U.S. Pacific Command
VOCO	verbal orders of the commanding officer
WMD	weapons of mass destruction
WRA	weapons restricted area
WRSET	DoD/DOE Weapon Recovery Safety Evaluation Team

## PART II. DEFINITIONS

Unless otherwise noted, these terms and their definitions are for the purpose of this Manual.

access. Close physical or electrical proximity to a nuclear weapon in such a manner as to allow the opportunity to tamper with or damage a nuclear weapon. For example, a person would not be considered to have access if an escort or a guard was provided for either the person or the weapon when the person is in close proximity to the weapon.

access to classified information. Defined in Joint Publication 1-02 (Reference (ag)).

accident scene. The area surrounding an accident site from which all non-essential personnel are evacuated or excluded.

accident site. An area within the NDA, NSA, WRA, weapon storage area, restricted area (RA), or safety zone containing the affected weapon(s), warhead(s), SNM, and any potentially damaged buildings, vehicles, and personal property affected by the accident. Additionally, the accident site will include response personnel, equipment, and resources necessary to control entry and access to the affected area, and to plan and organize health and safety matters, weapons recovery, and other operations essential to recovery from the emergency.

accident site consolidation. The phase of nuclear weapon accident response marked by arrival of a robust cadre of DoD and DOE/NNSA response assets to the accident site. This phase emerges from the initial response phase and begins once immediate life-saving and firefighting activities are completed.

aerial measuring system. A DOE/NNSA asset consisting of instrumentation and fixed and rotary wing aircraft used to perform aerial radiation surveys and radioactive source searches that are able to confirm the presence of radioactive materials on the ground or in the atmosphere, track the radiation plume, map the radioactive ground disposition, and provide aerial photography.

AFRRI. A tri-Service organization in Bethesda, MD, that conducts research in the field of radiobiology and related matters essential to operational and medical support of the Department of Defense and the Military Services. The AFRRI provides the MRAT, and also provides educational courses such as “The Medical Effects of Ionizing Radiation.” (See <http://www.afrri.usuhs.mil>.)

air sampler. A device used to collect samples of and measure the amounts of various pollutants or other substances in the air. As related to radiation, this device is used to collect radioactive particulates suspended in the air.

ARG. A DOE/NNSA asset composed of technical and scientific experts with specialized equipment. The ARG includes a cadre of senior scientific advisors, weapons engineers and technicians, experts in nuclear and HE safety, health physicists, radiation control technicians, industrial hygienists, physical scientists, packaging and transportation specialists, and other

specialists from the DOE/NNSA weapons complex. The ARG maintains readiness to provide DOE technical assistance to peacetime accidents involving U.S. nuclear weapons and components anywhere in the world.

ASHG. A group of health and safety experts, staffed by representatives from the Department of Defense and the DOE/NNSA, that ensures the health and safety of all on-site personnel during recovery from a nuclear weapon accident. The ASHG is concerned with all associated hazards, not only radiological hazards. The ASHG was formerly known as the Joint Hazard Evaluation Center.

available resources. Resources assigned to an incident, checked in, and available for use, normally located in a staging area.

beta particle radiation. An electron or positron emitted by an atomic nucleus during radioactive decay. Beta radiation may be harmful depending on the dose and time of exposure.

bioassay. The determination of type, quantity, concentration, and/or location of radioactive material in the body using either direct measurements of the body or analysis of biological material removed (blood, saliva) or excreted (feces, urine) from the body.

BROKEN ARROW. See nuclear weapon accident.

casualty. Defined in Reference (ag).

catastrophic incident. Any natural or manmade incident, including terrorism, that results in mass casualties or extraordinary levels of damage or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions. A catastrophic event could result in sustained national impacts over a prolonged period of time, almost immediately exceeds resources normally available to SLT and private-sector authorities in the impacted area, and significantly interrupts governmental operations and emergency services to such an extent that national security could be threatened.

CCL. A line that initially extends 100 meters beyond the known and/or suspected radiological contamination to provide a measure of safety. Once the contamination control station (CCS) is operational, the CCL becomes the outer boundary that separates the reduced hazard area from the clean area.

CCS. An area specifically designated for allowing ingress and egress of personnel and equipment to and/or from the hazards area/radiological control area (RCA), also called the exclusion zone). The outer boundary of the CCS is the CCL, and the inner boundary is the line segment labeled the hot line.

close proximity. Within two-arms' reach or within 7 feet of a weapon or SNM.

CNWDI. Top secret RD or secret RD revealing the theory of operation or design of the components of a thermonuclear or implosion-type fission bomb, warhead, demolition munition,

or test device. Specifically excluded is information concerning arming, fusing, and firing systems; limited life components; and totally contained quantities of fissionable, fusionable, and HE materials by type.

command staff. In an incident or accident management organization, the command staff consists of the incident command and the special staff positions of PIO, safety officer, LNO, and other positions as required, e.g., legal and medical advisors who report directly to the IC. They may have an assistant or assistants, as needed.

consequence management (CM). Defined in Reference (ag).

contaminant or pollutant. Defined in Reference (m).

contamination. Defined in Reference (ag).

contamination control. Defined in Reference (ag).

CONUS. Defined in Reference (ag).

cooperating agency. Defined in Reference (ag).

coordinate. To advance systematically an analysis and exchange of information among principals who have or may have a need to know certain information to carry out specific incident or accident management responsibilities.

coordinating agency. The coordinating agency is the Federal agency that owns, has custody of, authorizes, regulates, or is otherwise designated responsibility for the nuclear/radioactive material or nuclear weapon. Coordinating agencies are responsible for implementing processes detailed in the Nuclear/Radiological Incident Annex of Reference (c) and have primary responsibilities for Federal activities related to the nuclear/radiological aspects of the incident or accident. DHS may assume overall responsibility for Federal coordination of the response, while the coordinating agency would be responsible for supporting DHS in this mission. The coordinating agency was formerly known as the LFA.

critical infrastructure. Systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters.

custody. The responsibility for the control of, storage, transfer, and movement of, and access to weapons and components. Custody also includes the maintenance of and accountability for weapons, components, and radioactive materials.

decontamination. Defined in Reference (ag).

decontamination station. Defined in Reference (ag).

disaster. See major disaster.

dose. The amount of energy absorbed per unit mass of material, or the time integrated dose rate. The International System unit of dose is the gray. The traditional unit of dose is radiation absorbed dose.

DSCA. Refers to DoD support provided by Federal military forces, DoD civilians and contract personnel, and DoD agencies and Components, in response to requests for assistance during domestic incidents to include terrorist threats or attacks, major disasters, and other emergencies.

DSO. The DSO is a flag-grade military officer or DoD civilian equivalent, appointed by the Secretary of Defense, to manage and represent DoD coordinating agency statutory responsibilities and policy equities in a JFO. When the Department of Defense is not the coordinating agency, the DSO is responsible for command and control and coordination of DoD emergency response assets to support the IC. The DSO serves as the DoD senior spokesperson when the Department of Defense is not the coordinating agency.

emergency. Defined in Reference (q).

EOC. Defined in Reference (ag).

EOD. Defined in Reference (ag).

EOD procedures. Defined in Reference (ag).

ESF. Defined in Reference (ag). The ESFs serve as the primary operational-level mechanism to provide assistance to SLT governments or to Federal departments and agencies conducting missions of primary Federal responsibility.

exclusion zone. An area within the incident or accident site where contamination is present and the highest possibility for worker exposure to hazardous waste occurs.

explosive ordnance. Defined in Reference (ag).

radiation exposure. The level of radiation flux to which a material or living tissue is exposed. The actual dose of radiation from the exposure depends on many factors including length of exposure time, the distance from the radiation source, and the amount of shielding between the radiation source and the exposed object.

FCO. Defined in Reference (ag).

Federal on-scene coordinator. The Federal official predesignated by the EPA or the USCG to coordinate responses under subpart D of Reference (h), or the government official designated to coordinate and direct removal actions under subpart E of Reference (m).

FEMA. The Federal agency within DHS that establishes policy and coordinates all civil defense and civil emergency planning, management, mitigation, and assistance functions of executive agencies in response to emergencies that require Federal response assistance. FEMA assists State and local agencies in their emergency planning. Its primary role in a radiological accident is one of coordinating Federal, State, local, and volunteer response actions.

final disposal procedures. See EOD procedures.

first responders. Local and nongovernmental police, fire, and emergency medical personnel who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of Public Law 107-296 (Reference (ah)), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) who provide immediate support services during prevention, response, and recovery operations. First responders may include personnel from Federal and SLT, HN, or NGOs.

Formerly Restricted Data (FRD). Information removed from the restricted data category when the DOE (or antecedent Agencies) and the DoD jointly determine that such information relates primarily to the military use of atomic weapons and that such information may be adequately safeguarded as classified defense information. (Section 142d of Sections 2011-9675 of Reference (w)).

FRC. The Federal official appointed to manage Federal resource support activities related to non-Stafford Act incidents. The FRC is responsible for coordinating support from other Federal departments and agencies using interagency agreements and memorandums of understanding.

FRMAC. A coalition of all Federal resources that coordinates and manages the Federal off-site radiological monitoring and assessment activities during major radiological emergencies within the United States. The FRMAC works in support of SLT governments through the coordinating agency/LFA.

hazardous substance. Defined in Reference (m).

HAZMAT. Any material that is flammable; corrosive; an oxidizing, explosive, toxic, poisonous, radioactive, nuclear, unduly magnetic, or chemical agent; biological research material; compressed gas; or any other material that, because of its quantity, properties, or packaging, may endanger life or property. For the purposes of ESF #1, HAZMAT is a substance or material, including a hazardous substance, that has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated (See part 171.8 of title 49, CFR (Reference (ai))). For the purposes of ESF#10 to Reference (c), the term is intended to mean hazardous substances, pollutants, and contaminants as defined by Reference (m).

HE. An energetic material that detonates (instead of deflagrating or burning); the rate that the reaction zone advances into the unreacted material exceeds the velocity of sound in the unreacted material.

hazard prediction and assessment capability. A forward deployable modeling capability available for Government, government-related, or academic use. This software tool assists in emergency response to hazardous agent releases. Its fast running, physics-based algorithms enable users to model and predict hazard areas and human collateral effects in minutes. It is able to predict the effects of HAZMAT releases into the atmosphere and their impact on civilian and military populations.

Human Reliability Program. A program implemented for specifically tasked DOE personnel who handle, have access to, or control access to nuclear weapon systems and components. The program covers selection, screening, and evaluation of the personnel assigned to various nuclear duties. The program seeks to ensure that personnel coming under its purview are mentally and emotionally stable and reliable.

IAP. An oral or written plan containing general objectives reflecting the overall strategy for managing an incident. It may include the identification of operational resources and assignments. It may also include attachments that provide direction and important information for management of the incident during one or more operational periods.

IC. The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and the release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.

ICP. Defined in Reference (ag).

ICS. Defined in Reference (ag).

IMAAC. An interagency center responsible for production, coordination, and dissemination of consequence predictions for an airborne HAZMAT release. The IMAAC generates the single Federal prediction of atmospheric dispersions and their consequences utilizing the best available resources from the Federal Government.

incident. An unexpected event that presents the potential for negative consequences that may be caused by accidental or intentional acts, acts of God, unfavorable environmental conditions, or other factors.

initial actions. The actions taken by those responders first to arrive at an incident or accident site.

initial response resources. Disaster support commodities that may be pre-staged, in anticipation of a catastrophic event, at a Federal facility close to a disaster area for immediate application through an NRF ESF operation. The initial response resources are provided to victims and responders immediately after a disaster occurs. They are designed to augment State and local capabilities. The DHS/EPR/FEMA Logistics Division stores and maintains critically needed initial response commodities for victims and responders and pre-positions supplies and

equipment when required. The initial response resources include supplies (baby food, baby formula, blankets, cots, diapers, ready-to-eat meals, non-slip plastic sheeting, tents, and water) and equipment (emergency generators, industrial ice-makers, mobile kitchen kits, portable potties with service, portable showers, and refrigerated vans).

IRF. A tailored force that may be dispatched from the closest military installation by the NMCC immediately upon notification of a nuclear weapon accident or nuclear or radiological incident. The IRF will assume military command of the accident site, provide security forces, set up an NDA if appropriate, and establish a working relationship with the civilian IC in accordance with Reference (j).

JFO. Defined in Reference (ag).

JIC. A facility established to coordinate all incident- or accident-related public information activities. It is the central point of contact for all news media at the scene of the incident or accident. Public information officials from all participating agencies should collocate at the JIC.

JOC. The focal point for all Federal investigative law enforcement activities during a terrorist or potential terrorist incident or any other significant criminal incident, and is managed by the SFLEO. The JOC becomes a component of the JFO if the JFO is activated.

jurisdiction. A range or sphere of authority. Public agencies have jurisdiction at an accident related to their legal responsibilities and authorities. Jurisdictional authority at an accident can be political or geographical (e.g., city, county, tribal, State, Federal or HN boundary lines) or functional (e.g., law enforcement, public health). There are three types of jurisdiction with which the DoD IC needs to be concerned:

concurrent jurisdiction. In areas under concurrent jurisdiction, multiple governments (e.g., Federal and State or local governments) exercise simultaneous authority over the area. Essentially, this is dual jurisdiction. In nuclear weapon accidents both on and off DoD installations, where concurrent jurisdiction applies, the DoD IC must work with SLT and/or HN authorities to conduct collective accident management activities. An NDA/WRA will be established around an accident occurring outside the boundaries of a DoD or HN military installation. It may also be necessary to establish an NDA/WRA if the accident is inside the boundaries of a military installation to ensure proper safeguarding of classified components and materials. In an accident that is within the boundaries of a military installation, the DoD IC should consult with local military legal professionals to determine the advisability of establishing and declaring an NDA/WRA.

exclusive jurisdiction. In designated areas under exclusive jurisdiction, a single government (Federal or SLT) has sole jurisdiction over the area. Many DoD installations have exclusive Federal jurisdiction. On those installations, the Federal Government exercises executive, legislative, and judicial authority. On exclusive jurisdiction DoD installations, the DoD IC shall have sole authority over the site. Outside the boundaries of a DoD installation, the Department of Defense will have exclusive jurisdiction within the boundaries of a declared NDA but will rarely have exclusive jurisdiction outside the NDA.

proprietary jurisdiction. Proprietary jurisdiction applies in situations where a government entity has ownership of an area but has not retained jurisdiction. Under these circumstances, the owning government entity has the same rights as any other landowner. The SLT government retains jurisdiction over the area and has the authority to enforce laws in the area. In a nuclear weapon accident or incident on Federal land under proprietary jurisdiction, the DoD IC can be held liable for issues involving law enforcement activities. Although very few installations fall into this category, if a nuclear weapon accident occurs in an area where the Department of Defense has proprietary jurisdiction, the DoD IC should establish an NDA and a UC relationship with designated officials from the agencies with jurisdictional authority.

LFA. See coordinating agency. This term is still used for incidents and accidents that occur outside the United States.

LNO. A member of the incident command staff responsible for coordinating with representatives from cooperating and assisting agencies.

local government. A county, municipality, city, town, township, local public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; an Indian tribe or authorized tribal organization or, in Alaska, a Native Village or Alaska Regional Native Corporation; or a rural community, unincorporated town or village, or other public entity (as defined in Reference (ah)).

logistics section. The section of the incident command responsible for providing facilities, services, and material support for the incident or accident response and management.

communications unit. An organizational unit in the logistics section responsible for providing communication services at an incident or an EOC. A communications unit may also be a facility (e.g., a trailer or mobile van) used to support an incident communications center.

MACS. A system that provides the architecture to support coordination for incident and accident prioritization, critical resource allocation, communications systems integration, and information coordination. The components of MACS include facilities, equipment, EOCs, specific multiagency coordination groups, personnel, procedures, and communications. The systems assist agencies and organizations to fully integrate the subsystems of NIMS.

major disaster. Defined in Reference (k).

mitigation. Activities designed to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of an incident or accident. Mitigation measures may be implemented prior to, during, or after an incident or accident. Mitigation measures are often developed in accordance with lessons learned from prior incidents or accidents. Mitigation involves ongoing actions to reduce exposure to, probability of, or potential loss from hazards. Measures may include zoning and building codes, floodplain buyouts, and analysis of hazard-

related data to determine where it is safe to build or locate temporary facilities. Mitigation can include efforts to educate governments, businesses, and the public on measures they can take to reduce loss and injury.

mobilization. Defined in Reference (ag).

monitoring. The third definition in Reference (ag).

MRAT. A team from the AFRRI of highly qualified radiation medicine physicians, health physicists, and related scientists who provide state-of-the-art advice and assistance to the U.S. CCDRs, allied forces, Federal agencies, State and local governments, and others on radiological matters including accidents and incidents involving nuclear weapons, nuclear reactors, radiological dispersal devices, and industrial and/or medical sources. The MRAT also provides expertise for managing and treating radiation casualties. The MRAT deploys as an augmentee to the DTRA CMAT.

mutual aid agreement. A written agreement between agencies, organizations, and/or jurisdictions that they will assist one another on request by furnishing personnel, equipment, and/or expertise in a specified manner.

NARAC. A centralized computer-based system that estimates the transport, diffusion, and deposition of radioactive material or other HAZMAT released to the atmosphere and projects doses to people and the environment.

National Response Center. A national communications center for activities related to oil and hazardous substance incident response actions. Located at DHS/USCG HQ in Washington, D.C., it receives and relays notices of oil and hazardous substances releases to the appropriate Federal on-scene coordinator.

NCP (Reference (m)). Maintained by the EPA in coordination with the NRT, the NCP provides the organizational structure and procedures for preparing for and responding to discharges of oil and releases of hazardous substances, pollutants, and contaminants. To achieve this objective, the NCP establishes the NRT, RRTs, and local area committees to coordinate planning and preparedness efforts. Federal on-scene coordinators coordinate response activities at the incident site. The NCP applies to oil discharges into or on the navigable waters of the United States (including adjoining shorelines and into the exclusive economic zone) and to releases into the environment of hazardous substances, pollutants, or contaminants that may present an imminent and substantial danger to public health or welfare.

NDA. Defined in Reference (ag).

NGO. Defined in Reference (ag).

NIMS (Reference (j)). Defined in Reference (ag) and mandated by Reference (p). To provide for interoperability and compatibility among Federal and SLT capabilities, NIMS includes a core set of concepts, principles, and terminology. Reference (p) identifies these as the ICS; MACS;

training; identification and management of resources (including systems for classifying types of resources); qualification and certification; and the collection, tracking, and reporting of incident information and incident resources.

NIRT. A team created by Reference (ah) to provide DHS with a nuclear/radiological response capability. When activated, the NIRT consists of specialized Federal response teams drawn from DOE and/or EPA. These teams may become DHS operational assets providing technical expertise and equipment when activated during a crisis or in response to a nuclear/radiological incident as part of the DHS Federal response.

NRF (Reference (c)). The document that establishes a comprehensive, national, all-hazards approach to domestic incident response. It replaces the National Response Plan.

NRT. Composed of the 16 Federal agencies with major environmental and public health responsibilities, it is the primary vehicle for coordinating Federal agency activities under the NCP. The NRT carries out national planning and response coordination and is the head of a highly organized Federal oil and hazardous substance emergency response network. A representative from EPA serves as the NRT Chair, and DHS/USCG serves as Vice Chair.

NSA. An area established on non-Federal or Federal lands located in the United States, its possessions, or its territories, for safeguarding classified information, RD, or equipment and material belonging to DOE/NNSA or NASA. Establishment of an NSA temporarily places such lands under the effective control of DOE/NNSA or NASA and results only from an emergency event. The senior DOE/NNSA or NASA representative having custody of the material at the scene shall define the boundary, mark the boundary with a physical barrier, and post warning signs. The landowner's consent and cooperation shall be obtained when possible; however, operational necessity shall dictate the final location, shape, and size of the NSA.

nuclear component. The part of a nuclear weapon composed of fissionable or fusionable materials that contribute substantially to nuclear energy released during detonation. Nuclear components include radioactive boosting materials.

nuclear contribution. Explosive energy released by nuclear fission or fusion reactions as part of the total energy released by a radiological incident or accident.

nuclear detonation. A nuclear explosion resulting from fission or fusion reactions in nuclear materials, such as from a nuclear weapon.

nuclear radiation. Defined in Reference (ag).

nuclear weapon. Defined in Reference (ag).

nuclear weapon accident (flagword BROKEN ARROW). An unexpected event involving nuclear weapons or radiological nuclear weapon components that results in any of the following:

Accidental or unauthorized launching, firing, or use by U.S. forces or U.S. supported allied forces of a nuclear-capable weapon system that could create the risk of an outbreak of war.

Loss or destruction of a nuclear weapon or radiological nuclear weapon component, including jettisoning.

An increase in the possibility of, or actual occurrence of, an explosion, a nuclear detonation, or radioactive contamination.

Nonnuclear detonation or burning of a nuclear weapon or radiological nuclear weapon component.

Public hazard, actual or implied.

Any act of God, unfavorable environment, or condition resulting in damage to the weapon, facility, or component.

nuclear weapon theft (EMPTY QUIVER). The seizure, theft, or loss of a nuclear weapon. To include:

The loss (explained or unexplained) of a nuclear weapon or nuclear component.

The forcible, unauthorized seizure or theft of a nuclear weapon or nuclear component.

nuclear yield. Defined in Reference (ag).

on-scene coordinator. See Federal on-scene coordinator.

OPREP-3 BEELINE/PINNACLE EMPTY QUIVER. Report used to report the seizure, theft, or loss of a nuclear weapon. Includes:

The loss (explained or unexplained) of a nuclear weapon or nuclear component.

The forcible, unauthorized seizure or theft of a nuclear weapon or nuclear component.

OPREP-3 BENT SPEAR. Report used to report an unexpected event involving a nuclear weapon or component resulting in any of the following but not constituting a nuclear weapon accident:

An increase in the possibility of explosion or radioactive contamination.

Errors committed in assembling, testing, loading, or transporting equipment or the malfunctioning of equipment and material that might lead to an unintentional operation of all or part of the weapon arming or firing sequence that, in turn, might lead to a substantial change in yield, or increased dud probability.

Any act of God, unfavorable environment, or condition resulting in damage to the weapon, facility, or component.

OPREP-3 PINNACLE BROKEN ARROW. Report used to report a U.S. nuclear weapon accident that does not create risk of nuclear war. Included are:

Nuclear detonation of a U.S. nuclear weapon.

Nonnuclear detonation or burning of a nuclear weapon.

Radioactive contamination from a U.S. nuclear weapon or component.

Seizure, theft, loss, or destruction of a nuclear weapon or radiological nuclear weapon component, including jettisoning.

Public hazard, actual or implied, from a U.S. nuclear weapon or component.

operations section. The section responsible for all tactical incident and accident response operations. In ICS, it normally includes subordinate branches, divisions, and/or groups.

PAR. Advice to SLT, or HN authorities on emergency measures to be considered in deciding action for the public to take to avoid or reduce exposure to radiation or other hazard.

PPE. Clothing and other protective equipment worn by response and recovery personnel that provide protection from radiological contamination and protection from other hazards. Clothing may consist of coveralls, shoe covers, cotton or latex gloves, and hood or hair cap. While personal protective clothing protects the user from alpha-beta radiation, it is primarily a contamination control device to prevent the spread of contamination. A respirator may also be worn as a part of PPE, which protects against the inhalation of contaminants.

PFO. Defined in Reference (ag).

physical security. Elements of security concerned with physical measures designed to safeguard personnel and classified information; to prevent unauthorized access to nuclear weapons, SNM, and nuclear command and control (NC2) materials, equipment, facilities, and documents; and to safeguard them against espionage, sabotage, damage, and theft.

PIO. A member of the command staff responsible for interfacing with the public and media or with other agencies with accident-related information requirements.

planning section. Responsible for the collection, evaluation, and dissemination of operational information related to the incident or accident, and for the preparation and documentation of the IAP. This section also maintains information on the current and forecasted situation and on the status of resources assigned to the accident response operation.

resources unit. Functional unit within the planning section responsible for recording the status of resources committed to the incident or accident. This unit also evaluates resources currently committed to the incident or accident, the effects additional responding resources will have on the incident or accident, and anticipated resource needs.

processes. Systems of operations that incorporate standardized, repeatable procedures, methodologies, and functions necessary to provide resources effectively and efficiently. These include resource typing, resource ordering and tracking, and coordination.

PRP. A program implemented for all DoD personnel who control, handle, have access to, or control access to nuclear weapon systems and components, SNM, and NC2 materials. The program covers selection, screening, and continuous evaluation of the personnel assigned to various nuclear duties. The program seeks to ensure that personnel coming under its purview are mentally and emotionally stable and reliable.

public health. Protection, safety, improvement, and interconnections of health and disease prevention among people, domestic animals, and wildlife.

public works. Work, construction, physical facilities, and services provided by governments for the benefit and use of the public.

RADIAC. A term designating various types of radiological measuring instruments or equipment.

radioactivity. Defined in Reference (ag).

radiological accident. Defined in Reference (ag).

RCA. The control area including all known, or suspected, radiological contamination at the site of a radiological incident or accident. Also called the exclusion zone.

radiological survey. Defined in Reference (ag).

RAMT. A U.S. Army rapid response team specifically designed to provide timely expert guidance and services to the CDR, the IC, and/or local medical authorities and to provide limited medical support to response teams in controlled areas. The RAMT is capable of responding to a wide variety of events involving limited or mass nuclear casualties, radiologically contaminated patients, or exposed populations from events such as BROKEN ARROWS, reactor accidents, radiological terrorism, or nuclear war. The RAMT may deploy within 4 hours of notification and may operate in an NSA, an NDA, and CNWDI access areas.

REAC/TS. A DOE/NNSA asset that provides 24-hour direct or consulting assistance to medical and health physics practitioners dealing with radiation-related health problems or injuries from local, national, or international radiation incidents.

recovery. Involves myriad technical disciplines and supporting infrastructure to effectively reduce hazards to the public and the environment. Weapon recovery begins once any existing fires have been extinguished, weapons have been cooled, exposed personnel have been removed or stabilized, and initial reconnaissance of the area has been conducted by EOD personnel to locate weapon(s) and debris, as well as to prioritize future actions. The basic steps of weapon recovery operations are initial entry, locating weapons and weapon components, development and approval of the recovery plan, performing RSPs, and temporary storage, packaging, transport, and disposal of the weapon and components.

resources. Personnel and major items of equipment, supplies, and facilities available or potentially available for assignment to accident operations and for which status is maintained. Resources are described by kind and type and may be used in operational support or supervisory capacities at an accident or at an EOC.

RRCC. Defined in Reference (ag).

RRTs. As regional counterparts to the NRT, the RRTs comprise regional representatives of the Federal agencies on the NRT and representatives of each State within the region. The RRTs serve as planning and preparedness bodies before a response, and provide coordination and advice to the Federal on-scene coordinator during response actions.

RSPs. See EOD procedures.

RTF. A DoD response force appropriately staffed, trained, and equipped to coordinate all actions necessary to control and recover from a nuclear weapon accident. The specific purpose of the RTF is to recover weapons and provide radiological accident assistance.

safety officer. A member of the command staff responsible for monitoring and assessing safety hazards or unsafe situations and for developing measures for ensuring personnel safety.

safing. Defined in Reference (ag).

security area. The area surrounding the incident or accident site in a foreign country where a two-person rule is established to prevent unauthorized access to classified defense information, equipment, or material. Cooperation by local authorities and HN consent should be obtained through prior HN agreements. In some countries, this area may be designated as the WRA or RA, in accordance with bilateral or CCDR plans.

SEO. The official who provides command and control and coordination of all DOE/NNSA emergency response assets that may be called to lessen the consequences of the nuclear weapon accident. The SEO is the focal point for interfacing with the Department of Defense and other agencies and represents the DOE/NNSA at the accident site for all departmental response operations, including serving as the senior spokesperson for the DOE/NNSA.

SME. An individual who is a technical expert in a specific area or in performing a specialized job, task, or skill.

SNM. Plutonium and uranium enriched in the 239 or 235 isotope, respectively, and any other material that the DOE, under the provisions of sections 2011-2259 of Reference (w), determines to be SNM. Does not include source material.

SO. An individual representing a Federal department or agency with primary statutory responsibility for incident or accident management. SOs use existing authorities, expertise, and capabilities to aid in managing the accident, working in coordination with other members of the JFO coordination group. The SO for the Department of Defense is the DSO, and the SO for DOE is the SEO.

span of control. The number of individuals a supervisor is responsible for, usually expressed as the ratio of supervisors to individuals. Under NIMS, an appropriate span of control is between 1:3 and 1:7.

spill of national significance. Defined in Reference (m).

SR. The process of removing contaminants from a site that were the result of an incident or accident and restoring the site to conditions agreed on by the stakeholders.

SRWG. An organization formed at the accident scene whose sole purpose is to focus on SR issues. The SRWG draws on the expertise of the various elements who respond to the accident to form a coordinated SR team.

staging area. Location established where resources can be placed while awaiting a tactical assignment. The operations section manages staging areas.

State status. Denotes National Guard forces working under the command of the Governor in either title 32, U.S.C. (Reference (o)) or State active duty status. National Guard personnel can be placed in title 10 (Reference (ab)) status, placing them under the command of the Commander-in-Chief, can be placed in title 32 (Reference (o)) status where they are funded by the Federal Government but command authority remains with the State Governor, or they can be in State active duty status where they are funded and commanded by the State.

strategy. The general direction selected to accomplish incident objectives set by the IC.

task force. Defined in Reference (ag).

technical assistance. Support provided to SLT or HN jurisdictions when they have the resources but lack the complete knowledge and skills needed to perform a required activity (such as HAZMAT assessments).

threat. An indication of possible violence, harm, or danger.

tribal. Any Indian tribe, band, nation, or other organized group or community, including any Alaskan Native Village as defined in or established pursuant to the Alaskan Native Claims

Settlement Act (sections 1601-1629h of title 43, U.S.C. (Reference (aj))), that is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

two-person rule. Defined in Reference (ag).

type. A classification of resources in ICS that refers to capability. Type 1 is generally considered to be more capable than Types 2, 3, or 4, respectively, because of size; power; capacity; or, in the case of IMTs, experience and qualifications.

UC. In ICS, the UC is a unified team effort that allows all agencies with responsibility for the incident or accident, either geographic or functional, to manage an accident working together, by establishing a common set of incident or accident objectives and strategies. This is accomplished without losing agency authority, responsibility, or accountability.

unit. The organizational element having functional responsibility for a specific accident planning, logistics, or finance/administration activity.

US&R. Operational activities that include locating, extricating, and providing on-site medical treatment to victims trapped in collapsed structures.

volunteer. Any individual accepted to perform services by an agency that has authority to accept volunteer services when the individual performs services without promise, expectation, or receipt of compensation for services performed. (See Reference (f).)

warhead. Defined in Reference (ag).

weapon debris (nuclear). The residue of a nuclear weapon after it has undergone a conventional explosion, burned, or been severely damaged; that is, the materials used for the casing and other components of the weapon, plus unexpended plutonium, uranium, and other components, together with fission products, if any.

weapons recovery. See recovery.

WMD. Defined in section 2332a of Reference (y).

WRA. A security area surrounding an accident site in a foreign country where a two-person rule is established to prevent unauthorized access to classified defense information, equipment, or material. Cooperation by local authorities and HN consent should be obtained through prior HN agreements.