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^2 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^2 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^2 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 (C⁴I) 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 C⁴I 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 C⁴I cell provides effective C⁴I, logistics, and medical support to the deployed EOD and MDSU detachments. The deployed EOD C⁴I 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 parachuteinsertion 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, highrisk 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.