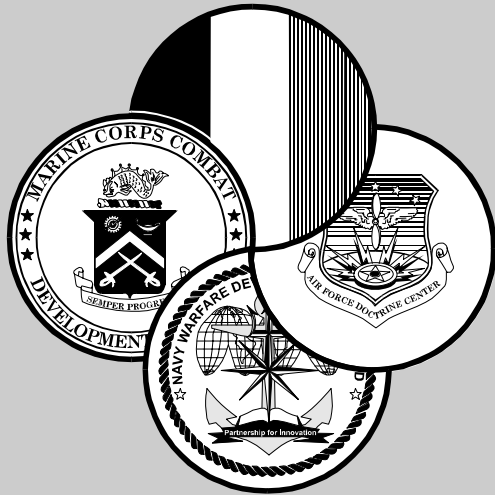


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# ***EOD***

## ***Multiservice Procedures for Explosive Ordnance Disposal in a Joint Environment***

**February 2001**

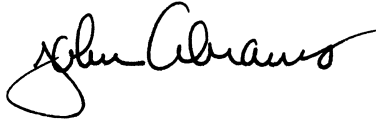
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**MULTISERVICE TACTICS, TECHNIQUES, AND PROCEDURES**

## FOREWORD

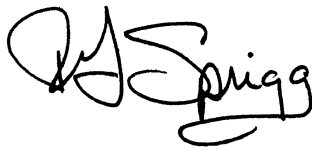
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# PREFACE

## 1. Scope

This multiservice tactics, techniques, and procedures (MTTP) manual provides guidance and procedures for the employment of an explosive ordnance disposal (EOD) force when operating in a joint capacity throughout the range of military operations.

## 2. Purpose

This manual identifies standard tactics, techniques, and procedures (TTP) among the services for planning, integrating, and executing EOD operations in a joint environment. It sets forth TTP to assist joint activities and performance of the entire EOD force and establishes the procedures necessary to protect all United States (US) military and coalition personnel and operations.

## 3. Application

This publication applies to all leaders, planners, and the EOD warfighter when deploying forces into any theater. The TTP established in this manual apply to the commanders of combatant commands, subunified commands, joint task forces (JTFs), and subordinate components of these commands.

## 4. Implementation Plan

Participating service command offices of primary responsibility will review this publication, validate the information, and reference and incorporate it in service and command manuals, regulations, and curricula as follows:

**Army.** The Army will incorporate the TTP in this publication in US Army training and doctrinal publications as directed by the Commander, US Army Training and Doctrine Command (TRADOC). Distribution is in accordance with Department of the Army (DA) Form 12-99-R.

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**Air Force (AF).** AF units will validate and incorporate appropriate procedures in accordance with applicable governing directives as validated by Headquarters (HQ), AF Civil Engineer (CE). Distribution is in accordance with Air Force Instruction 33-360 as directed by the Air Force Doctrine Center (AFDC).

## 5. User Information

a. The TRADOC-MCCDC-NWDC-AFDC Air Land Sea Application (ALSA) Center is the proponent for this publication with the joint participation of the approving service commands. ALSA will review and update this publication as required.

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15 February 2001

## EXPLOSIVE ORDNANCE DISPOSAL

### Multiservice Procedures for EOD in a Joint Environment

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**EXECUTIVE SUMMARY**

**EOD**

**Multiservice Procedures for  
Explosive Ordnance Disposal in a Joint Environment**

This manual–

- describes service-specific EOD organizations, capabilities, equipment, doctrine, and training.
- provides joint EOD command and control (C<sup>2</sup>) considerations.
- provides guidance for planning and conducting EOD operations in a joint environment.
- establishes procedures for information management (IM), and operational and intelligence reporting.

**Introduction**

This publication documents the C<sup>2</sup> considerations and procedures for conducting EOD operations in a joint environment. These TTP are necessary to coordinate and integrate multiservice EOD operations to facilitate efficient and safe joint EOD operations. The EOD force performed in a joint capacity during many recent operations; however, most of the command relationships and coordination requirements were *ad hoc*. Each service routinely deploys EOD forces into a theater, and assigns the force based on service needs rather than the theater needs as a whole. This MTTP provides many considerations for employing EOD forces in a joint capacity and provides C<sup>2</sup> options for the geographic combatant commander and commander, joint task force (CJTF) to consider. This MTTP also highlights the EOD capabilities and force structures for each service.

**Concept and Organization**

Chapters I and II highlight the significant joint C<sup>2</sup> issues when preparing to employ EOD forces. The focus of the service chapters (Chapters III-VI) is for the benefit of non-EOD commanders and staff and EOD commanders and staff from other services to gain an understanding of the personnel/equipment and doctrine utilized within the other services. Finally, in an effort to expedite C<sup>2</sup> requirements for the senior theater EOD commander, the MTTP offers standardized EOD reporting formats which each service has agreed to use when operating in a joint environment. Countering unexploded explosive ordnance (UXO) and the threat it creates during all operations is challenging. This MTTP provides the necessary command structure to assist (rather than impair) efficient EOD operations. This challenge becomes easier as the level of knowledge regarding other services' EOD forces and their contributions to the mission increase.



## Command and Control

By capturing methods used to coordinate joint EOD operations, this publication offers three command relationship options in how to best employ the entire EOD force:

- Service-component responsibility (with direct liaison authorized [DIRLAUTH]).
- Lead-service component (with or without tactical control [TACON] or operational control [OPCON] of other service EOD forces).
- Subordinate Joint EOD Task Force (JEODTF).

Other C<sup>2</sup> considerations when utilizing these task organization options include:

- a. The geographic combatant commander or CJTF can modify or mix these options to the theater mission, threat, and situation.
- b. The MTTP establishes methods for creating a joint EOD operations center (JEODOC) to assist and streamline the management of EOD operations at a single command, normally under the direction of the J-4.
- c. The JEODOC is useful whenever joint EOD management requirements are beyond the capability of the J-4 and/or the subordinate EOD force headquarters. Both the Army and Navy have existing C<sup>2</sup> EOD units around which a JEODOC or JEOETF headquarters can be built. Specifically, the Army's battalion (O-5 command) and group (O-6 command) headquarters, or the Navy's Mobile Unit (O-5 command) and group (O-6 command), provide a ready EOD headquarters unit to quickly manage or command joint EOD operations.

## Chapters

**Chapter I** – Introduces the Department of Defense (DOD) EOD mission, capabilities, and common characteristics of the EOD force. The chapter also provides a historical perspective of EOD operations and the impact the threat has had on US operations.

**Chapter II** – Describes the purpose for conducting EOD operations as a joint force and provides three distinct employment options for the CJTF to consider when employing EOD forces. This chapter also provides guidance for standing up a JEODOC or a JEOETF.

**Chapter III** – Provides the reader an understanding of Army EOD operations to include the Army EOD mission, service doctrine, Army organizations and capabilities, and specific Army EOD training.

**Chapter IV** - Provides the reader an understanding of Marine Corps EOD operations to include the USMC EOD mission, service doctrine, Marine Corps organizations and capabilities, and specific EOD training opportunities.

**Chapter V** – Discusses the Navy EOD mission and naval EOD doctrine. The chapter also focuses on Navy EOD operations to include Navy EOD organizations and capabilities and specific Navy EOD training opportunities.

**Chapter VI** – Presents AF EOD operations to include AF EOD mission, service doctrine, and specific AF EOD training.

### **Appendices**

**Appendix A** – Offers a multiservice capabilities matrix for commanders and planners to understand what capabilities each service can and can not provide.

**Appendix B** - Provides a CJTF staff or EOD staff officer with a logical checklist of necessary EOD planning requirements during each stage of an operation.

**Appendix C** – Describes the procedures for standing up a JEODTF, and the responsibilities of each service's EOD force. Also identifies EOD-specific JEODTF staff requirements and provides an example of a notional JEODTF staff.

**Appendix D** – Formulates and describes the required EOD reports, and standardizes reporting requirements when operating in a joint environment.

**Appendix E** – Captures the recurring EOD operations each service routinely conducts.

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## Chapter I

# EOD WITHIN THE DEPARTMENT OF DEFENSE

### 1. Mission

The mission of DOD EOD is to support national security strategy and force protection by neutralizing hazards from foreign and domestic, conventional, nuclear, biological or chemical (NBC) UXO, and improvised explosive devices (IEDs) that present a threat to operations, installations, personnel, or materiel.

### 2. Threat

The increasing potential of UXO resulting from the proliferation of arms, ammunition, and explosives throughout the world, and an increasing number of terrorist attacks threaten the mobility and survivability of the entire force. Area denial-type munitions containing antidisturbance, influence, self-destruct, remote control, booby-trap, or contact fuzing also directly threaten US forces. The increasing availability of NBC material, components, and weapons raises the possibility of terrorists using these weapons, or conventional IEDs, in an attack against civilian populations or military facilities and units. Wherever US forces deploy, these threats exist.

### 3. Capabilities

Military EOD personnel and equipment provide a variety of capabilities to commanders. Joint regulations and DOD directives prescribe specific responsibilities for each service. Common EOD training, equipment, and technical manuals provide each service with the capability to detect, identify, field evaluate, render safe, recover, and make final disposition of conventional or NBC UXO and IEDs, both foreign and domestic. Due to specific training and safety measures, equipment capabilities, and security issues, only EOD-qualified personnel can provide EOD support to US military operations. See Appendix A, Multiservice EOD Capabilities Matrix, and individual service chapters (chapters III-VI) for a detailed listing of specific service EOD capabilities.

### 4. Common Characteristics

a. **History.** The development of the US military EOD force was an outgrowth of the bitter experience of the British at the beginning of World War (WW) II, when the Germans dropped thousands of bombs and mines containing large explosive charges on land and in the waters around Great Britain. The US started an EOD service shortly before entering WWII by sending representatives from each of the military branches to England for

bomb disposal training. Those representatives returned to the US and established separate Army and Navy bomb disposal schools. By 1960, DOD combined the Army and Navy schools under Navy cognizance to become the Naval EOD School. In 1971, DOD designated the Secretary of the Navy as the single manager for EOD technology and training.

b. **Multiservice EOD School.** The Naval School EOD (NAVSCOLEOD) located at Eglin AFB, FL, is a Navy command, staffed by Army, Navy, AF, and Marine Corps instructors. The EOD course of instruction is approximately six months in length for Army, AF, and Marine Corps personnel and twelve months long for Navy personnel. Navy personnel receive additional instruction in diving procedures and underwater ordnance operations. NAVSCOLEOD trains officer and enlisted personnel from all services in munitions identification, render-safe procedures, explosives safety, and EOD-unique equipment. The school's mission is to provide EOD-trained individuals to the operating forces of all US services and to provide training to various federal agencies and international students.

c. **EOD Research and Development.** The Navy is assigned as the single manager for all DOD EOD research and development, training and evaluation, and common-type training. The Naval EOD Technology Division (NAVEODTECHDIV), Indian Head, MD, is a Navy command with colocated detachments of all services, which is responsible for research and development of specialized EOD tools, equipment, techniques, and procedures common to two or more services. This research and development assists EOD units in maintaining a modern capability to detect/locate, render safe, or dispose of UXO and associated hazards. All services can submit requirements to the NAVEODTECHDIV for equipment development and can provide input to the prioritization and selection of projects for development. The services also provide final approval and acceptance of developed items.

d. **EOD Technical Manuals.** All services use the same EOD technical manuals as the basis for EOD training and technical procedures. The NAVEODTECHDIV develops and publishes these technical manuals and receives joint service input and approval prior to publication. The NAVEODTECHDIV limits access to EOD publications to EOD-qualified personnel who are performing EOD duties. The NAVEODTECHDIV regularly exchanges information with both US national agencies and allied ordnance experts to stay abreast of the latest UXO trends and threats.

e. **Common Equipment.** All military EOD teams possess the same basic EOD tools to detect, identify, evaluate, render safe, and perform final disposition of explosive devices and associated hazards. These tools include portable x-ray equipment, robots, specialized demolition charges, and specialized tools for removing fuzes. Each service has specialized EOD equipment to perform service-unique EOD missions.

## **5. Interoperability**

The existing multiservice training and technical manuals, common equipment, and jointly supported research and development program make EOD one of the most interoperable specialties in the US military. Multiservice EOD forces have worked side by side in numerous operations during recent contingencies and conflicts. These joint EOD operations demonstrate the potential for greater planning and operational efficiency in the future.





## Chapter II

# EOD IN A JOINT ENVIRONMENT

### 1. Operations

a. **Background.** UXO and other hazardous devices in a theater of operations will likely threaten military forces and operations. US personnel have been killed or injured by UXO in virtually every conflict or contingency in which the US has participated. The UXO threat is more serious to noncombatants, who are unfamiliar with military ordnance. While service components usually deploy with, and are supported by, its own EOD assets, the number of these assets is very limited and in high demand. In many situations, the geographic combatant commander, through his directive authority for logistics, can achieve economy of effort by organizing his EOD forces using common servicing. Common servicing may allow the joint force commander (JFC) to provide more efficient and effective EOD support to the joint force depending on the operational scenario. The joint EOD force could also include integration of coalition EOD forces in a joint/coalition EOD task force (TF).

b. **Historical Examples.** During recent US contingencies, EOD assets from different services combined their efforts to maximize the efficiency of EOD operations. While effective, most were accomplished in an *ad hoc* manner, often improvised on site between the local EOD commanders.

(1) **Desert Storm.** During the major UXO cleanup effort in Kuwait immediately after Desert Storm, EOD forces from each of the services were organized into a *de facto* subordinate EOD JTF under Task Force Freedom. The JTF dealt with the large numbers of UXO remaining in Kuwait City. This organizational technique allowed the task force and subordinate EOD commanders to focus all available EOD assets on the major UXO clean-up effort in an organized and efficient manner, thus reducing the need for individual services to bring more EOD assets into the country.

(2) **Somalia.** In Somalia, EOD forces from the Army, AF, and Marines operated together to remove UXO by sharing response sectors in Mogadishu. Navy EOD personnel supplemented Army EOD soldiers in destroying captured munitions at an improvised demolition range.

(3) **Bosnia.** In support of continued peacekeeping efforts in Bosnia, US EOD forces were integrated to provide EOD services for the elimination of UXO and to support conventional/special operations and coalition forces.

c. **Planning.** A common servicing approach for EOD support is often the most efficient means to address the UXO threat, especially when a limited

number of EOD forces are available. Factors affecting the structure of a joint EOD force include intelligence and terrorist threats, parent unit mission (for example: flight operations, demining, or support to Special Operations Forces [SOF]). Appendix B, EOD Planning Checklist for Joint Operations, provides general EOD planning guidance to support contingency operations.

## **2. Employment Options**

a. **Background.** The magnitude of the UXO threat in the joint operations area (JOA), coupled with the overall operational situation, normally determines the value added and degree of common servicing desired for EOD support.

b. **JFC Options.** This chapter provides three options for structuring a joint EOD force to accomplish the theater mission. Each option and organizational examples depict the use of service forces to accomplish the EOD mission. If the geographic combatant commander uses a functional command structure for the theater, the JFC logistics directorate of a joint staff (J-4) would still have overall responsibility, with service forces performing the EOD mission. Based on the situation, the CJTF can modify or mix any of the following options:

- (1) Service-component responsibility (with DIRLAUTH).
- (2) Lead-service component (with or without TACON or OPCON) of other service EOD forces.
- (3) Subordinate JEODTF.

## **3. Service Component Responsibility with DIRLAUTH**

a. **Utilization.** The service-component responsibility employment option is used when each service component provides for and controls its own EOD forces and requirements. It is also the most common method of employing EOD forces, although this option often will not provide the most efficient or responsive use of EOD assets.

b. **Benefits.** This option works best when—

- (1) the service component geographical areas of responsibility within the JOA are clear.
- (2) the operational situation allows deployment of each of the service component's EOD forces.
- (3) the JFC does not require direct control of EOD missions.

c. **DIRLAUTH Option.** Commanders may benefit by specifying DIRLAUTH between the service component's EOD units. Previous EOD operations have routinely operated in this manner; however, DIRLAUTH often was not expressly written in the operation plan (OPLAN) or operation order (OPORD). Formalizing DIRLAUTH often provides a more efficient and

responsive method for coordinating EOD operations among the service components. See Figure II-1, Service-Component Responsibility (with DIRLAUTH) Organization.

d. Employment Considerations. This employment option—

- (1) allows each service to retain control of its EOD assets for operations in its area of responsibility (AOR).
- (2) does not always allow the most efficient or responsive use of EOD assets.
- (3) will likely increase response time to a major accident or incident when support is required to cross service-component lines.
- (4) increases intelligence and operational information sharing between the service components when DIRLAUTH is authorized.
- (5) may benefit the JFC and staff by establishing a JEODOC to assist in managing the EOD mission. Paragraph 6 of this chapter provides the conditions for establishing a JEODOC and its functions.

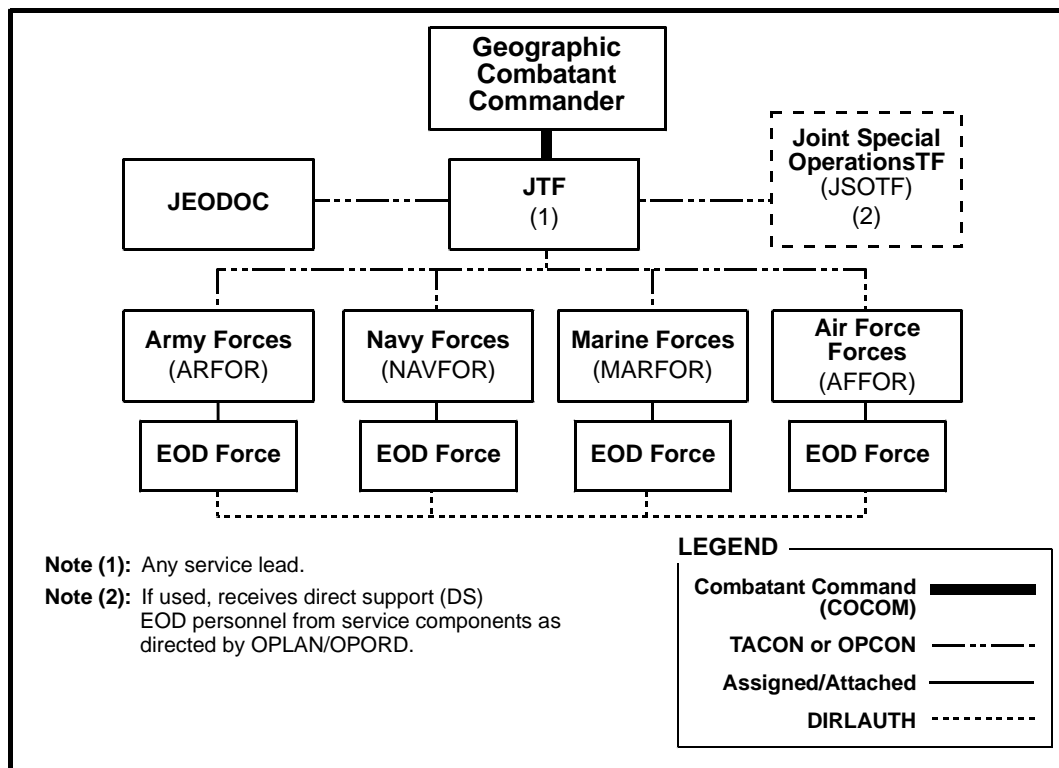


Figure II-1. Service-Component Responsibility (with DIRLAUTH) Organization

#### **4. Lead-Service Component (with or without TACON or OPCON) Option**

a. Utilization. The combatant commander may use the lead-service component option to support a limited duration mission or to provide more efficient EOD support, especially in a short notice, austere environment mission (for example: Bosnia and Kosovo). In this option, the combatant commander, through his directive authority for logistics, assigns specific EOD-related missions to a specific service component with or without TACON/OPCON of other services' EOD forces.

b. Formation. To establish a lead-service component, the combatant commander, in consultation with his subordinate JFC and service-component commanders, assigns specific common EOD tasks to a lead-service component. Normally, the lead-service component for EOD functions within a JFC is the service component with the majority of EOD requirements in theater. Another consideration for appointing a lead service is to appoint the component most capable of conducting the EOD mission. The combatant commander may place selected EOD assets from one or more of the other service components TACON or OPCON to the lead-service component EOD commander to assist in accomplishing the assigned tasks. Other services providing forces to the lead service may provide, or be directed to provide, staff augmentation to the lead-service EOD commander's staff. These services should, as a minimum, provide LNOs. Having other service EOD staff augmentation or LNOs within the lead-service EOD staff section expedites planning, coordination, and mission execution. This option must include a support relationship for administrative/logistics support. Figure II-2, Lead-Service (with or without TACON/OPCON) Organization, depicts a typical lead-service command relationship.

c. Employment Considerations. This option—

(1) allows more efficient use of limited EOD assets for JTF-specific missions of limited duration or high priority. This option is not used to provide EOD support for specific service-related missions (to include aircraft support, harbor clearances, and carrier battle-group support). Each service retains select EOD forces to accomplish service-specific missions.

(2) centralizes all routine EOD operation taskings and data tracking with a single point of contact (POC), normally the lead-service component EOD unit operations officer.

(3) improves technical intelligence acquisition and dissemination to all EOD forces.

(4) may benefit the JFC and staff by establishing a JEODOC to assist in managing the EOD mission. The conditions for establishing a JEODOC and its functions are discussed in paragraph 6 of this chapter.

(5) provides a mechanism that plans for fluctuations of service EOD force responsibilities as the operation transitions through different phases. Allows service EOD support to increase or decrease based on operational tempo or the theater EOD mission.

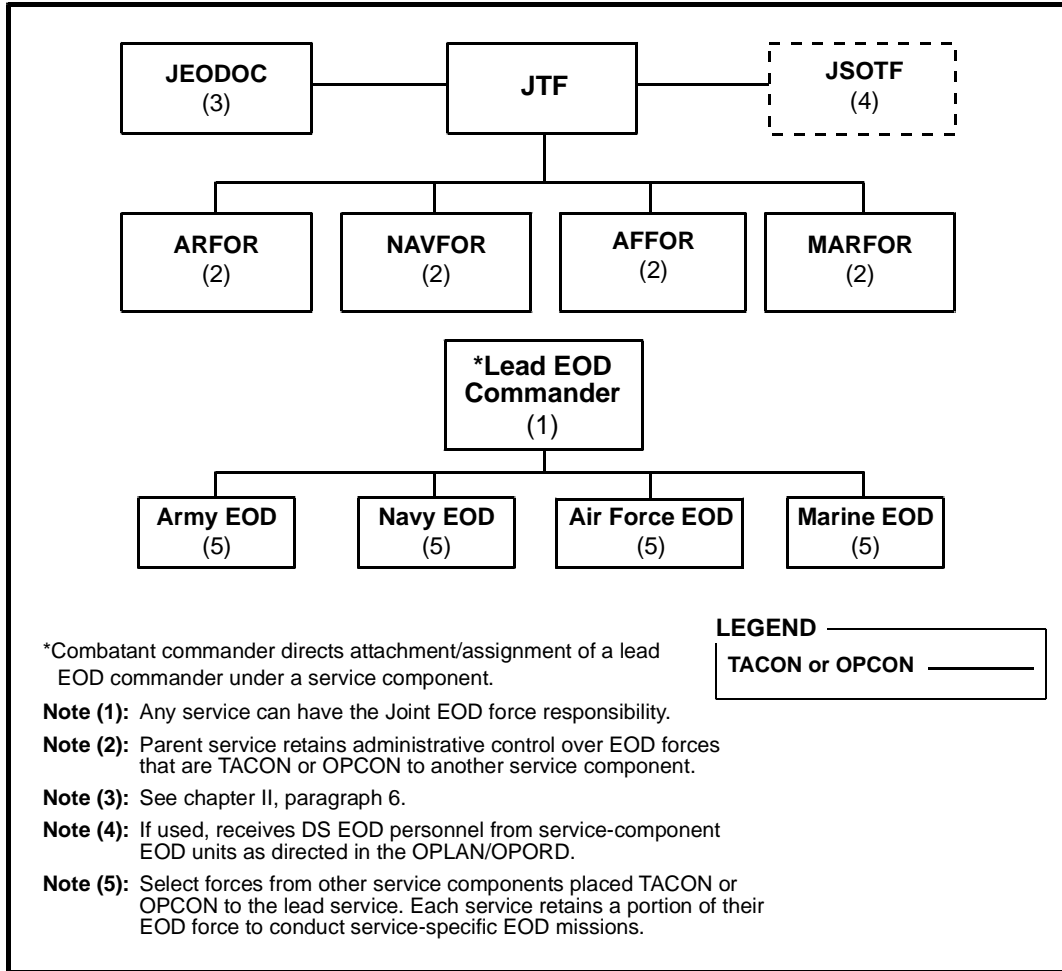


Figure II-2. Lead-Service (with or without TACON/OPCON) Organization

## 5. Subordinate JEODTF

a. **Utilization.** A JEODTF is a subordinate JTF that controls (via TACON/OPCON for attached units) two or more service-component EOD organizations and is jointly staffed. Task organizing EOD forces under a JEODTF allows the CJTF to focus limited EOD assets where they are needed most and provides an opportunity to optimize EOD mission capabilities. It also serves a similar function as a JEODOC, but includes command authority, as opposed to staff management, over assigned and attached EOD forces.

b. **Formation.** The CJTF should base the decision to establish a JEODTF on specific mission needs, while also considering ongoing service component EOD requirements. Based on JFC guidance and other considerations, such as an OPLAN and existing agreements, each service component provides assets to fulfill common EOD support requirements within the JOA. However, even when common EOD support is provided for by a lead service or JEODTF, service-unique EOD requirements remain the responsibility of the individual

service components. The combatant and subordinate JFCs should consider the common support requirements needed to allow service-components the ability to execute their service-specific requirements. See Figure II-3, JEODTF Organization. The JEODTF headquarters normally is built around an existing service-component EOD command, with augmentation from other service EOD staff personnel. When using a JEODTF, the CJTF must ensure that adequate administrative, logistical, and medical support is available to the JEODTF. The CJTF employs a JEODTF for a limited time for a specific mission to clear hazards that threaten theaterwide operations. See Appendix C for more details on establishing a JEODTF.

c. Employment Considerations. The JEODTF option—

(1) delegates the authority to organize forces to accomplish the EOD mission, based on the CJTF's concept of the operation. By design and to avoid duplication of effort, a JEODOC is not established if the JEODTF option is used.

(2) provides the EOD force with unity of effort, centralized planning, and decentralized execution.

(3) consolidates the capabilities of each service's EOD force in a joint effort to solve theaterwide UXO hazards.

(4) facilitates the combatant commander/CJTF control over EOD forces and missions.

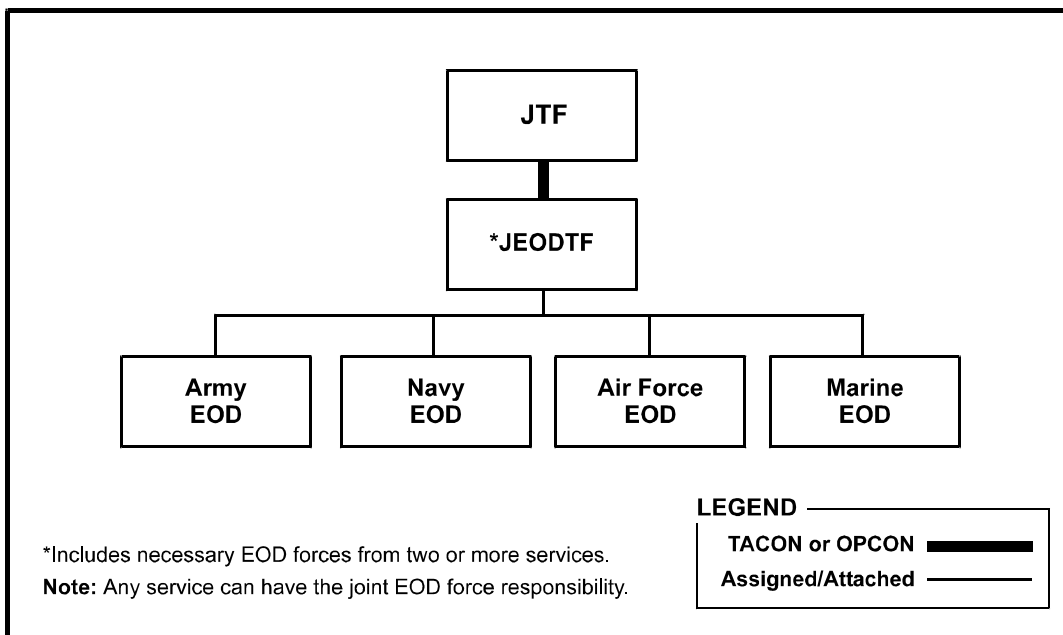


Figure II-3. JEODTF Organization

(5) expedites technical intelligence/data acquisition and dissemination to end-users.

(6) provides a command structure for the integration and control of coalition EOD forces.

(7) may be most appropriate for a major theater war (MTW), munitions storage or transportation disasters, large operations, or post-hostilities UXO clean-up operations.

## **6. JEODOC**

a. **Formation.** The JFC and J-4 staff determine the need for the JEODOC. The JEODOC is useful whenever joint EOD management requirements are beyond the capability of the JTF's J-4 staff or subordinate EOD force headquarters. The scope of the assigned mission and allocated force structure determines the staffing level and overall support requirements. The JEODOC is a fully integrated and mobile facility, manned and equipped by the individual service components under the auspices of the JTF J-4. To avoid duplication of effort, a JEODOC is not established when a JEODTF is formed. Both the Army and Navy have existing C<sup>2</sup> EOD units around which a JEODOC is built. Specifically, using the Army's battalion (O-5 command) and group (O-6 command) headquarters, or the Navy's Mobile Unit (O-5 command) and group (O-6 command), provide a ready EOD headquarters unit to quickly establish a JEODOC.

b. **Functions.** The JEODOC is a multifunctional operational center under the auspices of the JTF J-4. Its primary purpose is to manage theater-level UXO hazard-reduction operations and EOD planning, integrating, coordinating, and tasking functions (through the direction and authority of the commander) when there is no subordinate JEODTF formed to accomplish this task. The JEODOC provides the JTF oversight over all EOD operations in theater, tracks critical EOD assets, monitors and recommends changes in priorities, and resolves issues between service components. The JEODOC tasking authority enables the JTF to change service-component EOD force responsibilities as the operation transitions through different phases. This allows service EOD support to increase or decrease based upon operational tempo or the theater EOD mission. The major functions resident in the JEODOC are—

(1) **Operations/Intelligence (Ops/Intel) Section.** The ops/intel section ensures current theater-EOD operations are synchronized with CJTF intent. It monitors, synchronizes, and reports EOD operations to ensure maximum efficiency throughout the JOA. The section also monitors and interprets the enemy and friendly situation for the commander and informs forces of significant changes in operations, objectives, and priorities.

(2) **Administrative/Logistics (Admin/Log) Section.** The admin/log section identifies immediate or potential problems in the support or material system. The section determines logistics support resource requirements,

coordinates airlift requests, and special transportation requirements, and provides feedback (on request) for mission-essential repair and support items.

(3) Communications-Electronics (C-E) Section. This section provides information systems planning, coordination, and support to the JEODOC and all joint, coalition, and external organizations, as required.

## **7. Information Management and Reporting**

a. Information Management (IM). IM refers to the processes a JTF J-4, JEODOC, and JEODTF use to obtain, manipulate, direct, and control vital EOD-related information. IM for EOD operations includes all processes involved in the creation, collection and control, dissemination, storage and retrieval, protection, and destruction of critical EOD information. The goal of IM for EOD operations is to provide a timely flow of quality information, enabling the commander of any EOD force to anticipate and understand the consequences of changing conditions. See FM 3-99.4 (FM 101-4)/MCRP 6-23A/NWP 3-13.1.16/AFTTP(I) 3-2.22, *Multiservice Procedures for Joint Task Force-Information Management*.

b. Reporting Requirements. See Appendix D, Standardized EOD Reports.



## Chapter III

# ARMY EOD OPERATIONS

### 1. Interservice Responsibilities

Army Regulation (AR) 75-14; Chief of Naval Operations Instruction (OPNAVINST) 8027.1G; Marine Corps Order (MCO) 8027.1D; and Air Force Joint Instruction (AFJI) 32-3002, *Interservice Responsibilities for Explosive Ordnance Disposal*; and AR 75-15, *Responsibilities and Procedures for Explosive Ordnance Disposal*, define the Army's responsibilities as the following:

- a. To provide support to Army installations/activities and to render safe/dispose of explosive ordnance in the physical possession of the Army.
- b. To establish, operate, and support an explosive ordnance reconnaissance program.
- c. To provide routine and emergency response to all land-mass areas under US control, except those specifically assigned as a responsibility of the Navy, Marine Corps, or Air Force.

### 2. Mission

The Army EOD mission is to support national security strategy by providing the capability to neutralize hazards from conventional UXO, NBC and associated materials, and IED (both explosive and NBC), that present a threat to operations, installations, personnel, and/or material. Army EOD forces also may dispose of hazardous foreign or US ammunition, UXO, individual mines, booby-trapped mines, and chemical mines. Routine clearing and rapid breaching of foreign or US minefields is the responsibility of the Army engineers. EOD provides the Army with a rapidly deployable support package for the elimination of hazards from UXO in any operational environment. The EOD force serves as a combat multiplier by neutralizing UXO that is restricting freedom of movement and denying access to supplies, facilities, and other critical assets. Army EOD forces equip, train, and organize to support tactical land forces across the spectrum of operations, to include peacekeeping, military operations other than war (MOOTW), and MTW.

### 3. Doctrine

- a. Rules of Allocation. The Army has sufficient EOD force structure to support two simultaneous MTWs in separate theaters of operations. The Army allocates each theater one EOD group at Army/theater level; three EOD battalions at theater support command/corps/division level; and 28 EOD

companies at specified locations that best support the maneuver commander. See Figure III-1, US Army EOD Theater Force Structure.

b.  $C^2$ . The EOD group provides  $C^2$  for all Army EOD assets and operations in theater. The EOD battalions provide  $C^2$ , mission tasking, technical intelligence acquisition and management, and limited administrative and logistic support for up to 10 EOD companies. EOD battalions, or battalions (-), may deploy as the senior  $C^2$  element for Army EOD operations in a given operation. Ordnance companies remain under the command of their parent battalion, but depending on the operational situation, may be placed TACON/OPCON to another unit. When utilizing the TACON/OPCON  $C^2$  option, the parent battalion retains administrative control (ADCON) of their subordinate companies. EOD companies provide general support (GS) on an area basis or direct support (DS) to specified elements in support of operations. The combatant commander's planning staff tailors EOD forces to support specified operations down to a brigade combat team. Responsibilities of the EOD commander at all levels include—

- (1) recommending policy and distribution of EOD assets.
- (2) monitoring EOD support missions and establishing workload priorities.
- (3) serving as POC for technical intelligence coordination.
- (4) coordinating GS and DS EOD support.

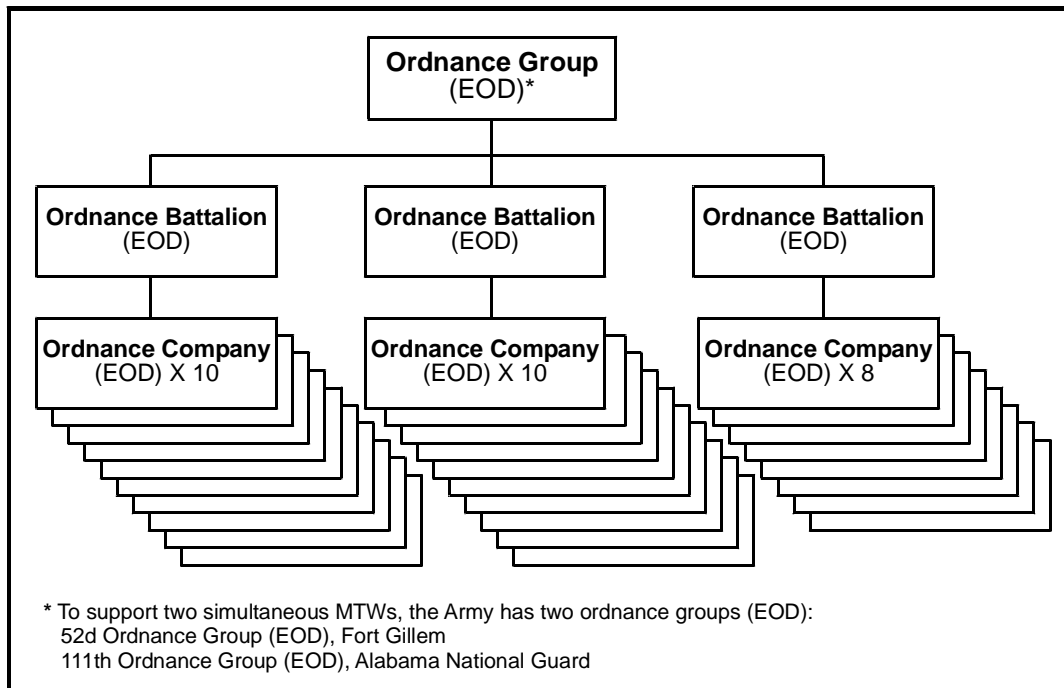


Figure III-1. US Army Theater EOD Force Structure

(5) ensuring each EOD unit establishes provisions for communications at each level to support EOD operations.

(6) supplementing other theater force-protection procedures to meet the existing threat.

(7) coordinating administrative and logistical support, as required, from the supported command.

c. **Operational Planning.** The EOD group and EOD battalion provide staff planning for Army EOD operations throughout their area of operations (AO). Thus, the EOD group commander is also the EOD special staff officer to the Army force commander, joint force land component commander (JFLCC), and coalition JFLCC. The EOD battalion commander serves as the EOD special staff officer at the corps JTF and coalition JTF level. In the absence of a deployed EOD group or EOD battalion, the senior-ranking Army EOD officer also serves as the EOD staff officer for the Army element. The EOD commander is responsible for providing the EOD annex to all OPLANs/OPORDs. This ensures that EOD forces fully understand and support the maneuver commander's operations and also provides for force protection throughout the AO.

d. **Theater-Level Strategic Planning.** The Army service component commander (ASCC) and his staff plan for Army and assigned EOD theater-strategic EOD requirements in support of the geographic combatant commander's campaign plan. The ASCC accomplishes the planning by using the Joint Operation Planning and Execution System (JOPES) and coordinates the planning effort with the combatant commander's EOD staff officer. The EOD battalion and group commander may provide LNOs to the geographic combatant commander or JFC staff if required. The EOD battalion commander may also provide an LNO to a brigade, division, or corps JTF headquarters if deemed necessary by operational requirements. The LNO ensures—

(1) mutual cooperation and understanding between commanders and staffs of different headquarters.

(2) coordination on tactical matters to achieve mutual purpose, support, and action.

(3) precise understanding of stated or implied coordination measures to achieve synchronized results.

e. **Combined Operations.** Combined operations involve the military forces of two or more nations acting together in common purpose. The EOD battalion/group commander considers military doctrine and training, equipment, cultural differences, and language barriers when providing TACON or OPCON of alliance or coalition EOD forces. Lessons learned indicate that few linguists have both the technical expertise and depth of understanding to cross both language and doctrinal boundaries and be fully

understood when dealing with UXO and technical EOD procedures. Combined operations require a significant resource commitment to dedicated liaison and linguist teams from alliance or coalition EOD forces.

#### 4. Organizations

The Army assigns EOD organizational assets to specified major command (MAJCOM) areas. See Figure III-2, US Army EOD Force Allocation. The

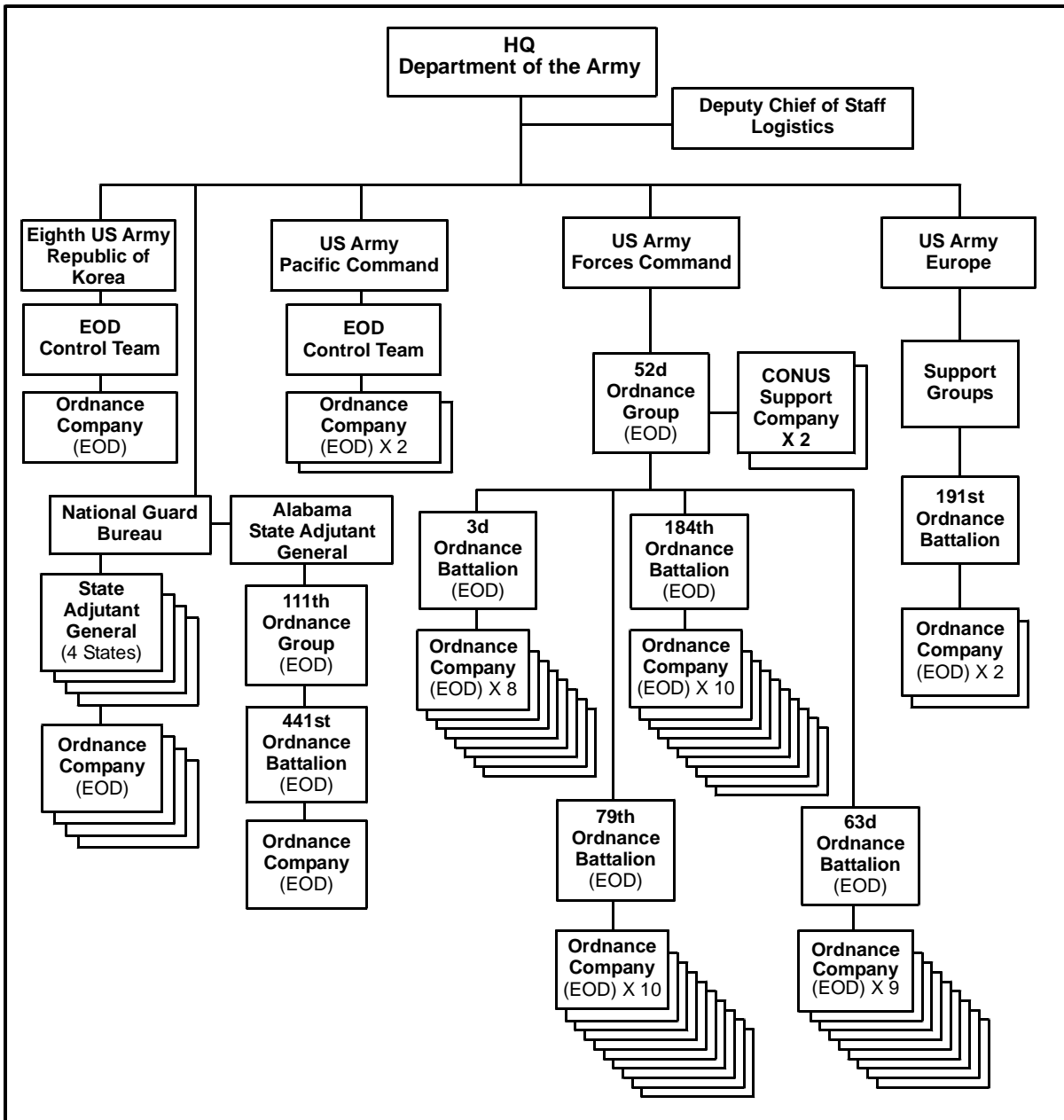


Figure III-2. US Army EOD Force Allocation

Army numbers all EOD units for support to specified OPLANs. Major EOD commands and their locations are:

- a. US Army Forces Command: 52d Ordnance Group (EOD), four EOD battalions, and 39 EOD companies.
- b. US Army Europe: EOD cell, 191st Ordnance Battalion, and two EOD companies.
- c. US Army, Pacific Command: EOD control team and two EOD companies.
- d. Eighth US Army, Republic of Korea: EOD control team and one EOD company.
- e. US Army National Guard: one EOD ordnance group, one EOD battalion, and five EOD companies.

## **5. Capabilities**

a. **The EOD Company–Mission.** Each EOD company is authorized 23 soldiers, comprising 20 EOD-qualified technicians, including the commander and first sergeant, and three support soldiers (personnel clerk, mechanic, and supply sergeant). The EOD companies provide GS to the corps on an area basis and can perform DS missions for a specific maneuver unit, normally a division or brigade TF. Due to the limited support personnel, the EOD company depends on the supported unit for administrative and logistical support.

b. **The EOD Company–Force Capabilities.** The activity of EOD intensifies based upon the operational tempo of the battle and stabilizes as the theater matures. The EOD force within a theater of operations can expect to conduct operations in a myriad of situations and locations. An EOD company can field up to seven EOD teams, consisting of a minimum of one EOD team leader and one EOD team member. Each team can operate for a period up to 72 hours and may conduct 8-10 EOD incidents in a 24-hour period. This is dependent on the mission, enemy, terrain and weather, troops and support available, time available (METT-T). The Army adds a “C” at the end of METT-T for civilian considerations. Manpower intensive EOD operations (multiple UXO, NBC operations, and ammunition supply point accidents) require several EOD teams at one time to complete the mission. EOD commanders can task organize their teams as necessary to complete the mission.

c. **Operational Capabilities.** Organic to each EOD company are personnel and equipment to identify, mitigate, neutralize, remove, and dispose of conventional or NBC explosive hazards. These hazards may arise from domestic or foreign ordnance or IED that degrades the commander’s mobility or that threaten personnel, operations, or installations. Many of the capabilities are non-service specific. To avoid repetition in the service chapters, Appendix E provides those capabilities that are recurring,

non-service specific EOD requirements. Key Army-specific EOD operational capabilities are—

(1) Force Protection. Army EOD provides the bomb disposal component of the Army's force protection program. In addition to actual response to explosive devices, Army EOD forces can also provide training in UXO/explosives recognition and reporting, bomb threat search procedures and evacuation, site vulnerability assessments, and unit standard operating procedures (SOP) preparation and validation. This training increases the effectiveness of the maneuver commander's force protection program.

(2) Very Important Person Protective Support Activity (VIPPSA). Army EOD is the executive agent for coordination and tasking of all military EOD support for the US Department of State (DOS) and US Secret Service (USSS) for the protection of the president, vice president, and designated foreign heads of state.

(3) Amnesty Programs. Army EOD units assist in the collection and disposal of hazardous munitions and components as part of the maneuver commander's force protection program, to ensure the continued safety of military personnel.

(4) Stuck Rounds. Each EOD team performs specialized procedures to remove artillery or mortar rounds that become stuck in firing tubes.

(5) Mortuary Services. Immediate recovery and clearance of deceased persons is a priority of the services. The presence of UXO being found on or imbedded in deceased persons adversely impacts the recovery of coalition or US personnel. Therefore, Army planners normally involve EOD-qualified leaders in planning and conducting recovery and processing of deceased personnel.

d. Continental US (CONUS) Support Company. The Army assigns two CONUS support companies to the EOD group. The CONUS support company assumes responsibility for the CONUS Army EOD mission upon deployment of an EOD battalion and all, or some, of its subordinate EOD companies. The CONUS support company commander provides C<sup>2</sup> of an operations section and disperses a response force or teams at up to six different geographical locations. The CONUS support company can assume many of the C<sup>2</sup> functions of the deployed battalion, to include—

- (1) coordination of EOD support to the USSS.
- (2) EOD support to military installation commanders.
- (3) EOD support to other civilian agencies.

The group can also task the companies to provide specialized support to the National Command Authority (NCA) for response to counterterrorism activities and response to weapons of mass destruction (WMD).

## **6. Training**

a. **Required Individual EOD Training.** All Army EOD specialists attend the Army-specific material/equipment training (Phase II) at Redstone Arsenal, AL. Army EOD personnel also receive continuous technical sustainment training and evaluations at their units of assignment.

b. **Specialized Training Opportunities.** Select EOD soldiers may also attend specialized training such as technical escort specialist, advanced access and disablement, advanced EOD, and a variety of nuclear and chemical operations courses. A limited number of specially selected EOD soldiers also attend Federal Bureau of Investigation civilian EOD training or foreign EOD courses, such as the British Army Engineer IED Disposal and Advanced Manual Techniques Course, the Canadian Military Forces IED Disposal Course, and the French Military Demining School.

c. **Combat Training Centers.** EOD companies and company elements provide support to maneuver forces (battalions, brigades, and division TF headquarters) undergoing training at the Joint Readiness Training Center, National Training Center, and the Combat Maneuver Training Center. Specifically, countering UXO hazards with EOD teams prevent needless deaths, injuries, and destruction of the commander's combat power. During reception, staging, onward movement, and integration, supporting EOD teams provide UXO danger awareness and risk management, fratricide prevention, and other safety instruction to JTF personnel.





## Chapter IV

# MARINE CORPS EOD OPERATIONS

### 1. Interservice Responsibilities

MCO 8027.1D; AR 75-14; OPNAVINST 8027.1G; and AFJI 32-3002, *Interservice Responsibilities for Explosive Ordnance Disposal*, states that the USMC EOD forces provide EOD services on USMC installations, in assigned operational areas, or for explosive ordnance in the physical possession of the Marine Corps.

### 2. Mission

The USMC EOD mission is to provide force protection in support of the Marine air-ground task force (MAGTF). This is accomplished by neutralizing hazards from foreign, domestic, conventional, and NBC UXO and IEDs that present a threat to operations, installations, personnel, or material. Additionally, Marine Corps EOD units provide technical intelligence on ordnance through disassembly and rendering munitions inert.

### 3. Doctrine

- a. Operational Concept. Marine EOD forces conduct operations to enhance survivability/mobility, preserve warfighting capabilities, and to enable Marine expeditionary and joint forces to achieve and maintain battlespace dominance through the reduction or elimination of UXO threats.
- b. C<sup>2</sup>. The EOD officer/team leader directs and coordinates the execution of EOD tasks in support of the commander's intent. The EOD teams within Marine expeditionary forces (MEFs) and subordinate MAGTFs must coordinate with each other to ensure complete support of all units. The senior EOD officer has staff responsibility for all EOD-related matters during a contingency or conflict.
- c. Operational Planning. For planning, EOD falls under the Pacific/Atlantic/MEF Marine Corps component logistics staff officer (Marine Corps brigade or higher staff) (G-4). The senior EOD Marine for a future mission conducts all operational planning. Due to the inherent danger of UXO, commanders should include the EOD officer/team leader in all phases of planning. This Marine is responsible for providing the EOD annex for OPLANs/OPORDs to ensure full EOD support in all phases of the operation.

### 4. Organizations

- a. Marine EOD Forces. Marine EOD forces within the MEFs consist of an EOD platoon within the engineer support battalion (ESB) of the force service

support group contained within the division and EOD forces within the Marine wing support squadron (MWSS) of the Marine wing support group.

(1) The EOD Platoon of the ESB. The ESB EOD platoon is a part of the headquarters and services (H&S) company of the ESB. The ESB S-3 tasks and controls the EOD platoon. See Figure IV-1, which depicts the H&S company of the ESB. Organization and equipment for the EOD platoon provides eight fully capable teams for operations in support of the MEF. See Figure IV-2, USMC EOD Platoon, Engineer Support Battalion, for a depiction of the eight teams. These eight teams can reorganize into smaller teams and respond to separate incidents, depending upon the complexity of the UXO/IED incident. A six-man EOD team will support a Marine expeditionary unit (special operations capable) (MEU[SOC]). The MEU (SOC) is the most

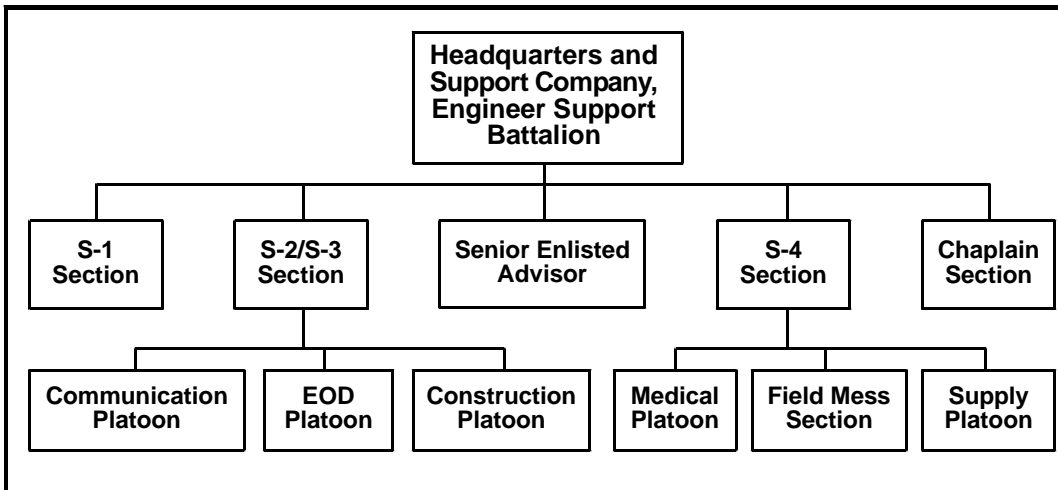


Figure IV-1. USMC H&S Company, Engineer Support Battalion

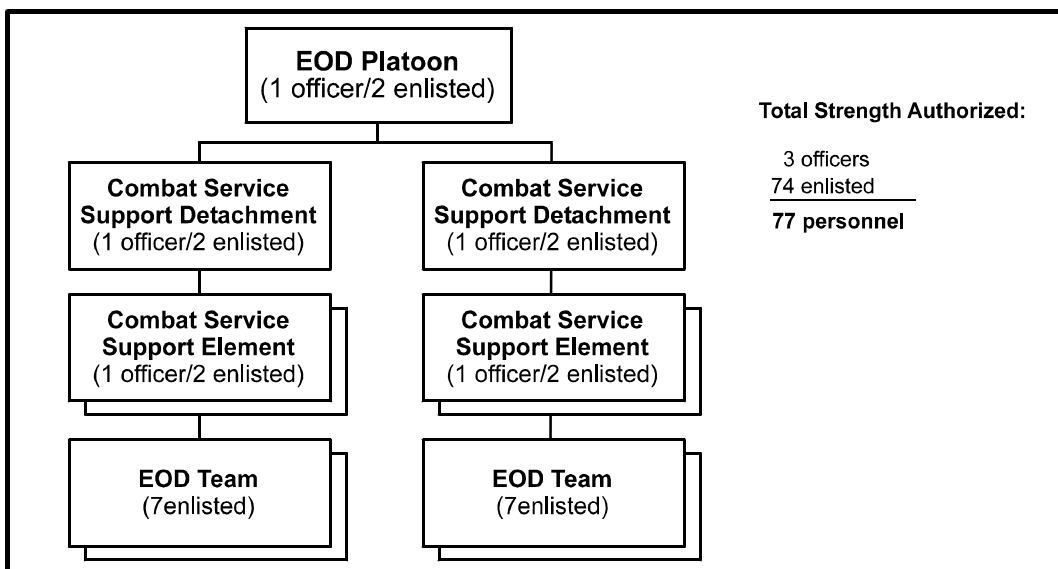


Figure IV-2. USMC EOD Platoon, Engineer Support Battalion

commonly deployed version of a MAGTF. The Marine Corps assigns the EOD team to the MEU service support group (MSSG) operations officer. During MEU operations, the EOD team may be OPCON/TACON to a higher headquarters to facilitate the most efficient use of a scarce asset.

(2) EOD Section of the MWSS. The EOD section of the MWSS consists of one officer and six enlisted personnel and primarily supports the air combat element. The MWSS EOD section is capable of providing full EOD support to an expeditionary airfield (EAF). Each team may reorganize into smaller teams and respond to separate incidents. For example, the EOD team may operate at a forward operating base, EAF, forward arming and refueling point, or may respond to a separate UXO incident. See Figure IV-3, USMC EOD Section, Marine Wing Support Squadron.

b. Marine Base/Air Station EOD Forces.

(1) Marine Corps Bases. The base EOD teams are under OPCON of the Assistant Chief of Staff, Operations and Training, department of the Marine Corps base. The EOD team usually consists of one officer and six enlisted and provides full EOD support for all operational and training evolutions that the base conducts.

(2) Marine Corps Air Stations (MCAS). The Marine Corps assigns this EOD team as a special staff section to the air station commanding officer. This section usually consists of one officer and four enlisted personnel and provides all support in the conduct of operations and training aboard the MCAS.

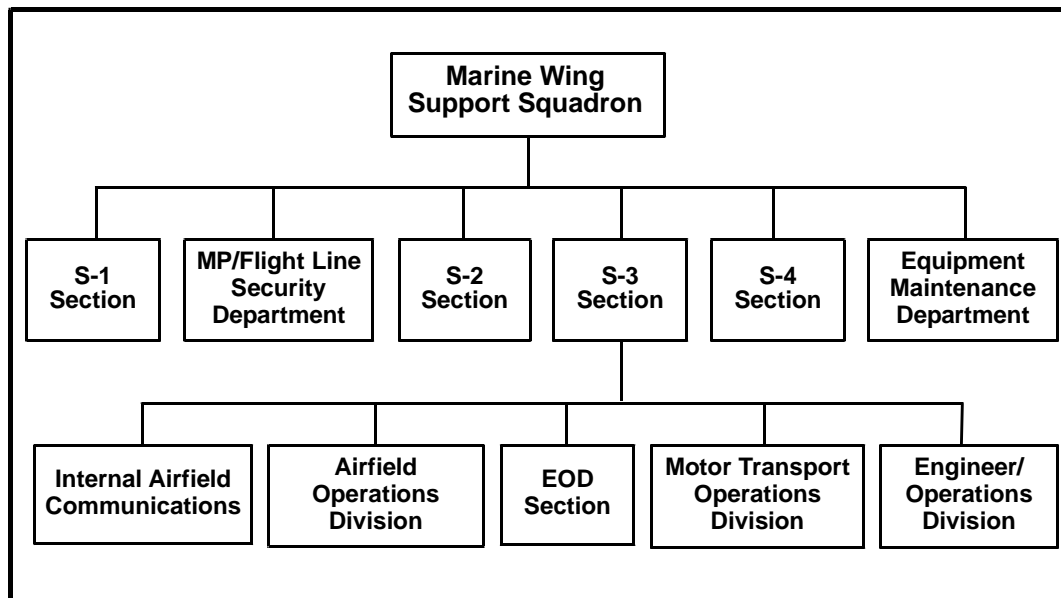


Figure IV-3. USMC EOD Section, Marine Wing Support Squadron

## 5. Capabilities

a. Marine EOD Team Capabilities. In addition to the recurring operations provided in Appendix E, all Marine EOD teams have the following capabilities—

(1) Tactical Recovery of Aircraft or Personnel (TRAP). The EOD technicians assist in extracting personnel from aircraft and the recovery, rendering safe, or destruction of any remaining explosive and classified components as required. Marine EOD technicians that support/participate in a TRAP operation are under OPCON of the search team leader.

(2) Base Recovery After Attack. EOD provides rapid UXO clearance after an attack to facilitate rapid reopening of an airfield for combat operations. A UXO hazard can disrupt and/or paralyze air operations and do so for long periods of time. These disruptions/interruptions to operations are particularly applicable to targets requiring rapid reopening priority. Regardless of the munitions employed against an airbase, base recovery, and, in particular, airfield recovery must take place in the shortest time possible. Multiple factors effect when and how the rendering safe and clearance of UXO occurs during a recovery mission. These factors include, but are not limited to—

- (a) sensitivity of the fuzing.
- (b) condition of the munition.
- (c) location of the munition.
- (d) priority of clearance assigned to the location.

(3) Noncombatant Evacuation Operation (NEO). The EOD team neutralizes any explosive hazards capable of endangering the NEO party/ security forces or evacuating personnel. These explosive hazards can include conventional or improvised UXO. The EOD team can also destroy any contraband, weapons, or explosives brought into the site. During an NEO, the site commander normally has TACON of the EOD team for optimal utilization.

(4) Humanitarian Assistance (HA) Operations. Marine EOD units conducting an HA operation provide mobile training teams. These teams destroy weapons, ordnance, and explosives, and report ordnance-related information to the proper authority. The EOD units support MAGTF internal security by responding to IEDs and by providing instruction to MAGTF units concerning ordnance identification and IED awareness. The optimal method of employing an EOD unit during an HA is by TACON to the operations officer.

(5) Force Protection. The optimal method of employing EOD forces during force protection operations is by providing DS to the MAGTF. Employment of the EOD force requires application of planned and integrated security programs, including—

- (a) combating terrorism.
- (b) physical security.

- (c) operations security.
- (d) personal protective security supported by intelligence.
- (e) counterintelligence
- (f) other security programs.

The EOD force within the MAGTF normally receives direction from the force protection officer of the MAGTF. Attachment of EOD teams to subordinate units should only occur when the supported unit is separated from the MAGTF and response by individual tasking is not feasible.

(6) **Technical Support and Training.** EOD units provide technical intelligence through exploitation of ordnance by identification, disassembly, and rendering munitions inert. Additionally, Marine EOD personnel teach awareness, response, reporting, and identification of IEDs and locally manufactured ordnance items. EOD units perform crater analysis and assist in post-blast investigations. The MAGTF can attach EOD forces to raid units to neutralize munitions/missiles.

(7) **Dynamic Entry.** Dynamic entry involves the use of specialized technical entry methods against a specific target. EOD performs the dynamic entry mission in support of the maritime special purpose force (MSPF) and military police (MP) special response teams. Methods include the use of mechanical tools, thermal torches, shotguns, and explosives. Dynamic entry methods ensure 100 percent penetration of the target using a minimum of force, with the intent to limit collateral damage. These operations support in-extremis hostage rescue and raids to destroy or rescue equipment/ personnel in support of the MSPF or MP special response teams.

(8) **Disaster Areas.** If a disaster strikes an area where munitions are manufactured, stored, or utilized, EOD support may allow relief forces to conduct operations and to safeguard citizens.

b. **Marine Corps MOOTW EOD Capabilities.** During MOOTW and smaller scale contingencies, EOD forces recover, render safe, and dispose/neutralize ammunition/UXO, and clear IEDs used by guerrilla or paramilitary units.

c. **MEU (SOC) EOD Capabilities.** MEU (SOC) EOD units provide EOD-related capabilities in the following operations:

(1) **Maritime Intercept Operation (MIO).** The purpose of an MIO is to board and search shipping vessels that may be handling contraband or are potentially hostile to national interests. The USMC often attaches EOD teams to a unit conducting a visit, board, search, and seize (VBSS) operation. The EOD teams search for and render safe or destroy IEDs and other hazardous devices.

(2) **Gas and Oil Platform (GOPLAT) Operation.** A GOPLAT is an operation when the NCA dictates use of oil and gas production platforms as a staging/listening/operating base, or the US deems it necessary to capture the platform. The Marine Corps assigns an EOD team to the assault force of a

GOPLAT to neutralize IEDs and to perform special demolition procedures to destroy critical locations (if necessary).

(3) In-Extremous Hostage Rescue (IHR). The Marine Corps conducts this mission to protect American and foreign lives that have been held hostage or prisoner when a point of death situation arises. The Marine Corps assigns EOD technicians to the maritime special purpose force during deployment. The assault unit EOD technicians must qualify on assault skills to operate as part of the team during all phases of the operation. During the IHR, the EOD technicians clear explosive devices and are members of the dynamic entry teams. The EOD technicians assist the person or persons tasked with breaching (establishing an entry point) to facilitate surprise and speed of entry.

## **6. Training**

a. Team Qualification Requirements. All EOD technicians are graduates of basic EOD school and possess some or all of the skills listed in paragraph b below, through MEU training rotation and follow-on training at their unit.

b. MEU-Specific Courses. The following courses are MEU-specific training opportunities:

- (1) Specialized demolitions.
- (2) Dynamic entry and close-quarters battle courses.
- (3) Training in the urban environment.
- (4) Special operations exercises (taught by the Special Operations Training Group from the 1st, 2d and 3d MEF).

Marines also attend Basic Airborne School, Fort Benning, GA; the Combat Divers School, Panama, FL; and the Small Boat Training Landing Force Training Center within the Pacific and Atlantic Fleets.

## Chapter V

# NAVY EOD OPERATIONS

### 1. Interservice Responsibilities

OPNAVINST 8027.1G/AR 75-14/MCO 8027.1D/AFJI 32-3002, *Interservice Responsibilities for Explosive Ordnance Disposal*, defines the Navy EOD mission. US Navy (USN) EOD provides services on naval installations; within oceans and contiguous waters, up to the high water mark of harbors, rivers and coastal environments; and emergency response to land mass not specifically assigned as a responsibility of the Army, Marine Corps, or AF.

### 2. Mission

The USN EOD mission is to support national security strategy by providing forces capable of conducting land and underwater detection, identification, render safe, recovery, field evaluation, and disposal of explosive ordnance.

### 3. Doctrine

The Navy generally categorizes EOD operations into three types: maritime operations, contingency operations, and ordnance intelligence and acquisition.

a. **Maritime Operations.** The Navy conducts EOD operations to enhance ship survivability, preserve fleet warfighting capabilities, and enable naval, expeditionary, and joint forces to achieve and maintain battlespace dominance through the reduction or elimination of hazardous UXO threats. The Navy assigns EOD forces to aircraft carrier battlegroups (CVBG), amphibious ready groups (ARG) and mine-countermeasures groups, special contingency operations at sea and ashore, and shore installations where continuing EOD requirements exist. Operational commanders employ these forces as necessary to meet theater objectives.

b. **Contingency Operations.** EOD forces support contingency operations in support of US forces and operations in the interest of national security and safety. Their flexibility and interoperability facilitate partnership with Special Warfare and Marine Corps forces when threats involve conventional ordnance or WMD. From their dedicated fleet and shore assignments, EOD forces support federal and local authorities in the rendering safe and disposal of explosives and explosive devices and assist the USSS in presidential and very important person (VIP) protection. EOD forces also support the Coast Guard in counternarcotics operations and participate in MOOTW such as maritime interdiction, NEO, disaster relief, and security assistance surge operations.

c. **Ordnance Intelligence and Acquisition.** Navy EOD personnel are qualified divers and can recover ordnance items on land or underwater, make

the ordnance explosively safe, and return the item for exploitation. EOD detachments gather immediate preliminary intelligence on threat ordnance in the field. This intelligence is then disseminated to those requiring it in the AO until the detachment or other asset can conduct a more detailed exploitation. Data collected contributes to the development of render-safe procedures and supports the development of countermeasures, as well as determining the location of enemy stockpiles, types of launch platforms, and tactics.

#### 4. Organizations

The Navy organizes EOD forces to support the geographic combatant commanders. The geographic combatant commander has OPCON of EOD forces through the fleet commanders and numbered fleet commanders. Staff officers within each of these organizations provide C<sup>2</sup> and staff planning support for operational EOD activities. See Figure V-1 for a depiction of the Atlantic Fleet and European EOD organizational structure and Figure V-2 for the EOD organizational structure of the Pacific Fleet.

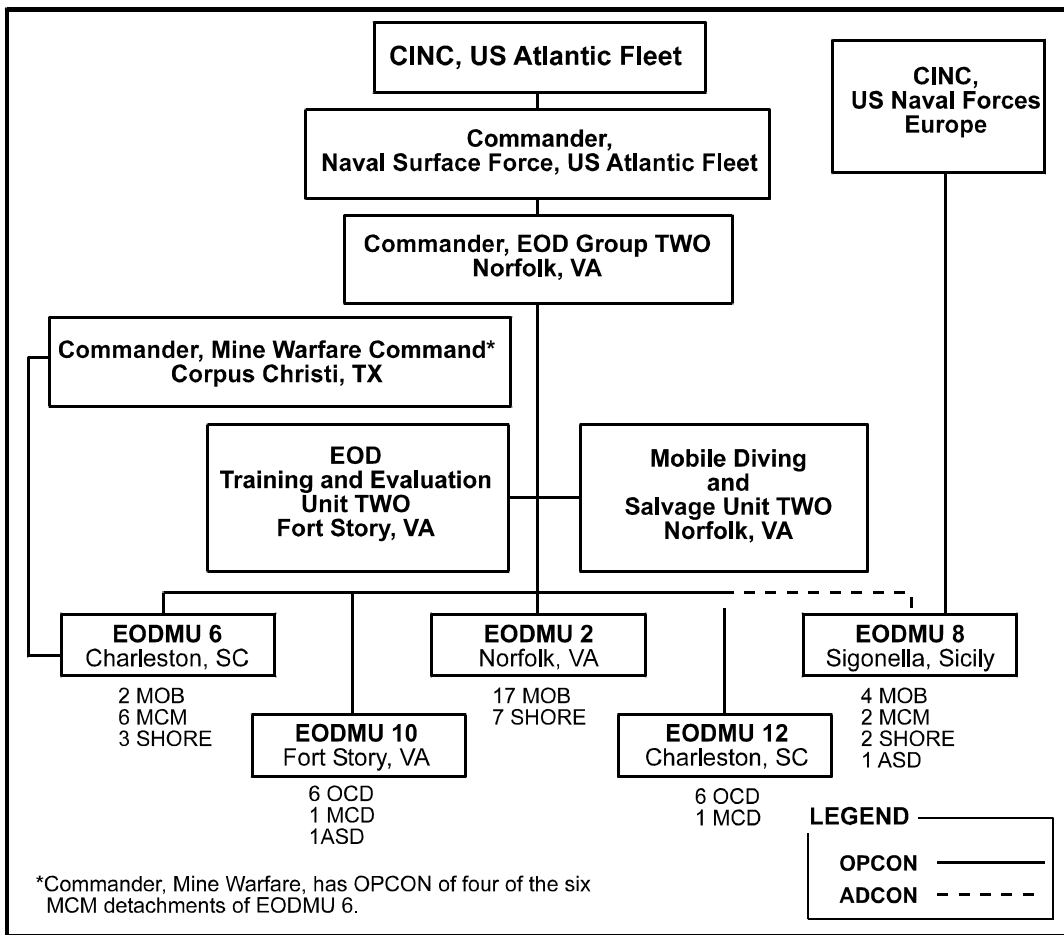


Figure V-1. Atlantic Fleet and European EOD Organization



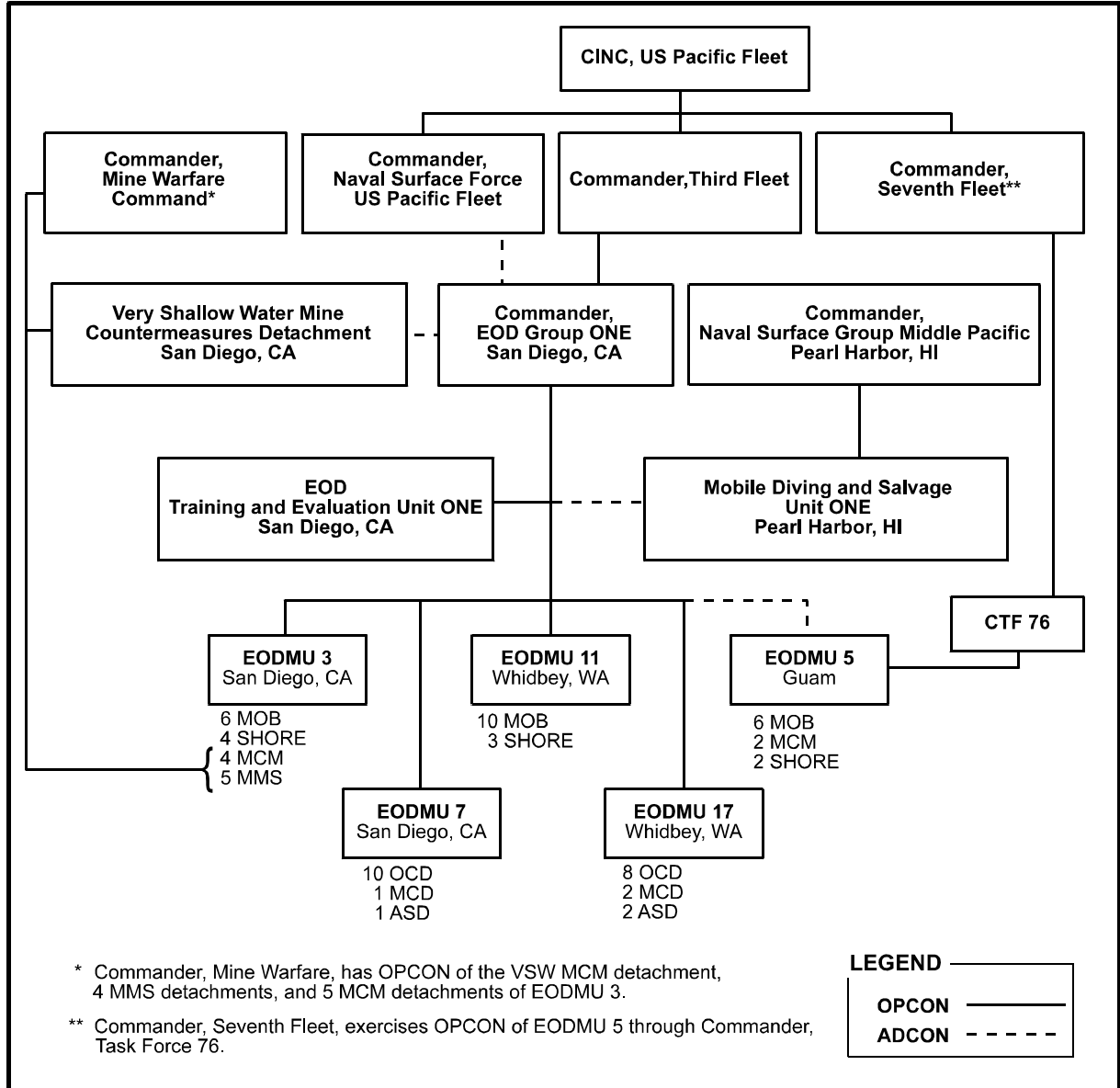


Figure V-2. Pacific Fleet EOD Organization

## 5. Capabilities

The fundamental operational entity within EOD is the detachment. A detachment is a subordinate entity, capable of independent operations, with assignment to EOD mobile units (EODMUs). The best method to describe Navy EOD capabilities is by listing the EOD detachment types. Appendix A identifies specific mission capabilities of each of the major Navy EOD detachments.

a. EOD Mobile (MOB) Detachments. These detachments provide EOD support to CVBGs, ARGs, and theater commanders. The Navy tasks MOB detachments with a variety of contingency operations to include range

clearance, USSS support, organic mine countermeasures (MCM), humanitarian demining operations (HDO), riverine, port security/harbor defense operations, and to augment SOF. The EOD MOB detachment can perform in one of three main configurations—a CVBG deployment, an ARG deployment, and contingency deployments.

(1) EOD MOB Detachments–CVBG Deployments.

(a) Mission. The MOB detachment's mission is to provide an EOD warfare capability to the deployed CVBG commander. Navy EOD provides response during flight deck operations involving live, fuzed ordnance, and ordnance replenishment evolutions. Also, Navy EOD provides a rapid response to ordnance incidents within the CVBG and a forward deployable capability for response to contingencies outside of the CVBG. MOB detachments also provide support to maritime interdiction forces, NEO, and other contingency operations in a MOOTW environment and participate in bilateral multinational exercises. MOB detachments can perform a limited amount of minor ships underwater repair tasks. Mobility capabilities include fastrope, rappel, helicopter cast and recovery, specialized personnel insertion/extraction (SPIE) and helicopter deployment of combat rubber raiding craft (CRRC). EOD personnel from these detachments may split into smaller response elements. Normal manning is one officer and seven enlisted personnel.

(b) Assignment. The Navy assigns an EOD MOB detachment to each deploying CVBG as a task element. To coordinate C<sup>2</sup> of the MOB detachment within the CVBG, assignment of the detachment is to the CVBG commander. A separate EOD officer and senior enlisted EOD technician is colocated on the CVBG commander's platform with the EOD officer performing duties as the task element commander. The EOD officer that performs the task element commander functions also acts as the EOD LNO to plan and direct the employment of detachments/elements as appropriate.

(2) EOD MOB Detachment-ARG Deployment.

(a) Mission. The mission and capabilities are similar to those provided to a CVBG with the additional emphasis of supporting amphibious operations afloat and ashore.

(b) Assignment. The Navy assigns an EOD MOB detachment to each ARG/MEU. The ARG/MEU further assigns the detachments to the deployed amphibious squadron/amphibious group. To best coordinate C<sup>2</sup> of the MOB detachments within the ARG, the ARG commander has OPCON of the detachment. The ARG commander assigns the detachments as task elements under the amphibious task group. The host ship(s) have TACON of the detachments. Normal manning is one officer and seven enlisted personnel.

(3) EOD MOB Detachments–Contingency Operations Deployment. When the Navy tasks an EOD MOB detachment to perform in a MOOTW environment, the detachment provides EOD personnel to support primary

forces engaged in contingency operations including insurgency/counterinsurgency, counterterrorism/antiterrorism, peacekeeping, maritime interdiction, NEO, disaster relief, counterdrug, and security assistance surge operations. Normal manning is one officer and seven enlisted. The EOD MOB detachment performs the following operations in support of contingency operations:

(a) Special Operations Support. EOD forces frequently operate in support of SOF. In Vietnam, Grenada, Panama, and the Persian Gulf, EOD provided direct mission support to dispose of antipersonnel devices, IEDs, and UXO that impeded operations. Any MOB detachment can perform contingency operations in a MOOTW environment such as VBSS or insurgency/counterinsurgency action in support of special operations. Additionally, the Navy permanently assigns a limited number of EOD personnel to the Navy Special Warfare Development Group.

(b) Counternarcotics. The increase in the use of IEDs in the narcotics trade has significantly expanded EOD-force participation in counternarcotics operations. EOD personnel conduct diving and search operations in support of the US Coast Guard, US Treasury, and US Customs Service in counternarcotics and drug interdiction.

(c) EOD Support to Non-DOD and Civilian Organizations. The executive manager for EOD technology and training provides EOD research, technology, and training support to the USSS, the Federal Bureau of Investigation, the Central Intelligence Agency, the US Coast Guard, and the Federal Aviation Administration. The executive manager provides assistance to other organizations designated by the Secretary of Defense. The Navy provides EOD assistance to render safe and dispose of IEDs, nonmilitary commercial explosives, and similar dangerous articles upon request from federal agencies or civil authorities.

b. Fleet Antiterrorist Security Team. The commander, EOD Group TWO assigns a detachment from EODMU TWO to support these operations. This detachment augments a Marine company on a rotational basis, as required. Their mission is to support geographical areas experiencing heightened tension resulting from a terrorist threat or regional instability. Normal manning is one officer and seven enlisted personnel.

c. Shore-Based (SHORE) Detachments. The Navy locates EOD SHORE detachments at shore activities that require continuous EOD support. Their mission is to provide an EOD capability to the activity to which they are assigned. EOD support includes general ordnance handling, transportation, storage, disposal and/or safety missions, live-fire training, range clearance, and underwater ordnance testing. The operational commander may deploy the assigned detachment for area or regional response in support of military and civilian incidents or accidents requiring EOD warfare skills. The specific mission determines the actual manning requirements of a SHORE detachment.

d. MCM Detachments.

(1) Mission. EOD MCM detachments are part of the dedicated mine warfare force and are specialized detachments that locate, identify, neutralize, recover, exploit, and dispose of sea mines. These detachments provide the MCM commander with an underwater capability. They normally conduct integrated operations with surface MCM (SMCM) and airborne MCM (AMCM) units and are also capable of limited independent operations. MCM detachments maintain basic warfighting capabilities equivalent to those of MOB detachments in the conventional ordnance and IED threat response areas. MCM detachments have special low-influence signature (magnetic and acoustic) equipment and capabilities. The detachments are also responsible for recovering new mine types and subsequently conducting tactical field exploitation of the recovered mines, a mission critical to the effectiveness of all MCM operations. Normal manning is one officer and seven enlisted personnel.

(2) Assignment. The Navy often assigns MCM detachments under OPCON of an MCM squadron commander. Each deploying MCM squadron normally consists of a command/support ship, an AMCM unit, an SMCM unit, and an underwater MCM (UMCM) unit. The UMCM command task unit is normally the commanding officer of EODMU THREE or EODMU SIX (or their designated representative). The UMCM task unit normally consists of two or more MCM detachments and other EOD detachments as assigned. The EOD command task unit is the MCM squadron commander's primary advisor for planning and executing safe and efficient UMCM operations.

e. Marine Mammal System (MMS) Detachments. MMS detachments provide an enhanced capability to detect, identify, mark, render safe, recover, and neutralize objects within the water column as well as those that have become buried under the ocean's floor. All MMS detachments are mobile systems that can rapidly deploy to most areas of the world on short notice utilizing fixed-wing aircraft, helicopters, trucks, boats, amphibious ship well decks, or command ship. The Navy's current marine mammal program has one fleet operational site and one fleet support facility, both located in San Diego, CA. These highly mobile, reliable, and effective systems provide a trained, contingency response capability in the following mission areas:

(1) Mark (MK) 4 Module (MOD) 0 MMS (Close-Tethered, Deep-Moored Minehunting, and Neutralization System). This MMS detachment is an underwater surveillance and detection system which employs dolphins for object location, marking, and recovery with the mission of detecting and neutralizing close-tethered, deep-moored mines. The system provides an effective tool for port break-in and breakout missions as well as MCM operations at naval choke points, anchorages, along known/suspected mine routes (Q-routes) and in vital sea lanes. Normal manning is one officer and 18 enlisted personnel.

(2) MK 5 MOD 1 MMS (Pingered Object Recovery System). This MMS detachment is a recovery system that uses sea lions to locate and attach

recovery hardware to mines and test ordnance with acoustic pingers attached to them. Normal manning is one officer and 13 enlisted.

(3) MK 6 MOD 1 MMS (Swimmer Detection and Defense System). This MMS detachment is a waterside security system that uses dolphins to protect harbors, anchorages, and individual assets against unauthorized swimmers, divers, and swimmer delivery vehicles. It can be employed in MOOTW, antiterrorist, or traditional port and anchorage scenarios. Normal manning is one officer and 20 enlisted personnel.

(4) MK 7 MOD 1 MMS (Bottom and Buried Minehunting and Neutralization System). This MMS detachment is a mine detection, location, and neutralization system that uses dolphins to detect and neutralize proud mines (mines on the ocean floor) and mines buried under the ocean bottom. Normal manning is one officer and 25 enlisted personnel.

f. Area Search Detachments (ASDs).

(1) ASD Underwater Systems. ASDs detect and locate underwater ordnance on the ocean bottom by using side-scan sonar, towing hardware/cables, and precise navigation systems. The sonar and associated equipment are portable and have a relatively small logistic footprint for employment on an ASD craft of opportunity. Although ASDs are flexible and mobile, their effectiveness is largely limited to areas of smooth and hard bottoms. Buried mines, certain mine shapes, cluttered and uneven bottoms, and moored mines reduce the effectiveness of ASDs for MCM operations. Normal manning is one officer and four enlisted personnel.

(2) ASD Deployment and Mission. ASDs deploy from EODMUs or mobile diving and salvage units (MDSU) to perform underwater search operations to locate salvageable objects such as aircraft or large debris to be removed from sea lanes. These operations occur during channel conditioning operations and support the conduct of port breakouts and overseas port facility recovery operations. ASDs also use their assets to reacquire mine-like objects previously detected by other MCM assets and systems. EOD ASDs provide a limited mine-detection capability when a low-profile presence or very rapid response is desired, and the increased risk to the host platform is acceptable. ASDs can pass position data and mark contacts for prosecution by EOD MCM detachments and can operate in both salt and fresh water.

g. Fly-Away Recompression Chamber Detachment. This detachment provides emergency hyperbaric recompression treatment for personnel who experience diving-related injuries when a local chamber is not available. The fly-away recompression chamber can locate on an MCM command/support ship, a craft of opportunity, or ashore. Normal manning is three divers, one diving medical technician, and one diving medical officer.

h. Very Shallow Water (VSW) MCM Detachments.

(1) VSW Mission. The mission of the VSW MCM detachment is to provide a small cadre of specially trained and equipped forces to conduct

low-visibility mine exploration and reconnaissance operations in the VSW zone (10-40 feet). Primary functional areas include: confirming the presence or absence of mines in selected VSW areas, re-acquiring and identifying previously detected mine-like contacts in the VSW zone, and providing the tactical commander with data from VSW zone exploratory and reconnaissance missions to predict mine density. Supporting functional areas involves diving and demolition operations. VSW MCM forces must apply primary and supporting functional areas described above by employing specific VSW MCM-unique equipment, procedures, and tactics to counter the VSW mine threat.

(2) VSW Assignment and Operations. VSW serves as a component of the Navy's dedicated MCM forces under OPCON of commander, mine warfare command, and ADCON of commander, EOD Group ONE. The detachment participates in fleet MCM exercises and conducts regular fleet training to develop and refine VSW MCM tactics. Additionally, they serve as a warfighting laboratory for assessing the performance of new technologies to address MCM reconnaissance in the VSW zone. In the event of contingency operations, the VSW detachment maintains a 48-hour fly-away capability for short-notice embarkation in advance force platforms assigned under the commander, amphibious task force (CATF) and the MCM commander when the MCM commander is assigned under the CATF. The VSW detachment can mobilize with specialized equipment and tactics to enhance advance force and pre-assault MCM capabilities in support of amphibious operations in a mined environment. Current manning totals 70 personnel—seven officers and 46 enlisted personnel from the Navy and one officer and 16 enlisted from the Marine Corps.

i. EOD Command, Control, Communications, Computers, and Intelligence (C<sup>4</sup>I) Cell. Individual EOD and MDSU detachments are currently assigned in support of various OPLANs/contingency plans (CONPLANs). As multiple detachments deploy, EOD forces may deploy as a single unit under the control of their commanding officer. Operations may require employment of EOD detachments simultaneously in close proximity or rapidly dispersed to remote areas for independent operations. Accordingly, an EOD C<sup>4</sup>I capability is required to assist in eliminating fratricide and providing force identification and logistical support. Experience during Desert Storm, numerous exercises, and MOOTW have routinely demonstrated that an EOD C<sup>4</sup>I cell provides effective C<sup>4</sup>I, logistics, and medical support to the deployed EOD and MDSU detachments. The deployed EOD C<sup>4</sup>I cell also facilitates organic support capabilities to sustain operations for long periods. Normal manning is two officers and seven enlisted personnel.

j. Naval Reserve Force (NRF) EOD Detachments. NRF EOD detachments are maintained within the NRF EODMUs. They provide contributory support during peacetime and crisis response during MOOTW, major regional conflicts, and contingency operations. NRF detachments are comprised of selected reserve personnel, who maintain capabilities in diving, basic demolition, ordnance location, identification, and disposal. There are

three types of NRF EOD detachments: ordnance clearance detachments (OCDs), mobile communications detachments (MCDs), and ASDs.

(1) OCDs. OCDs provide diving and demolition support, perform manpower-intensive EOD-related tasks that enable EOD detachments to be available for more technical procedures, and act as force multipliers when integrated with regular forces. OCDs can locate, identify, and destroy conventional ordnance, but they do not perform render-safe or exploitation procedures. OCDs train and qualify on basic use of the low-signature diving equipment (MK 16 underwater breathing apparatus [UBA]). OCDs conduct routine hull/pier/underwater searches, locate/identify/destroy underwater ordnance in support of MCM port clearance operations, and provide contributory support in the areas of search-and-rescue retrograde ordnance/explosives disposal and range clearance operations. For MCM operations, OCDs work in conjunction with other MCM assets to provide additional identification and neutralization capabilities. Normal manning is one officer and six enlisted personnel.

(2) MCDs. MCDs provide a deployable field communications cell for integrated command post tactical and strategic communications in support of EOD forces in the field. Capabilities include Global Command and Control System, secure voice, data, and imagery radio-frequency communications in the high frequency, ultrahigh frequency line of sight, satellite communications, and very high frequency spectrum. Normal manning is one officer and four enlisted personnel.

(3) ASDs. ASDs were described in paragraph 5f above.

k. MDSUs. In addition to assigned EOD units, EOD Group ONE and EOD Group TWO have ADCON over MDSU ONE and MDSU TWO, respectively. MDSUs provide mission-capable active and naval reserve detachments to perform diving, salvage/recovery, and underwater ship-repair operations in ports or harbors. They can operate from ports, US Navy and Military Sealift Command vessels, or commercial contract salvage or repair vessels. In addition, the MDSU detachments provide limited self-defense. Each MDSU has mobile diving and salvage detachments and fleet maintenance diving detachments. These detachments can simultaneously deploy to different areas of the world in support of their assigned mission areas.

## **6. Training**

a. Diver Training. EOD diver training, conducted at the Naval Diving and Salvage Training Center, Panama City, FL, qualifies Navy EOD technicians to perform self-contained underwater breathing apparatus (SCUBA), MK-16 mixed gas, and surface-supplied diving operations.

b. Tactical Insertion/Extraction. EOD MOB and MCM detachments perform the tactical insertion and extraction of personnel and equipment by unconventional methods (for example SPIE, rappel, fastrope, casting, and

CRRC) in areas that cannot be accessed/reached by conventional means. Select mobile and shore detachments maintain land and water parachute-insertion capability for worldwide emergent support.

c. EOD Training and Evaluation Units (EODTEUs). EODTEUs provide readiness improvement training to EOD detachment personnel preparing for operational deployments. Detachments are guided through advanced TTP classroom training, followed by advanced practical exercises in all core mission areas. EODTEUs provide similar training to shore and naval reserve detachment personnel. Additionally, training units provide specialized, high-risk supervisory training for demolition/burn range operations, SPIE/rappel/fastrope operations, SCUBA/MK-16 UBA operations and field communications procedures. EODTEUs also conduct field evaluation of new and experimental EOD tools and equipment prior to distribution to operational units.



## Chapter VI

# AIR FORCE EOD OPERATIONS

### 1. Interservice Responsibilities

AFJI 32-3002; AR 75-14; OPNAVINST 8027.1G; and MCO 8027.1D, *Interservice Responsibilities for Explosive Ordnance Disposal*, define the AF EOD responsibilities. The AF EOD furnishes services on AF installations, dispersal bases (which include non-DOD installations from which air reserve component forces operate), in assigned operational areas, or for the disposal of explosive ordnance in the physical possession of the USAF. When requested by other services, federal agencies, or civil authorities, USAF EOD teams respond to any incident site to prevent or limit damage and injury.

### 2. Mission

The AF EOD mission is to protect people, facilities, and resources from damaging effects of UXO, hazardous components, and devices. The EOD personnel locate, identify, disarm, neutralize, recover, and dispose of hazardous explosives, NBC, and incendiary items. They also neutralize criminal and terrorist bombs when requested or directed by proper authority, clear areas of explosives-related contamination, and dispose of unserviceable and outdated munitions. The EOD force supports the USSS and the DOS in their protection of the president, vice president, foreign dignitaries, and VIPs. EOD forces train other USAF personnel on ordnance recognition, hazards, and precautions and provide EOD support to the global engagement mission.

### 3. Doctrine

a. Concept. The USAF organizes EOD force packages into unit-type codes (UTCs) to provide flexible structures to support contingency missions. The USAF designs these packages to meet specific manning and equipment requirements based on the mission and threat. Planners can combine the UTCs in building-block fashion to provide coverage for location-specific missions.

b. C<sup>2</sup>. In peacetime, USAF assigns EOD units to a USAF wing under the base civil engineer (BCE) and further assigns the wings to the MAJCOMs through the numbered Air Forces. During deployed operations, USAF assigns EOD units under the deployed BCE (when one is assigned). If no BCE is assigned, EOD units normally work for the deployed wing/unit commander. At the wing level during increased threat conditions, the wing establishes a survival recovery center (SRC) for wing C<sup>2</sup>. The senior EOD representative performs duties at the SRC to control all EOD operations at the deployed location.

c. **Operational Planning.** The USAF provides basic UTC packages for planners to develop capabilities at deployed locations. These UTCs form capabilities to respond to the various threat levels. This building-block approach allows the maximum flexibility in EOD force employment. The USAF EOD UTCs are—

(1) **4F9X1-Civil Engineer Squadron (CES) Prime Base Engineer Emergency Force (BEEF) EOD Lead Team.** This UTC consists of six personnel, EOD equipment, technical data, explosives, two vehicles (one M-1116 up-armored high-mobility multipurpose wheeled vehicle [UA-HMMWV] and one M1038 high-mobility multipurpose wheeled vehicle [HMMWV]), and one M101 trailer. The UTC supports MTW locations and contingency missions at aerial ports, en route bases, or critical CONUS operating locations. It also provides limited capability for MOOTW and force protection buildup. This UTC supports lead aviation squadrons by protecting critical resources and personnel from the effects of explosive hazards, minor munitions accidents, terrorist explosive devices, and UXO from limited enemy attack. Capabilities of the UTC include render safe US and foreign conventional and chemical hazards, and IEDs.

(2) **4F9X2-CES Prime BEEF EOD Follow Team.** This UTC has four personnel with a limited set of EOD equipment, technical data, explosives, and one vehicle (M1038 HMMWV). The UTC augments an EOD lead team (4F9X1) to provide added support to both a lead and a follow aviation squadron.

(3) **4F9X3-CES Prime BEEF EOD Base Support/Sustainment Team.** The base support/sustainment team has two personnel deploying with a set of base support equipment. This UTC includes robotic platforms for remote operations and augments the EOD lead team (4F9X1) and/or EOD follow team (4F9X2). This UTC can provide additional equipment for sustained operations.

(4) **4F9X6-CES Armored Base Recovery Vehicle.** The 4F9X6 UTC consists of one M1116 UA-HMMWV that provides mobile, armored protection during ordnance reconnaissance and safing missions.

(5) **4F9X7-All-Purpose Remote Transport System (ARTS).** The ARTS provides remote application of explosive tools for use against large IEDs and a remotely operated platform for removal of submunitions from operating areas. The ARTS also supports any deployed EOD capability for recovery from attack, force protection build-up, or accident clean-up operations.

(6) **4F9X9-CES Prime BEEF High Threat Augmentation Team.** The high threat augmentation team consists of two EOD personnel with weapons, ammunition, and personal protective equipment. This UTC augments other UTCs in incremental levels by adding two additional personnel until necessary manpower requirements are met.

(7) 4F9XA-CES Prime BEEF EOD Leadership/Management Team. The 4F9XA UTC has one EOD officer and a chief master sergeant with personal weapons, ammunition, and personal protective equipment. This UTC supports forward-deployed staff positions and provides a C<sup>2</sup> capability for theater, JTF, or unit EOD teams.

(8) 4F9XB-CES Prime BEEF EOD Contingency Support Team. This UTC consists of six personnel, one vehicle, minimum EOD equipment, technical data, and explosives. This UTC supports en-route and force-protection missions.

#### 4. Organizations

During peacetime, the AF assigns EOD flights to the CE organization within the MAJCOMs. They are responsible for peacetime support of the command mission and posturing deployable force packages. See Figure VI-1, Air Force Peacetime EOD Organization. In wartime, the EOD force deploys to support the geographic combatant commanders. See Figure VI-2, Air Force Wartime EOD Organization.

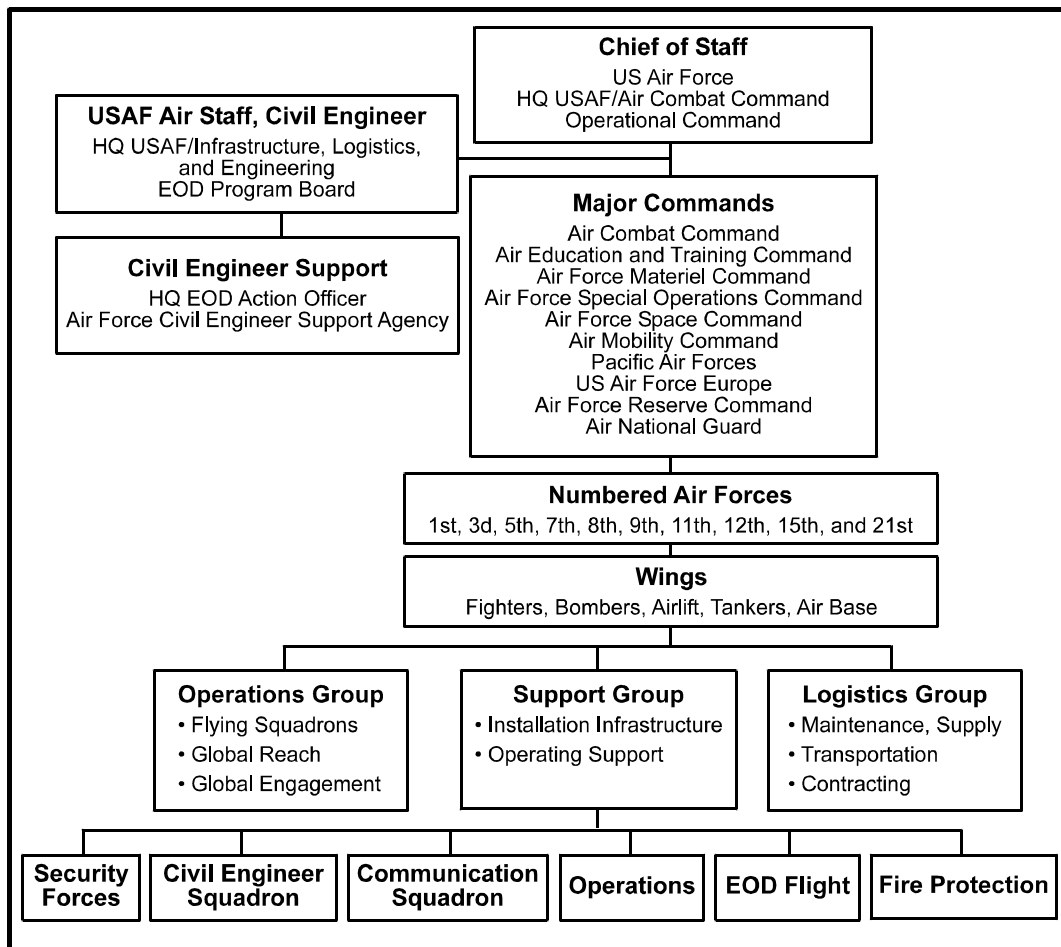


Figure VI-1. Air Force Peacetime EOD Organization

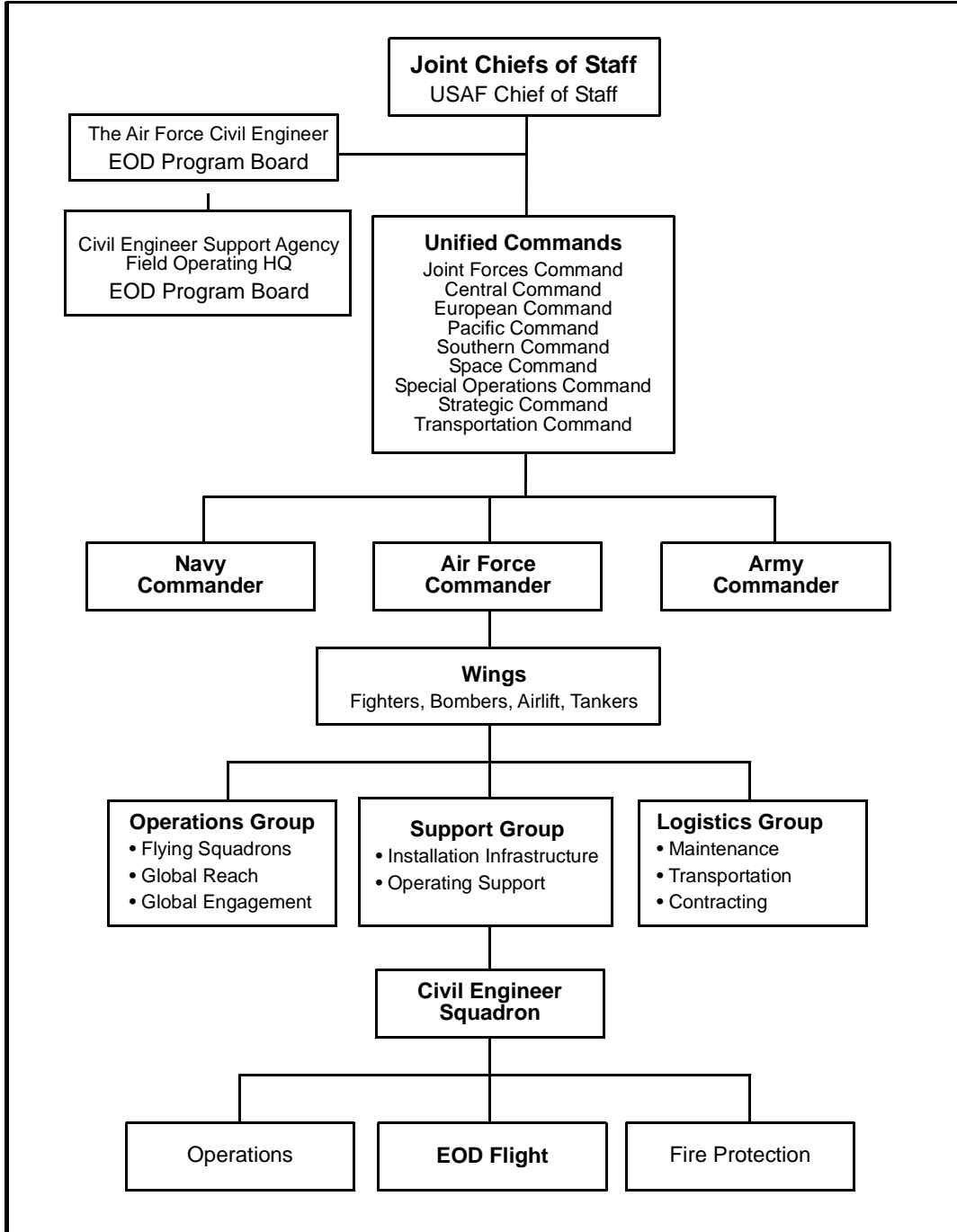


Figure VI-2. Air Force Wartime EOD Organization

## 5. Capabilities

a. General. The minimum EOD team size on incident responses is two qualified operators employing remote procedures whenever possible. If available, a third EOD-qualified supervisor provides on-scene safety, supervision, and command advice.

b. **Capabilities.** In addition to the recurring, nonservice-specific EOD capabilities at Appendix E, the USAF EOD force has the following capabilities:

(1) **Launch and Recovery of Aircraft.** The USAF's EOD teams directly support sortie generation. They respond to airfield emergencies according to peacetime requirements of safety, resource protection, and sound judgment. Wartime operations involving aircraft differ from peacetime operations primarily from an increased operations tempo.

(2) **Force Protection.** To provide a secure environment, USAF EOD operations require EOD forces to respond outside traditional base boundaries. AF EOD plays a critical role in force protection by eliminating or mitigating explosive hazards created by known or suspected criminal and terrorist devices.

(3) **Airfield Recovery Operations.** CE rapid runway repair includes EOD operations during airfield recovery operations. The SRC plans, prioritizes, and controls all airfield recovery operations. The SRC integrates all assets (to include engineer, EOD, security forces, disaster preparedness, communications, transportation, resource management) to support postattack recovery operations.

(4) **Aerial Port Operations.** Aerial ports are vital links to transportation in both surge and sustainment operations. They are susceptible targets for hostile forces wishing to disrupt operations. They have a substantial EOD mission relative to the increased movement of munitions. Additionally, enemy ordnance captured for intelligence assessment must transit these ports.

(5) **Mortuary Services.** Because of ordnance being left on or imbedded in casualties, processing casualty operations should involve EOD teams. While this is particularly important at the CONUS-port mortuaries (last military involvement prior to turning over casualties to the families), EOD teams should also support theater mortuary efforts.

(6) **Base Populace Training.** AF EOD personnel provide training on ordnance hazards and recognition, mine awareness, terrorist bomb search and recognition procedures, and personnel protective measures.

(7) **DS Units (Full Capability Nuclear Support).** The AF assigns EOD personnel dealing with nuclear munitions in personnel reliability program positions. The program is set up to review the individual's background prior to working with nuclear munitions. Personnel working in DS units with full capability nuclear support train to perform all necessary EOD actions on nuclear weapon systems from site stabilization to site recovery.

## **6. Training**

a. **"SILVER FLAG".** This exercise prepares EOD forces for airfield operations in MTW environments via classroom, practical hands-on exercises,

and field training. The SILVER FLAG course/exercise provides classroom and practice training in the following areas:

- (1) Force protection planning.
- (2) Large vehicle operations.
- (3) NBC operations.
- (4) IED tools and procedures.
- (5) ARTS.
- (6) Portable radio communications-139 radio system.
- (7) Land navigation.
- (8) Global positioning system.
- (9) Damage assessment operations.
- (10) Standoff munitions disruption.
- (11) Minefield operations.

The first three days of training are classroom and practical, culminating with an integrated airfield recovery exercise. The exercise is based on a humanitarian/MOOTW scenario that allows students to apply skills learned throughout the course in a realistic environment.

b. Air Mobility Warfare Center-“PHOENIX READINESS”. The Air Mobility Warfare Center conducts a training event for EOD forces (also known as Exercise PHOENIX READINESS). The exercise prepares EOD forces for MOOTW environments via classroom, practical, and field training. The training culminates in a four-day deployment exercise.

**Appendix A**  
**MULTISERVICE EOD CAPABILITIES MATRIX**

Capability	Army			Navy					Air Force		Marine Corps			
	EOD Team	EOD Company	CONUS Support Company	Mobile	MCM	VSW/MCM	Shore	OCD	Home Base	Deployed	MEU	ESB EOD Platoon	MWSS EOD Section	Base/Station
<b>CONVENTIONAL MUNITIONS</b>														
Locate/Identify	X	X	X	X	X		X	X	X	X	X	X	X	X
Render Safe Procedures (RSP)	X	X	X	X	X		X		X	X	X	X	X	X
Dispose	X	X	X	X	X		X	X	X	X	X	X	X	X
<b>Near-Surface Buried Munition Detection</b>	X	X	X	X	X		X	X	X	X	X	X	X	X
<b>Subsurface Buried Munition Detection</b>	X	X	X	X	X		X	X	X	X	X	X	X	X
<b>Buried Ordnance Recovery</b>	X	X	X	X	X		X	X	X	X	X	X	X	X
<b>Large Area Munitions Clearance</b>	X	X	X	X	X		X	X	X	X	X	X	X	X
<b>Airfield Recovery</b>		X	X	X	X		X	X	X	X	X	X	X	X
<b>Submunitions Clearance</b>	X	X	X	X	X		X	X	X	X	X	X	X	X
<b>Surface Munitions Disruption</b>	X	X	X	X	X		X		X	X	X	X	X	X
<b>Munitions Storage Area Accident Cleanup</b>		X	X	X	X		X		X	X	X	X	X	X

Capability	Army			Navy					Air Force		Marine Corps			
	EOD Team	EOD Company	CONUS Support Company	Mobile	MCM	VSW/MCM	Shore	OCD	Home Base	Deployed	MEU	ESB EOD Platoon	MWSS EOD Section	Base/Station
<b>Naval Sea Mines (1)</b>														
Locate/Identify				X	X	X	X	X						
RSP				X	X	X	X							
Dispose				X	X	X	X	X						
Recover					X									
Low-Influence Diving				X	X	X	X(3)	X(3)						
<b>Limpet Mines (1)</b>														
Locate/Identify				X	X		X	X						
RSP				X	X		X							
Dispose				X	X		X	X						
<b>UNDERWATER ORDNANCE (1)</b>														
Locate/Identify				X	X	X	X	X						
RSP				X	X	X	X							
Dispose				X	X	X	X	X						
IED	X	X	X	X	X		X		X	X	X	X	X	X
Large Vehicle IED	X	X	X	X	X		X		X	X	X	X	X	X
<b>WMD (2)</b>														
Locate/Identify	X	X	X	X			X(3)		X(3)	X(3)	X(3)	X(3)	X(3)	X(3)
RSP		X(3)		X			X							
<b>NUCLEAR MUNITIONS</b>														
Radiation Detection/Monitor	X	X	X	X			X(3)		X		X	X	X	X
RSP Nuclear System				X			X(3)		X			X	X	X



Capability	Army			Navy					Air Force		Marine Corps			
	EOD Team	EOD Company	CONUS Support Company	Mobile	MCM	VSW/MCM	Shore	OCD	Home Base	Deployed	MEU	ESB EOD Platoon	MWSS EOD Section	Base/Station
Continue RSP				X(3)			X(3)		X			X	X	X
Seal/Package			X	X			X(3)		X		X	X	X	X
<b>BIOLOGICAL MUNITIONS</b>														
Detection														
Decontaminate	X	X	X	X			X(3)							
Seal/Package				X	X	X	X(3)		X					
RSP					X		X(3)		X	X	X	X	X	X
Emergency Disposal				X	X	X	X(3)		X	X	X	X	X	X
<b>CHEMICAL MUNITIONS</b>														
Agent Identification	X	X	X	X	X		X(3)		X	X	X	X	X	X
Agent Decontamination	X	X	X	X	X		X(3)		X	X	X	X	X	X
Seal/Package	X	X	X	X			X(3)		X	X	X	X	X	X
RSP	X	X	X	X			X(3)		X	X	X	X	X	X
Emergency Disposal	X	X	X	X	X		X(3)		X	X	X	X	X	X
<b>Munitions Intel Gathering</b>	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Exploitation</b>				X	X	X	X		X	X	X	X	X	X
<b>Inerting</b>											X	X	X	X
<b>Explosive Demolition</b>	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Vessel Boarding Search &amp; Seizure</b>				X	X						X			
<b>NEO</b>	X	X	X	X	X		X(3)			X	X	X	X	

Capability	Army			Navy					Air Force		Marine Corps			
	EOD Team	EOD Company	CONUS Support Company	Mobile	MCM	VSW/MCM	Shore	OCD	Home Base	Deployed	MEU	ESB EOD Platoon	MWSS EOD Section	Base/Station
TRAP/Combat Search and Rescue				X	X		X(3)				X	X	X	
Aircraft Crash Recovery	X	X	X	X(4)	X(4)		X(4)	X(4)	X	X	X	X	X	X
VIP Protection	X	X	X	X	X		X		X	X	X	X	X	X
Dynamic Entry	X(5)	X(5)	X(5)	X(5)	X(5)		X(5)				X(5)	X(5)	X(5)	X(5)
<b>Tactical Insert/Extract Personnel and Equipment</b>														
Parachute				X(6)			X(6)				X			
SPIE				X	X		X				X	X	X	X
Fastrope				X	X		X				X	X	X	X
Rappel				X	X		X				X	X	X	X
CRRC				X			X							
Casting				X	X	X	X	X						
Robotics (Small)							X		X	X				
Robotics (Large)		X	X						X	X		X		X
Satellite Communications				X	X	X	X	X			X	X		
Organic Tactical Communications	X	X	X	X	X	X	X	X	X	X	X	X	X	

- (1) In water only, otherwise treat as conventional ordnance.
- (2) Refer to established OPLANS for further guidance.
- (3) Selected detachments only.
- (4) Includes in-water recovery.
- (5) See service chapters for unique breaching capabilities.
- (6) Only designated Mobile and shore detachments.

## Appendix B

# EOD PLANNING CHECKLIST FOR JOINT OPERATIONS

### 1. Mobilization Planning

- a. Train, equip, and organize EOD forces within each service component. \_\_\_\_\_
- b. Review OPLANs for EOD requirements and the planned flow of EOD forces time-phased forces deployment list (TPFDL). \_\_\_\_\_
- c. Consider adding an EOD-qualified officer to the combatant commander's special staff. \_\_\_\_\_
- d. Identify opportunities for joint EOD operations in exercise plan (EXPLANs), OPLANs, CONPLANs, and OPORDs. \_\_\_\_\_
- e. Perform an intelligence estimate of information necessary to counter the UXO and IED threat including: \_\_\_\_\_
  - (1) Ordnance orders of battle.
  - (2) Terrorist/paramilitary threats and capabilities.
  - (3) Critical target listing (enemy) and munitions US forces plan to use.
  - (4) Critical vulnerabilities (friendly) and what munitions the enemy may use.
- f. Coordinate periodic joint, interoperability exercises with multiservice EOD forces. \_\_\_\_\_

### 2. Deployment Planning

- a. Update intelligence estimate. \_\_\_\_\_
- b. Update mission analysis to determine EOD requirements to support the mission, to include— \_\_\_\_\_
  - (1) joint EOD mission requirements.
  - (2) service EOD requirements.
  - (3) total EOD requirements.

c. Source the EOD requirements to support joint and service-specific missions.

\_\_\_\_\_

d. Determine flow of EOD forces (TPFDL).

\_\_\_\_\_

### 3. Employment Planning

a. Develop mission statements and concept of operations.

\_\_\_\_\_

(1) Identify single-service EOD missions (See Chapters III-VI).

(2) Identify joint EOD missions (See Chapter II).

(3) Select employment options for conducting joint operations (See Chapter II).

(a) Service responsibility with DIRLAUTH.

(b) Lead service component (with or without TACON/OPCON).

(c) Subordinate JEODTF.

b. Establish JEODOC (if required) (See Chapter II and Appendix C).

\_\_\_\_\_

c. Ensure methodology is in place for intelligence collection and dissemination.

\_\_\_\_\_

(1) Disseminate new or unknown ordnance technical information within theater.

(2) Process new or unknown ordnance items to appropriate agencies outside theater.

(3) Coordinate with the National Imagery and Mapping Agency for updated mapping, geodesy, and multispectral imagery data covering the area of the UXO/EOD incident.

### 4. Sustainment Planning

a. Coordinate administrative and logistical support with Theater Support Command or service components.

\_\_\_\_\_

b. Monitor EOD reports; take action as required.

\_\_\_\_\_

## 5. Redeployment Planning

- a. Ensure EOD commanders understand and employ appropriate procedures (for instance, explosives safety and environmental protection) for the closing of demolition areas. \_\_\_\_\_
- b. Establish EOD battle hand-off requirements and procedures—
  - (1) to host nation.
  - (2) to coalition EOD forces.
  - (3) to civilian contractors.\_\_\_\_\_
- c. Determine redeployment flow of EOD forces. \_\_\_\_\_
- d. Conduct post-mission analysis. \_\_\_\_\_



## Appendix C

# ESTABLISHING A JEODTF

### 1. Background

A key responsibility of the geographic combatant commander is the designation of an EOD controlling authority after a full evaluation of the assigned mission. It is important for the efficiency of the TF that the JEODTF J-3 is a currently qualified EOD officer. All personnel assigned to the JEODTF staff should understand multiservice or joint TTP to allow for a seamless transition. JEODTF planning should be in concert with established joint doctrine as found in JP 5-00.2, *Joint Task Force Planning Guidance Procedures*.

### 2. Authority

Establishment of a JEODTF is appropriate when EOD C<sup>2</sup> requirements exceed the capabilities of the theater EOD staff or when conducting EOD operations with a joint force would be more efficient. The CJTF normally forms a JEODTF from the nucleus of the designated major service component EOD command. Both the Army and Navy have existing C<sup>2</sup> EOD units around which a JEODTF is built. Specifically, using the Army's EOD group (0-6 command) headquarters, or the Navy's mobile group (0-6 command), provides a ready EOD headquarters unit to serve as a building block for a JEODTF headquarters. A combatant commander establishes and deploys a JEODTF from outside the theater of operations. When formed, the JEODTF is a temporary joint EOD headquarters that controls two or more different service component's EOD units in a specific JOA to accomplish the EOD mission. The JEODTF supports the theater campaign plan, JTF mission, or other operations as directed.

### 3. Responsibilities

The JEODTF is responsible for making recommendations to the CJTF (or geographic combatant commander if a JTF has not been formed) on the proper employment of EOD and for accomplishing assigned operational missions. The JEODTF develops a detailed plan using the JOPES for integrated employment of assigned and attached forces based on an assessment of the operational requirements.

- a. Organization of Forces. The commander, JEODTF, has the authority to organize assigned or attached forces to meet mission requirements.

b. **Commander's Guidance.** The combatant commander is responsible for—

- (1) defining the scope of responsibility of the JEODTF.
- (2) defining units assigned OPCON, TACON, and relationships within the JFC.
- (3) defining JEODTF AORs for force protection, UXO response, and other missions.
- (4) ensuring that all identified external support requirements for sustaining the EOD force are properly coordinated.

#### 4. The JEODTF Staff

The designated EOD commander coordinates the establishment of the JEODTF staff. A doctrinal method is to develop JEODTF staffs around the "core" of the designated EOD commander's assigned staff. Other service EOD personnel augment the designated JEODTF's core staff. The geographic combatant commander may also provide certain augmentation (to include security, medical, and administration/logistics) to a JEODTF, depending on the mission and support requirements. See Figure C-1, Notional JEODTF Staff Organization.

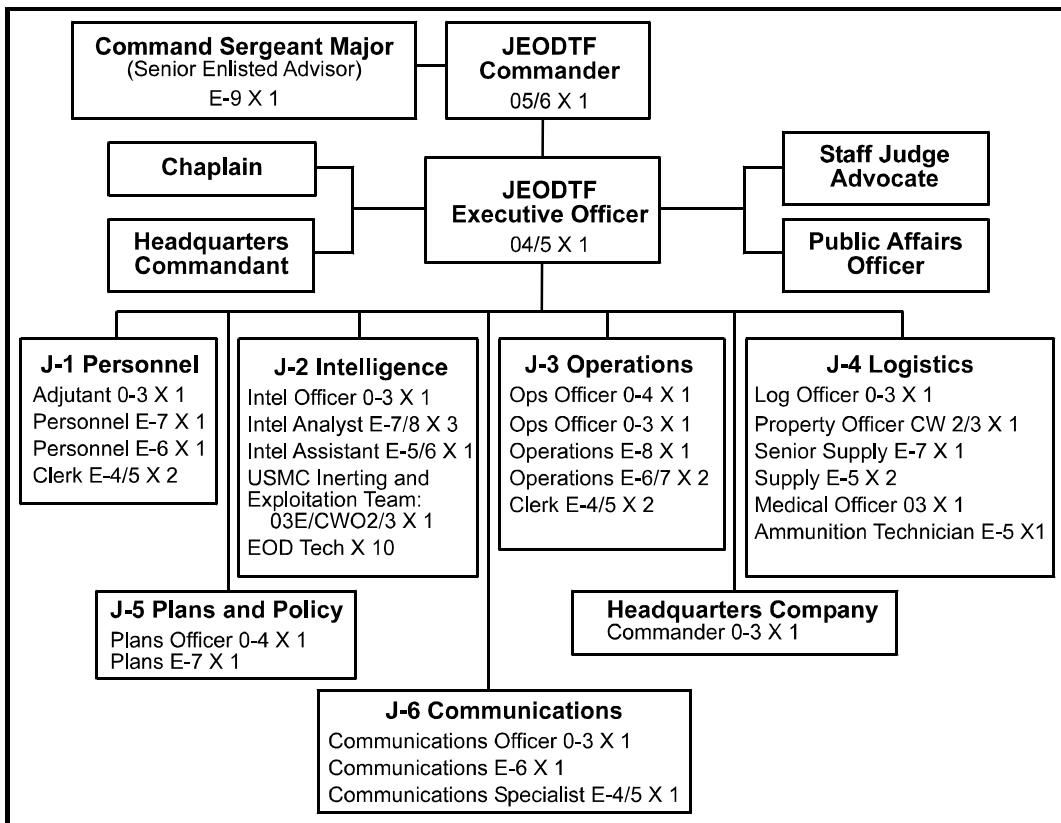


Figure C-1. Notional JEODTF Staff Organization



a. Organization. EOD commanders organize the JEODTF staff as necessary to carry out assigned duties and responsibilities. The JEODTF staff includes at a minimum the normal J-1 through J-4 staff and may include J-5 and J-6 as well as special staff members as required.

b. Orientation Program. A staff orientation program ensures that all individuals assigned to the JEODTF become thoroughly familiar with multiservice and joint EOD operations. This can be accomplished through the establishment of a joint reception center, a short training program, or even use of a "buddy" system whereby an experienced JEODTF staff member mentors a newly assigned individual.

## **5. Staff Functions and Responsibilities**

a. The Manpower and Personnel Directorate (J-1). The J-1 provides joint personnel planning, coordination, management, and review; assists subordinate commands in acquiring, replacing, and transferring personnel; provides administrative and personnel service; monitors and reports the personnel readiness of assigned, allocated, and apportioned forces to higher headquarters; and provides appropriate input to OPLANs.

b. The Intelligence Directorate (J-2). The primary function of the J-2 is to support the JEODTF staff and subordinate assigned/attached units by ensuring the availability of reliable intelligence and timely indications and warning on the characteristics of UXO on the battlefield, first-seen ordnance, and potential terrorist threats. Members of the directorate actively participate in joint staff planning and in planning, coordinating, directing, integrating, and controlling a concentration of intelligence efforts on the proper enemy items-of-intelligence interest at the appropriate time. The J-2 also has the functional responsibility for the acquisition, production, requests, and dissemination of intelligence and counterintelligence to support EOD operations. The J-2 develops, refines, and updates the JEODTF intelligence estimate to provide a common understanding and view of the battlefield and directs intelligence collection efforts and exploitation of first-seen/recovered foreign ordnance. The J-2 serves as the single POC within intelligence channels for the collection and dissemination of technical intelligence products and provides intelligence input to OPORDs.

c. The Operations Directorate (J-3). The J-3 plans, coordinates, and integrates EOD operations with that of the supported commander. Should the JEODTF not include a J-5, the J-3 would also perform long-range or future planning functions. The J-3 conducts crisis action planning; assists the J-5 (if organized) in deliberate planning; and coordinates and directs the deployment, employment, and redeployment of assigned and attached forces. The J-3 is responsible for providing oversight of current operations and planning for emerging missions; maintaining a current operations estimate; preparing operational plans, annexes, orders, reports, and records; determining pre-deployment technical training requirements for replacement EOD personnel; and recommending EOD priorities for operational support,

task organization, and JTF boundaries. Should the JEODTF not include a J-6, the J-3 would also perform the C<sup>4</sup>I planning and execution functions.

d. The Logistics Directorate (J-4). The J-4 formulates logistics plans and coordinates supply, maintenance, transportation, field services, general engineering, health services, contracting, host-nation support, and other logistics activities. The J-4 provides logistic oversight for JEODTF and the management of external logistics.

e. The Plans Directorate (J-5). The J-5 conducts deliberate planning for the JEODTF, develops and recommends C<sup>2</sup> arrangements, and participates in the JTF, theater, or combatant command's campaign and concept planning. The J-5 also projects future EOD requirements for personnel, material, and organization. When required, the J-5 provides the JEODTF input for the JOPES.

f. The C<sup>4</sup>I Systems Directorate (J-6). The J-6 is responsible for communications, electronics, and automated information systems in support of the JEODTF. This includes development and integration of C<sup>4</sup>I architecture and plans that support the command's operational and strategic requirements as well as policy and guidance for implementation and integration of interoperable C<sup>4</sup>I systems to exercise command in the execution of the JEODTF mission.

g. Staff Judge Advocate (SJA). The SJA is the legal advisor on issues ranging from administrative law to rules of engagement. To ensure the JEODTF complies with international law, domestic law, environmental protection laws, and DOD regulations, the SJA coordinates with the JTF SJA and JEODTF supported commands.

h. Public Affairs Officer (PAO). The PAO advises the JEODTF commander on public opinion pertaining to the impact of EOD operations, public affairs policy and guidance from higher headquarters, and the command's need to establish a detailed media communications plan. The media communications plan focuses on providing overarching public affairs guidance on media relationships, targeting internal and external audiences, providing key messages, and detailing the production of public information materials (to include web pages, fact sheets, releases, and related materials). Finally, the PAO serves as the JEODTF spokesperson and ensures that the public affairs portion of EXPLANs, CONPLANs, OPLANs, and OPORDs, and related planning and execution documents are properly prepared and coordinated

i. Chaplain. The chaplain is the JEODTF commander's primary staff officer in the areas of religion, morals, and morale as affected by religion. The chaplain is the commander's adviser on indigenous religions and local religious practices. They provide religious support to all TF members regardless of service.

j. HQ Commandant. The commander, JEODTF, appoints the HQ commandant, who is responsible for all aspects of the headquarters operation. The commandant assumes the initial functional responsibility for all equipment and facilities assigned to the JEODTF and assigns subsequent functions to personnel and agencies in direct control of those activities. The commander must include the HQ commandant in the JEODTF planning process to fully support the efforts of the EOD mission.



## Appendix D

# STANDARDIZED EOD REPORTS

### 1. Background

Timely and accurate UXO reporting and intelligence information gathering during EOD operations, regardless of service component, is critical to the safe conduct of operations within an AOR. Although reporting procedures are similar between the service components and provide similar information, submission and dissemination procedures differ. Timely, standardized reporting and dissemination provide multiservice EOD forces with the ability to effectively counter the hazards associated with ordnance. During multiservice operations, using the following reports prevents redundancy and ensures accurate EOD incident tasking, reporting, and tracking.

### 2. UXO Spot Report

a. Purpose. The UXO Spot Report is a detailed, two-way reporting system that makes clear where the UXO hazard areas are, the priority for clearance, and which units the hazard affects. The report is used to request help in handling a UXO hazard that affects the unit's mission and is beyond their ability to handle. This report helps the commander set priorities based on the battlefield situation. The UXO Spot Report is the first echelon report sent when an observer detects UXO. The report consists of nine lines and is sent by the fastest means available. See Table D-1, Sample UXO Spot Report.

b. Routing. Forward the UXO Spot Report through the chain of command. Each commander in the chain who reviews the report may change the priority to reflect the current tactical situation or projected battle plans. Each commander in the chain is responsible for forwarding UXO Spot Reports through command channels and for setting the proper priority for each report. A higher-level commander in the chain that changes a priority must inform subordinate commands, especially the initial reporting unit. In addition to the priority status, all commanders need to be kept informed of the status of each UXO hazard in their area. The reporting unit's higher headquarters that is supported by EOD or engineer forces determines the final priority. Based on METT-T, with the Army adding a "C" for civilian considerations, EOD teams use the UXO spot reports to prioritize and sequence their response to assigned UXO incidents.

**Table D-1. Sample UXO Spot Report**

<b>Line 1.</b>	Date-Time Group (DTG): DTG item was discovered.
<b>Line 2.</b>	Reporting Activity (unit identification code and location (grid of UXO).
<b>Line 3.</b>	Contact Method: Radio frequency, call sign, POC, and telephone number.
<b>Line 4.</b>	Type of Ordnance: Dropped, projected, placed, or thrown. If available, give the size of the hazard area and number of items, if more than one. Without touching, disturbing, or approaching (due to a potential tripwire) the item, include details about size, shape, color, and condition (intact or leaking).
<b>Line 5.</b>	NBC Contamination: Be as specific as possible.
<b>Line 6.</b>	Resources Threatened: Report any equipment, facilities, or other assets that are threatened.
<b>Line 7.</b>	Impact on Mission: Provide a short description of your current tactical situation and how the presence of the UXO affects your status.
<b>Line 8.</b>	Protective Measures: Describe any measures taken to protect personnel and equipment.
<b>Line 9.</b>	Recommended Priority: Recommend a priority for response by EOD technicians or engineers.
<b>Priority</b>	<b>Basis</b>
Immediate	Stops the unit's maneuver and mission capability, or threatens critical assets vital to the mission.
Indirect	Slows the unit's maneuver and mission capability, or threatens critical assets important to the mission.
Minor	Reduces the unit's maneuver and mission capability, or threatens noncritical assets of value.
No Threat	Has little or no affect on the unit's capabilities or assets.

### **3. EOD Incident Report**

The EOD unit responding to the incident submits this report in message, memorandum, or digital format. See Table D-2 for the format of the EOD incident report. The EOD unit should immediately report essential details of the operation that have immediate and vital significance. Include the following relevant information in the EOD incident report.

**Table D-2. Sample EOD Incident Report**

<b>Line 1.</b>	Responding EOD unit.
<b>Line 2.</b>	Personnel, vehicles, and any special equipment responding to incident.
<b>Line 3.</b>	Site POC or on-scene commander.
<b>Line 4.</b>	Geographical location (latitude/longitude and/or Global Positioning System) and location with respect to buildings or valuable installations.
<b>Line 5.</b>	Chronological record of operations, including safety precautions taken.
<b>Line 6.</b>	Detailed description and available photographs/drawings of items; positive identification; external markings/condition of case or body; worn or damaged parts; corrosion; extent and kind of sea growth; condition of explosives; fuzing/firing mechanisms; batteries; important components or fittings; and antistripping devices or booby traps.
<b>Line 7.</b>	Reason object failed to function as designed.
<b>Line 8.</b>	Difficulties or unusual circumstances related to the incident.
<b>Line 9.</b>	RSP used, if applicable.
<b>Line 10.</b>	Final disposition of items.
<b>Line 11.</b>	List expenditure of demolition materials.
<b>Line 12.</b>	Additional pertinent information.

**NOTE:** This report does not supersede, unless specified, specific service reporting requirements.

**4. Technical Intelligence Reports.**

Technical intelligence reporting follows the appropriate service procedures contained in Army technical manual/Air Force Technical Order/Navy EOD Bulletin 60A-1-1-7.

**5. Lead Service and JEODTF EOD Report.**

Each service maintains unique, service-specific EOD reports and formats. It is useful when conducting operations as a joint force to have mutual reports and reporting formats. Those EOD assets under TACON/OPCON of lead service or JEODTF prepare the following intelligence reports for first-seen ordnance:

a. **Spot Report.** The acquiring unit prepares the spot report as an oral or written report. The sender transmits the report by the fastest means available. The minimum information requirements for this report are as follows:

- (1) Identification of reporting unit.
- (2) What is being reported (for instance ordnance or documents).

- (3) Time and location of recovery.
- (4) Quantity of material.
- (5) Condition of material.
- (6) POC.

b. Preliminary Technical Report (PRETECHREP) Type B. See Table D-3, Sample PRETECHREP. An EOD unit forwards this report when an item of ordnance has technical intelligence value. The sender of the report forwards the report to the JEODOC/JEODTF J-2. An interim RSP is developed and reported, whether the RSP is issued or not.

**Table D-3. Sample PRETECHREP**

<p>For the protection of sources and methods and unless otherwise directed by on-scene intelligence personnel, the initial report shall be classified SECRET/NOFORN/WNINTEL. WARNING NOTICE – INTELLIGENCE SOURCES OR METHODS INVOLVED. The first paragraph of the report shall read:</p> <p>1. (U) This report is initially classified S/NF/WNINTEL for protection of sources and methods. Verification of correct classification by (your service intelligence organization) is required.</p>
<p>Foreign nuclear weapons or components, including sabotage devices, are evacuated through technical intelligence channels. Security classification of such items, once in evacuation channels, will not be lower than SECRET (RESTRICTED DATA).</p>
<p><b>PRIORITY</b></p> <p>FM: XXXX ORD CO (EOD)  TO: XXXX (JEODOC)  INFO: CDRUSATECHDET INDIAN HEAD MD  NAVEODTECHDIV INDIAN HEAD MD//  FSTC CHARLOTTESVILLE VA//AIFRCB/AIFIM//  DIA WASHINGTON DC//DT2C/DT-3B//</p> <p>BT  SECRET/NOFORN/WNINTEL  WARNING NOTICE - SENSITIVE INTELLIGENCE SOURCES OR  METHODS INVOLVED</p>



**Table D-3. Sample PRETECHREP (continued)**

<p>SUBJ: PRETECHREP</p> <p>REF A. MSG XXX SUBJECT: SPOT REPORT</p> <p>a. ( ) DATE FOUND, LOCATION (map references)</p> <p>b. ( ) TYPE OF EQUIPMENT AND QUANTITY</p> <p>c. ( ) ORIGIN</p> <p>d. ( ) BRIEF DESCRIPTION WITH DISTINGUISHING MARKS</p> <p>e. ( ) TECHNICAL CHARACTERISTICS WITH AN IMMEDIATE VALUE</p> <p>f. ( ) NAME OF COMMANDER OF CAPTURING UNIT</p> <p>g. ( ) TIME AND ORIGIN OF MESSAGE</p> <p>h. ( ) TENTATIVE RSP (EOD use only)</p> <p style="text-align: center;">(Classification)</p> <p><b>NOTE:</b> The subject and each paragraph and subparagraph must be classified individually, but not higher than the classification of the entire message.</p> <p>Examples: 1. (Secret/No-Foreign); 2. (Unclassified)</p>
--

c. Complementary Technical Report (COMTECHREP) Type B.

(1) Purpose. Use the COMTECHREP Type B to report information about explosive ordnance. Technical intelligence (TECHINT) teams prepare these reports, as do EOD personnel. However, EOD personnel only prepare them in the absence of a TECHINT team or when requested by a G-2 or representative. This report must be as complete and detailed as possible. EOD personnel prepare and send this report by the fastest means through the JEODOC/JEODTF J-2 to the TECHINT unit.

(2) Timing and Completeness. Complete all of the items in the report that you have information for and strive for the most complete report possible. However, when a detailed report might result in serious delay and the report is of significant or new items of extreme urgency, complete only paragraphs a-e, l(1), y, and aa of priority message. See Table D-4, Sample COMTECHREP.

(3) Additional Information. Additional paragraphs of particular importance, for example, those referring to safety (paragraph u) or design (paragraph m) may be included at the originator's discretion. Paragraph aa should state an estimated time required for a detailed report to be completed.

**Table D-4. Sample COMTECHREP**

**PRIORITY**

FM: XXXX ORD CO (EOD)  
TO: XXXX (JEODOC)  
INFO: CDRUSATECHDET INDIAN HEAD MD  
NAVEODTECHCEN INDIAN HEAD MD//DC//  
FSTC CHARLOTTESVILLE VA//AIFRCB/AIFIM//  
DIA WASHINGTON DC//DT2C/DT-3B//

BT  
SECRET/NOFORN/WNINTEL  
WARNING NOTICE - SENSITIVE INTELLIGENCE SOURCES OR  
METHODS INVOLVED

SUBJ: COMTECHREP  
REF A. MSG XXX SUBJECT: PRETECHREP

- a. Date and location of acquisition, acquired by, and for whom.
- b. Nationality, designation, and identification marks.
- c. Description.
- d. Overall length, including fuze, tail, vanes, or control surfaces and fittings; measurement of various states (if there are several).
- e. Maximum diameter of each state (if there are several).
- f. Shape, design, and internal configuration (streamlining shells).
- g. Span of vanes and control surfaces.
- h. Number, relative positions, and dimensions (width, length, size, and/or configuration of control surfaces).
- i. Thickness of casing at—
  - (1) nose.
  - (2) slides.
  - (3) base.
- j. Type and materials of body and control surfaces.
- k. Color and markings of—
  - (1) nose.
  - (2) body.
  - (3) tail and vanes.
- l. Weight—
  - (1) total, including propellant.
  - (2) of filling.
- m. Nature of filling. If chemical or biological warfare in nature, give method of filling, for example, bomblets or massive fill; specify method of delivery, such as spray, groundburst, or airburst. For antitank missiles with high-explosive, antitank (HEAT) warheads, give full details of cone-liner materials, cone angle, and diameter. For antitank missiles with non-HEAT warheads, give full description of the warhead.

**Table D-4. Sample COMTECHREP (continued)**

- n. Type of missile guidance system and method of stabilization environment (control and guidance radars, acquisition radar); frequencies used for reception response (in case of a transponder); and proximity fuze (if there is one). Electronic countermeasures and electronic counter-countermeasures equipment and/or chaff-dispensing equipment.
- o. Sensors.
- p. Diameter of radome and size of homing dish, if fitted.
- q. Dimensions (internal and external) of wave guides in the homing head, and wave guides and or aerials in the wings or body, and the technology used.
- r. Homing head, transducer design, and shape and size (torpedoes).
- s. Method of propulsion and propeller data (torpedoes).
- t. Detonating system, fuzing system (nose, tail, or transverse) and firing mechanism details.
- u. Type of suspension, giving details of devices used, such as electrically operated hoods or release gear.
- v. Antihandling or booby-trap devices.
- w. Other information (to include estimate of time required to prepare item for shipment to TECHINT center or designated industrial firm for detailed analysis).
- x. Name of officer in command of technical team making examination.
- y. Time and origin of message.
- z. Energy used for mobile systems other than propulsions.
- aa. Estimate of time required for completion.

**Note:** If feasible, a preliminary set of photographs should be sent with the report.

(Classification)

**Note:** The subject and each paragraph and subparagraph must be classified individually, but not higher than the classification of the entire message. Examples: 1. (S/NF); a. (U); b. (C).

## **6. Responsibilities**

a. **Service Responsibility (with DIRLAUTH).** DIRLAUTH as authorized by CJTF allows for more rapid dissemination of ordnance intelligence between service EOD forces prior to submitting reports into intelligence channels. Each service EOD command must coordinate with other EOD assets to disseminate this information.

b. **JEODOC.** The JEODOC, when established, is responsible for the collection of incident tracking reports and ordnance intelligence from service-component EOD assets, assessment and dissemination of information to all

service EOD assets within the AO, and submission of consolidated information reports to intelligence channels.

c. JEODTF. The JEODTF collects incident tracking reports and ordnance intelligence from service-component EOD assets, assesses and disseminates information to all service EOD assets within the AO, and submits consolidated information reports to intelligence channels.

## Appendix E

# EOD Recurring Support Operations

### 1. Background

The DOD EOD force performs numerous support missions on a recurring basis. Each of the services EOD personnel assists in the performance of these missions.

### 2. Recurring DOD EOD Support Missions

The DOD EOD force performs the following missions on a recurring basis:

a. VIPPSA.

(1) General. Currently the DOS and DOD use joint EOD assets to support the USSS and the DOS in protecting the President or Vice President and their immediate families (as defined by DOD Instruction 5030.34). This protection is also provided to the US Secretary of State, foreign heads of state, prime ministers, ministers of defense, or other VIPs as specified by the President of the United States. The EOD force provides specific protection from all potentially hazardous explosive devices within assigned secure areas for protecting VIPs.

(2) Executive Agent. The Secretary of the Army is the DOD executive agent for the direct receipt, approval, coordination, and tasking of USSS and DOS requests for routine reimbursable and nonreimbursable EOD protective support for locations worldwide. The Assistant Secretary of the Army (Installations, Logistics, and Environment) maintains oversight of this support on behalf of the executive agent. The Director of Military Support provides staff support to the Secretary of the Army to assist in carrying out this executive agency. Commander, US Joint Forces Command (USJFCOM), is designated the operating agent to act on behalf of the executive agent to plan, coordinate, task, and execute routine EOD VIP protective support employing assets from the military services and the unified and specified commands. The US Army EOD for VIPPSA, Fort Gillem, GA, is the tasking and coordinating agent for the Commander, USJFCOM.

(3) CONUS and Outside the Continental US (OCONUS) Missions. Support requests from USSS or DOS are communicated directly to the VIPPSA. For missions within CONUS, the VIPPSA identifies the closest EOD unit (of any service) and tasks that unit's command to provide EOD teams to support the USSS or DOS security details. For OCONUS missions, the VIPPSA tasks the geographical combatant commander to provide EOD teams. EOD teams assigned to support USSS or DOS are subject to overall supervision and direction of the USSS Director or the Director of the DOS

Office of Diplomatic Security (or their authorized representative) at the mission site for the duration of the support mission.

(4) **VIPPSA Tasks.** A typical EOD VIP support mission will include the following tasks:

(a) Conduct a site survey of areas to be visited by the protectee.

(b) Assist in establishing evacuation routes for potentially hazardous explosive devices.

(c) Search the areas to be visited by the protectee for hazardous explosive devices.

(d) Clear the protectees' departure route in the event a hazardous explosive device is discovered.

(5) If the EOD team discovers a hazardous explosive device, provide technical assistance to local law enforcement agencies/bomb disposal teams as requested.

b. **Force Protection.** Since criminal and terrorist attacks commonly involve the use of explosive devices on US forces, force commanders should include EOD commanders/planners in all force protection planning and training. During periods of conflict, the awareness of, and emphasis on, force protection are heightened, thus increasing EOD response to potentially hazardous situations. In addition to actual response to explosive devices, EOD forces can provide training in UXO/IED recognition and reporting; bomb threat search procedures and evacuation; site vulnerability assessments, and SOP preparation and validation. This training will increase the effectiveness of the commander's force protection program. EOD forces also provide DS to NEO forces.

c. **Joint Task Force Full Accounting (JTFFA).** JTFFA is a standing task force under the Commander in Chief, Pacific (CINCPAC). EOD personnel support the JTFFA by providing the fullest possible accounting of US personnel listed as missing in action in Vietnam, Cambodia, and Laos. Most sites investigated by JTFFA teams are littered with UXO from military action, or in the case of aircraft crash sites, from UXO that was part of the aircraft's payload. EOD personnel clear UXO from investigation sites so that JTFFA recovery personnel can operate in a safe environment. EOD support to this mission is provided by all services, and primarily from units within CINCPAC.

d. **WMD.** Certain EOD units have special capabilities and training to recognize and render safe all known types of WMD. All EOD units are trained to provide first response to suspected WMD and to assist in coordination of responses by more specialized national WMD response assets.

e. **Intelligence Gathering and Reporting.** EOD forces perform technical intelligence gathering and reporting on new or first-seen foreign ordnance,

aircraft, weapons systems, or sabotage devices encountered by maneuver forces.

f. HDO. EOD forces develop training programs and conduct HDO training in support of SOF in developing countries that are experiencing landmine/UXO problems.

g. Weapon/Ammunition Storage Site Inspections. EOD forces conduct inspections of weapon/ammunition storage sites during peacekeeping operations for compliance with peace agreements. EOD forces assist with the safety and storage requirements for ammunition and associated components.

h. Destruction of Foreign Ammunition. EOD forces inspect and destroy foreign ammunition and explosive items.

i. Amnesty Programs. EOD units assist in the collection and disposal of hazardous munitions and components as part of the maneuver commander's force protection program to ensure the continued safety of military personnel.

j. Accident/Incident Investigation. EOD forces provide technical information on foreign and US ordnance and conduct crater or munition fragmentation analysis, as part of an accident or incident investigation.





# Glossary

## PART I—ABBREVIATIONS AND ACRONYMS

### A

<b>ADCON</b>	administrative control
<b>admin</b>	administrative
<b>AF</b>	Air Force
<b>AFB</b>	Air Force base
<b>AFDC</b>	Air Force Doctrine Center
<b>AFFOR</b>	Air Force forces
<b>AFJI</b>	Air Force Joint Instruction
<b>AFTTP(I)</b>	Air Force tactics, techniques, and procedures (interservice)
<b>AL</b>	Alabama
<b>ALSA</b>	Air Land Sea Application
<b>AMCM</b>	airborne mine countermeasures
<b>AO</b>	area of operations
<b>AOR</b>	area of responsibility
<b>AR</b>	Army regulation
<b>ARFOR</b>	Army forces
<b>ARG</b>	amphibious ready group
<b>ARTS</b>	all-purpose remote transport system
<b>ASCC</b>	Army service component commander
<b>ASD</b>	area search detachment
<b>ATTN</b>	attention
<b>AZ</b>	Arizona

### B

<b>BCE</b>	base civil engineer
<b>BEEF</b>	base engineer emergency force

### C

<b>(C)</b>	confidential
<b>C<sup>2</sup></b>	command and control

<b>C<sup>4</sup>I</b>	command, control, communications, computers, and intelligence
<b>CA</b>	California
<b>CATF</b>	commander, amphibious task force
<b>CE</b>	civil engineer
<b>C-E</b>	communications-electronics
<b>CES</b>	civil engineer squadron
<b>CINC</b>	commander in chief
<b>CINCPAC</b>	Commander in Chief, Pacific
<b>CJTF</b>	commander, joint task force
<b>CO</b>	Colorado
<b>comm</b>	commercial phone line
<b>COMTECHREP</b>	complementary technical report
<b>CONPLAN</b>	contingency plan
<b>CONUS</b>	continental United States
<b>CRRC</b>	combat rubber raiding craft
<b>CVBG</b>	carrier battle group

## D

<b>DA</b>	Department of the Army
<b>DC</b>	District of Columbia
<b>DIRLAUTH</b>	direct liaison authorized
<b>DOD</b>	Department of Defense
<b>DOS</b>	Department of State
<b>DS</b>	direct support
<b>DSN</b>	Defense Switched Network
<b>DTG</b>	date-time group

## E

<b>E</b>	enlisted (with number represents pay grade)
<b>EAF</b>	expeditionary airfield
<b>EOD</b>	explosive ordnance disposal
<b>EODMU</b>	explosive ordnance disposal mobile unit
<b>EODTEU</b>	explosive ordnance disposal training and evaluation unit
<b>ESB</b>	engineer support battalion
<b>EXPLAN</b>	exercise plan

## F

<b>FL</b>	Florida
<b>FM</b>	field manual
<b>FORSCOM</b>	US Army Forces Command

## G

<b>G-2</b>	Army or Marine Corps component intelligence staff officer
<b>G-4</b>	Army or Marine Corps component logistics staff officer
<b>GA</b>	Georgia
<b>GOPLAT</b>	gas and oil platform
<b>GS</b>	general support

## H

<b>H&amp;S</b>	headquarters and services
<b>HA</b>	humanitarian assistance
<b>HDO</b>	humanitarian demining operations
<b>HEAT</b>	high-explosive, antitank
<b>HI</b>	Hawaii
<b>HMMWV</b>	high-mobility multipurpose wheeled vehicle
<b>HQ</b>	headquarters

## I

<b>IED</b>	improvised explosive device
<b>IHR</b>	in-extremous hostage recovery
<b>IM</b>	information management
<b>intel</b>	intelligence

## J

<b>J-1</b>	manpower and personnel directorate of a joint staff
<b>J-2</b>	intelligence directorate of a joint staff
<b>J-3</b>	operations directorate of a joint staff
<b>J-4</b>	logistics directorate of a joint staff
<b>J-5</b>	plans directorate of a joint staff
<b>J-6</b>	command, control, communications, and computer systems directorate of a joint staff
<b>JEODOC</b>	joint explosive ordnance disposal operations center

<b>JEODTF</b>	joint explosive ordnance disposal task force
<b>JFC</b>	joint force commander
<b>JFLCC</b>	joint force land component commander
<b>JOA</b>	joint operations area
<b>JOPEs</b>	Joint Operation Planning and Execution System
<b>JP</b>	joint pub
<b>JSOTF</b>	joint special operations task force
<b>JTF</b>	joint task force
<b>JTFFA</b>	joint task force full accounting

## L

<b>LNO</b>	liaison officer
<b>log</b>	logistics

## M

<b>MAGTF</b>	Marine air-ground task force
<b>MAJCOM</b>	major command
<b>MARFOR</b>	Marine forces
<b>MCAS</b>	Marine Corps air stations
<b>MCCDC</b>	Marine Corps Combat Development Command
<b>MCD</b>	mobile communications detachment
<b>MCM</b>	mine countermeasures
<b>MCO</b>	Marine Corps order
<b>MCRP</b>	Marine Corps reference publication
<b>MCWP</b>	Marine Corps warfighting publication
<b>MD</b>	Maryland
<b>MDSU</b>	mobile diving and salvage units
<b>MEF</b>	Marine expeditionary force
<b>METT-T</b>	mission, enemy, terrain and weather, troops and support available, time available
<b>METT-TC</b>	mission, enemy, terrain, troops, time available, and civilian constraints (Army only)
<b>MEU</b>	Marine expeditionary unit
<b>MEU(SOC)</b>	Marine expeditionary unit (special operations capable)
<b>MIO</b>	maritime intercept operation
<b>MK</b>	mark

<b>MMS</b>	Marine mammal system
<b>MO</b>	Missouri
<b>MOB</b>	mobile
<b>MOD</b>	module
<b>MOOTW</b>	military operation other than war
<b>MP</b>	military police
<b>MSPF</b>	maritime special purpose force
<b>MSSG</b>	Marine expeditionary unit service support group
<b>MTTP</b>	multiservice tactics, techniques, and procedures
<b>MTW</b>	major theater war
<b>MWSS</b>	Marine wing support squadron

## N

<b>NAVEODTECHDIV</b>	Navy EOD technology division
<b>NAVSCOLEOD</b>	naval school explosive ordnance disposal
<b>NBC</b>	nuclear, biological, chemical
<b>NAVFOR</b>	Navy forces
<b>NC</b>	North Carolina
<b>NCA</b>	National Command Authority
<b>NEO</b>	noncombatant evacuation operations
<b>NF</b>	no-foreign (as in secret, no foreign)
<b>NOFORN</b>	no-foreign (as in secret, no foreign)
<b>NRF</b>	naval reserve force
<b>NWDC</b>	Navy Warfare Development Command
<b>NWP</b>	Navy warfare publication

## O

<b>O</b>	officer (with number represents pay grade)
<b>OCD</b>	ordnance clearance detachment
<b>OCONUS</b>	outside the continental US
<b>OH</b>	Ohio
<b>OPCON</b>	operational control
<b>OPLAN</b>	operation plan
<b>OPNAVINST</b>	chief of naval operations instruction

**OPORD** operation order  
**ops** operations

## P

**PAO** public affairs office  
**POC** point of contact  
**PRETECHREP** preliminary technical report

## R

**RI** Rhode Island  
**RSP** render safe procedures

## S

**(S)** secret  
**S-1** battalion or brigade personnel staff officer (Army; Marine Corps battalion, brigade, or regiment)  
**S-2** battalion or brigade intelligence staff officer (Army; Marine Corps battalion, brigade, or regiment)  
**S-3** battalion or brigade operations staff officer (Army; Marine Corps battalion, brigade, or regiment)  
**S-4** battalion or brigade logistics staff officer (Army; Marine Corps battalion, brigade, or regiment)  
**SC** South Carolina  
**SCUBA** self-contained underwater breathing apparatus  
**SHORE** shore-based (detachment)  
**SJA** staff judge advocate  
**SMCM** surface mine countermeasures  
**SOC** special operations capable  
**SOF** special operations forces  
**SOP** standard operating procedure  
**SPIE** specialized personnel insertion/extraction  
**SRC** survival recovery center

## T

**TACON** tactical control  
**TECHINT** technical intelligence  
**TF** task force

<b>TPFDL</b>	time-phased force deployment listing
<b>TRADOC</b>	US Army Training and Doctrine Command
<b>TRAP</b>	tactical recovery of aircraft or personnel
<b>TTP</b>	tactics, techniques, and procedures
<b>TX</b>	Texas

## U

<b>(U)</b>	unclassified
<b>UA-HMMWV</b>	up-armored high-mobility multipurpose wheeled vehicle
<b>UBA</b>	underwater breathing apparatus
<b>UMCM</b>	underwater mine countermeasures
<b>US</b>	United States
<b>USAF</b>	US Air Force
<b>USJFCOM</b>	US Joint Forces Command
<b>USMC</b>	US Marine Corps
<b>USN</b>	US Navy
<b>USSS</b>	United States Secret Service
<b>UT</b>	Utah
<b>UTC</b>	unit type codes
<b>UXO</b>	unexploded explosive ordnance

## V

<b>VA</b>	Virginia
<b>VBSS</b>	visit, board, search, and seize
<b>VIP</b>	very important person
<b>VIPPSA</b>	very important person protection support activity
<b>VSW</b>	very shallow water

## W

<b>WA</b>	Washington
<b>WMD</b>	weapons of mass destruction
<b>WW</b>	world war

## PART II—TERMS AND DEFINITIONS

**administrative control.** Direction or exercise of authority over subordinate or other organizations in respect to administration and support. It includes organization of service forces, control of resources and equipment, personnel management, unit logistics, individual and unit training, readiness, mobilization, demobilization, discipline, and other matters not included in the operational missions of the subordinate or other organizations. Also called **ADCON**.

**area of operations.** An operational area defined by the JFC for land and naval forces. Areas of operation do not typically encompass the entire operational area of the JFC, but should be large enough for component commanders to accomplish their missions and protect their forces. Also called **AO**.

**area of responsibility.** (1) The geographical area associated with a COCOM within which a combatant commander has authority to plan and conduct operations. (2) In naval usage, a predefined area of enemy terrain for which supporting ships are responsible for covering by fire known targets or targets of opportunity and by observation. Also called **AOR**.

**Army corps.** A tactical unit larger than a division and smaller than a field army. A corps usually consists of two or more divisions together with auxiliary arms and services.

**assign.** To place units or personnel in an organization where such placement is relatively permanent and/or where such organization controls and administers the units or personnel for the primary function, or greater portion of the functions, of the unit or personnel.

**attach.** (1) The placement of units or personnel in an organization where such placement is relatively temporary. (2) The detailing of individuals to specific functions where such functions are secondary or relatively temporary, e.g., attached for quarters and rations; attached for flying duty.

**change of operational control.** The date and time (coordinated universal time) at which a force or unit is reassigned or attached from one commander to another where the gaining commander will exercise OPCON over that force or unit. Also called **CHOP**. *See also* **operational control**.

**combatant command.** A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant commands typically have geographic or functional responsibilities. Also called **COCOM**.

**common servicing.** That function performed by one military service in support of another military service for which reimbursement is not required from the service receiving support.



**conventional mines.** Land mines, other than nuclear or chemical, which are not designed to self-destruct. They are designed to be emplaced by hand or mechanical means. Conventional mines can be buried or surface laid and are normally emplaced in a pattern to aid in recording.

**direct liaison authorized.** The authority granted by a commander (any level) to a subordinate to directly consult or coordinate an action with a command or agency within or outside of the granting command. Direct liaison authorized is more applicable to planning than operations and always carries with it the requirement of keeping the commander granting direct liaison authorized informed. Direct liaison authorized is a coordination relationship, not an authority through which command may be exercised. Also called **DIRLAUTH**.

**direct support.** A mission requiring a force to support another specific force and authorizing it to answer directly to the supported force's request for assistance. Also called **DS**.

**disposition.** The operation by suitably qualified personnel designed to render safe, neutralize, recover, remove, or destroy mines.

**explosive ordnance.** All munitions containing explosives, nuclear fission or fusion materials, and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket, and small arms ammunition; all mines, torpedoes, and depth charges; demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature.

**explosive ordnance disposal.** The detection, identification, on-site evaluation, rendering safe, recovery, and final disposal of unexploded explosive ordnance. It may also include explosive ordnance that has become hazardous by damage or deterioration. Also called **EOD**.

**Explosive Ordnance Reconnaissance Program.** Reconnaissance involving the investigation, detection, location, marking, initial identification, and reporting of suspected UXO, by explosive ordnance reconnaissance agents, in order to determine further action.

**forward arming and refueling point.** A temporary facility organized, equipped, and deployed by an aviation commander. It is normally located in the main battle area closer to the AO than the aviation unit's combat service area, to provide fuel and ammunition necessary for the employment of aviation maneuver units in combat. The forward arming and refueling point permits combat aircraft to rapidly refuel and rearm simultaneously. Also called **FARP**.

**functional component command.** A command normally, but not necessarily, composed of forces of two or more military departments which may be established across the range of military operations to perform

particular operational missions that may be of short duration or may extend over a period of time.

**general support.** That support which is given to the supported force as a whole and not to any particular subdivision thereof. Also called **GS**.

**Global Command and Control System.** Highly mobile, deployable C<sup>2</sup> system supporting forces for joint and multinational operations across the range of military operations, any time and anywhere in the world with compatible, interoperable, and integrated C<sup>4</sup> systems.

**improvised explosive device.** A device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic, or incendiary chemicals and designed to destroy, incapacitate, harass, or distract. It may incorporate military stores, but is normally devised from nonmilitary components. Also called **IED**.

**interoperability.** (1) The ability of systems, units, or forces to provide services to and accept services from other systems, units, or forces and to use the services so exchanged to enable them to operate effectively together. (DOD). (2) The condition achieved among C-E systems when information or services can be exchanged directly and satisfactorily between them and/or their users. The degree of interoperability should be defined when referring to specific cases.

**joint force commander.** A general term applied to a combatant commander, subunified commander, or joint task force commander authorized to exercise COCOM (command authority) or OPCON over a joint force. Also called **JFC**.

**joint operations.** A general term to describe military actions conducted by joint forces (two or more services), or by service forces in relationships (for instance support or coordinating authority), which, of themselves, do not create joint forces.

**joint operations area.** An area of land, sea, and airspace, defined by joint forces, or by service forces in relationships (e.g., support, coordinating authority), which, of themselves, do not create joint forces. Also called **JOA**.

**Joint Operation Planning and Execution System.** A continuously evolving system that is being developed through the integration and enhancement of earlier planning and execution systems: Joint Operation Planning System and Joint Deployment System. It provides the foundation for conventional C<sup>2</sup> by national- and theater-level commanders and their staffs. It is designed to satisfy their information needs in the conduct of joint planning and operations. It includes joint operation planning policies, procedures, and reporting structures supported by communications and automated data processing systems. It is used to monitor, plan, and execute mobilization, deployment, employment, and sustainment activities associated with joint operations. Also called **JOPES**.

**joint task force.** A joint force that is constituted and so designated by the Secretary of Defense, a combatant commander, a subunified commander, or an existing joint task force commander. Also called **JTF**.

**lead agent.** Individual services, COCOMs, or joint staff directorates may be assigned as lead agents for developing and maintaining joint doctrine, joint TTP, publications, or joint administrative publications. The lead agent is responsible for developing, coordinating, reviewing, and maintaining an assigned doctrine, joint TTP, or joint administrative publication.

**liaison.** That contact or intercommunication maintained between elements of military forces or other agencies to ensure mutual understanding and unity of purpose and action.

**line of communication.** A route, either land, water, and/or air, which connects an operating military force with a base of operations and along which supplies and military forces move. Also called **LOC**.

**logistic support.** Logistic support encompasses the logistic services, materiel, and transportation required to support CONUS-based and worldwide deployed forces.

**logistic support (medical).** Medical care, treatment, hospitalization, evacuation, furnishing of medical services, supplies, materiel, and adjuncts thereto.

**Marine air-ground task force.** A task organization of Marine forces (division, aircraft wing, and service-support groups) under a single command and structured to accomplish a specific mission. The components normally include command, aviation combat, ground combat, and combat-service-support elements (including Navy support elements). Three types which can be task-organized are the Marine expeditionary unit, Marine expeditionary brigade, and Marine expeditionary force. Also called **MAGTF**.

**Marine expeditionary unit.** A task organization which is normally built around a battalion landing team, reinforced helicopter squadron, and logistic support unit. It fulfills routine forward-afloat deployment requirements, provides an immediate reaction capability for crisis situations, and is capable of relatively limited combat operations. Also called **MEU**.

**Marine expeditionary unit (special operations capable).**  
A forward-deployed, embarked US Marine Corps unit with enhanced capability to conduct special operations. The unit is oriented toward amphibious raids, at night, under limited visibility, while employing emission control procedures. It is not a Secretary of Defense-designated special operations force but, when directed by the National Command Authorities and/or the geographical combatant commander, may conduct hostage recovery or other special operations under in extremis circumstances when designated special operations forces are not available. Also called **MEU(SOC)**.

**military operations other than war.** Operations that encompass the use of military capabilities across the range of military operations short of war. These military actions can be applied to complement any combination of the other instruments of national power and occur before, during, and after war. Also called **MOOTW**.

**military service.** A branch of the armed forces of the United States, established by act of Congress, in which persons are appointed, enlisted, or inducted for military service, and which operates and is administered within a military or executive department. The military services are the United States Army, the United States Navy, the United States Air Force, the United States Marine Corps, and the United States Coast Guard.

**mine.** (1) In land-mine warfare, an explosive or other material, normally encased, designed to destroy or damage ground vehicles, boats, or aircraft, or designed to wound, kill, or otherwise incapacitate personnel. It may be detonated by the action of its victim, by the passage of time, or by controlled means. (2) In naval-mine warfare, an explosive device laid in the water with the intention of damaging or sinking ships or of deterring shipping from entering an area. The term does not include devices attached to the bottoms of ships or to harbor installations by personnel operating underwater, nor does it include devices which explode immediately on expiration of a predetermined time after laying.

**munition.** A complete device charged with explosives, propellants, pyrotechnics, initiating composition, or NBC material for use in military operations, including demolitions. Certain suitably modified munitions can be used for training, ceremonial, or nonoperational purposes. Also called ammunition. (Note: In common usage, munitions [plural] can be military weapons, ammunition, and equipment.)

**noncombatant evacuation operations.** Operations directed by the Department of State, the Department of Defense, or other appropriate authority whereby noncombatants are evacuated from foreign countries when their lives are endangered by war, civil unrest, or natural disaster to safe havens or to the United States. Also called **NEO**.

**nuclear weapon.** A complete assembly (i.e., implosion-type, gun-type, or thermonuclear-type), in its intended ultimate configuration which, upon completion of the prescribed arming, fusing, and firing sequence, is capable of producing the intended nuclear reaction and release of energy.

**obstacle.** Any obstruction designed or employed to disrupt, fix, turn, or block the movement of an opposing force and to impose additional losses in personnel, time, and equipment on the opposing force. Obstacles can exist naturally or can be manmade, or can be a combination of both.

**operational control.** Transferable command authority that may be exercised by commanders at any echelon at or below the level of COCOM. OPCON is inherent in COCOM (command authority). OPCON may be

delegated and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. OPCON includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. OPCON should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate JFCs and service and/or functional component commanders. OPCON normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions. OPCON does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. Also called **OPCON**.

**operations center.** The facility or location within a theater used by the commander to command, control, and coordinate all EOD activities. Also called **EOD**.

**ordnance.** Explosives, chemicals, pyrotechnics, and similar stores, to include bombs, guns and ammunition, flares, smoke, and napalm.

**recovery.** In naval-mine warfare, salvage of a mine as nearly intact as possible to permit further investigation for intelligence and/or evaluation purposes.

**render safe.** As applied to weapons and ammunition, the changing from a state of readiness for initiation to a safe condition.

**Service component command.** A command consisting of the service component commander and all those service forces, such as individuals, units, detachments, organizations, and installations under the command, including the support forces assigned to a COCOM, or further assigned to a subordinate unified command or JTF.

**submunition.** Any munition that, to perform its task, separates from a parent munition.

**tactical control.** Command authority over assigned or attached forces or commands, or military capability or forces made available for tasking, that is limited to the detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned. TACON is inherent in OPCON. TACON may be delegated to and exercised at any level at or below the level of combatant command. Also called **TACON**.

**unexploded explosive ordnance.** Explosive ordnance which has been primed, fused, armed or otherwise prepared for action. It has been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material and remains unexploded either by malfunction or design or for any other cause. Also called **UXO**.

**unit type code.** A five-character, alphanumeric code that uniquely identifies each type unit, and, in the case of this manual, specific EOD organizations or structures of the armed forces. Also called **UTC**.

**weapons of mass destruction.** In arms control usage, weapons that are capable of a high order of destruction and/or of being used in such a manner as to destroy large numbers of people. Can be NBC and radiological weapons, but excludes the means of transporting or propelling the weapon where such means is a separable and divisible part of the weapon. Also called **WMD**.

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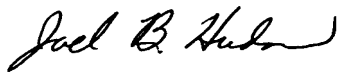
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