NAVY TACTICS, TECHNIQUES, AND PROCEDURES

NAVAL COASTAL WARFARE OPERATIONS NTTP 3-10.1

EDITION APRIL 2005

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS

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2. NTTP 3-10.1 (APR 2005) is effective upon receipt.

3. NTTP 3-10.1 (APR 2005) defines standard naval tactics, techniques, and procedures to be employed in the vicinity of harbors, ports, or coastal logistics sites by core naval coastal warfare (NCW) resources. This publication should be reviewed in its entirety.

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Approved

J. S. GODLEWSKI

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1. NTTP 3-10.1 (APR 2005) was reviewed for format and approved Joint and Navy Service Terminology. The contents of NTTP 3-10.1 (APR 2005) support Navy Strategic and Operational Level doctrine.

JOHN M. KELLY
Commander
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2. Summary. NTTP 3-10.1 (APR 2005) provides tactics, techniques, and procedures for planning and executing naval coastal warfare (NCW) operations. Guidance is provided to United States Navy (USN) and United States Coast Guard (USCG) forces responsible for planning and execution of NCW operations in a joint or combined operating environment. It should be viewed as a "how-to" guide for commanders to plan and execute NCW missions.

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CONTENTS

Page No.

CHAPTER 3 — INSHORE SURVEILLANCE OPERATIONS

CHAPTER 4 — PORT SECURITY AND HARBOR DEFENSE

Page No.

Page No.

CHAPTER 7 — JOINT OPERATIONS

CHAPTER 8 — MILITARY OPERATIONS OTHER THAN WAR

Page No.

CHAPTER 9 — NAVAL COASTAL WARFARE DEFENSIVE BOAT TACTICS

CHAPTER 10 — WEAPONS PROCEDURES AND TACTICS

Page No.

Page No.

Page No.

Page No.

Page No.

LIST OF ILLUSTRATIONS

Page No.

Page No.

CHAPTER 10 — WEAPONS PROCEDURES AND TACTICS

APPENDIX A — NAVAL COASTAL WARFARE GROUP ORGANIZATIONS

APPENDIX G — INTELLIGENCE SUPPORT TO NAVAL COASTAL WARFARE

APPENDIX H — INFORMATION OPERATIONS SUPPORT TO NAVAL COASTAL WARFARE

APPENDIX R — MARITIME HOMELAND SECURITY/MARITIME HOMELAND DEFENSE OF PORTS AND WATERWAYS

PREFACE

NTTP 3-10.1, NAVAL COASTAL WARFARE OPERATIONS, defines standard naval tactics, techniques, and procedures to be employed in the vicinity of harbors, ports, or coastal logistics sites by core naval coastal warfare (NCW) resources. This publication should be reviewed in its entirety.

Throughout this publication, references to other publications imply the effective edition.

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WARNINGS, CAUTIONS, AND NOTES

The following definitions apply to "WARNINGs," "CAUTIONs," and "Notes" found throughout the manual.

WARNING

An operating procedure, practice, or condition that may result in injury or death if not carefully observed or followed.

CAUTION

An operating procedure, practice, or condition that may result in damage to equipment if not carefully observed or followed.

Note

An operating procedure, practice, or condition that is essential to emphasize.

WORDING

The concept of word usage and intended meaning which has been adhered to in preparing this publication is as follows:

"Shall" has been used only when application of a procedure is mandatory.

"Should" has been used only when application of a procedure is recommended.

"May" and "need not" have been used only when application of a procedure is optional.

"Will" has been used only to indicate futurity, never to indicate any degree of requirement for application of a procedure.

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CHAPTER 1

Introduction

1.1 PURPOSE

The purpose of this publication is to provide tactics, techniques, and procedures (TTP) for planning and executing naval coastal warfare (NCW) operations. It provides guidance to United States Navy (USN) and United States Coast Guard (USCG) forces responsible for the planning and execution of NCW operations in a joint or combined operating environment. It should be viewed as a "how-to" guide for commanders to plan and execute NCW missions.

This chapter discusses NCW organization and operations. An overview of NCW forces and operations can be found in Navy Warfare Publication (NWP) 3-10 (Rev. B), Naval Coastal Warfare.

1.2 MISSION

The NCW mission is to protect strategic port facilities and strategic commercial shipping and naval ships in harbor approaches, at anchorages and in ports, from bare beach to sophisticated port facilities, in order to ensure the uninterrupted flow of cargo and personnel to the combatant commander. NCW operations protect these assets from waterborne threats. These operations occur in coastal areas outside the continental United States (OCONUS), in support of national policy, and are referred to as NCW expeditionary operations, and within the United States (US) as part of this nation's homeland security (HLS) and homeland defense (HLD).

1.3 NAVAL COASTAL WARFARE OVERVIEW

NCW involves the employment of mobile sensor systems (e.g., radar, sonar, electronic warfare support (ES), and visual) and small, armed patrol craft to provide a surveillance and interdiction capability against waterborne threats in the inshore/coastal environment. NCW forces are linked with other naval surveillance assets and landside security and host nation (HN) forces to promote a seamless exchange of information and ensure deconfliction of friendly forces. The NCW organic command, control, communications, computers, and intelligence (C4I) capability provides a robust capability to coordinate surveillance and interdiction operations and develop a detailed near-real-time common tactical picture (CTP) of the coastal battlespace.

NCW operations also support maritime pre-positioning force (MPF) and assault follow-on echelon (AFOE) offload operations, and submarine security missions.

1.4 NAVAL COASTAL WARFARE ORGANIZATION

The Chief of Naval Operations (CNO) has established a new command, Commander, Maritime Force Protection Command (COMARFPCOM). This command is part of the realignment placing explosive ordnance disposal (EOD), expeditionary salvage, and NCW forces under one command with primary responsibility for Title 10 functions. COMARFPCOM will centrally manage current and future readiness requirements and resources as the type commander (TYCOM) for these three functional areas. NWP 3-10 defines core NCW forces as naval coastal warfare groups (NCWGRUs), naval coastal warfare squadrons (NCWRONs), mobile inshore undersea warfare units (MIUWUs), inshore boat units (IBUs), mobile security squadrons (MSSs), and mobile security detachments (MSDs). In some circumstances, the core NCW force may include USCG port security units (PSUs). A notional Navy core NCW organization is depicted in Figure 1-1. Appendix A outlines the units and locations of the various NCW forces.

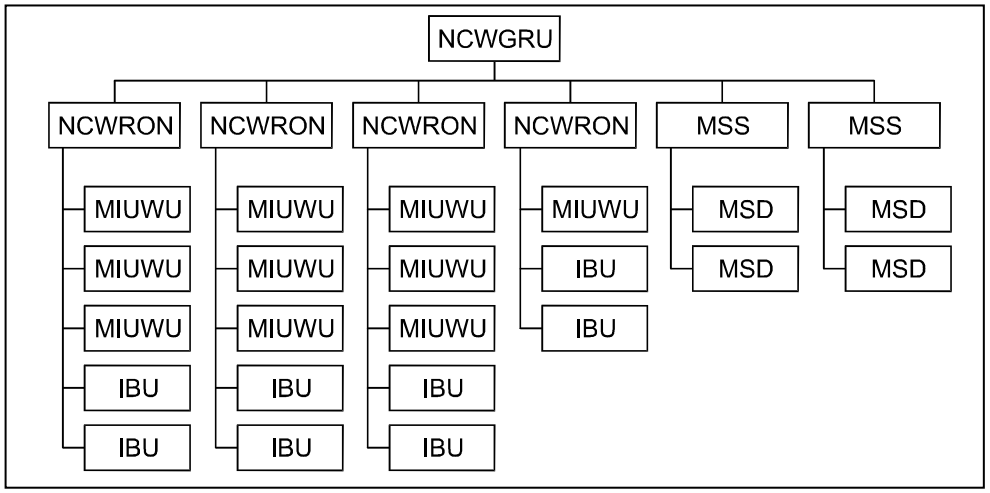

Figure 1-1. Notional Navy Core NCW Organization

1.4.1 Naval Coastal Warfare Group

The NCWGRU provides centralized administrative support, training, operational planning, movement and intelligence coordination, logistics, HN coordination and organizational oversight to deploy combat-ready subordinate units. The NCWGRU commander exercises operational control (OPCON) of subordinate units. JP 0-2, Unified Action Armed Forces (UNAAF), describes command relationships: OPCON, tactical control (TACON), and support. The NCWGRU commander conducts periodic operational readiness and administrative evaluations to validate preparedness and certification of subordinate units for deployment in support of fleet operations.

The NCWGRU is not a deployable asset, but may provide various staff members to augment deployable units. For large-scale NCW operations, the NCWGRU commander may deploy as the naval coastal warfare commander (NCWC).

1.4.2 Naval Coastal Warfare Squadron

The NCWRON is a multiservice (Navy/USCG), deployable, crisis response-immediate (CR-I) asset. It provides centralized planning and the C4I required for conducting expeditionary NCW operations. The NCWRON commander may function as the NCWC for small-scale operations, force protection officer (FPO), seaward security officer (SSO), or harbor defense commander (HDC) during these operations and has OPCON of assigned units. In addition, HN or augmenting assets, such as EOD detachments or mobile diving and salvage units (MDSUs), may be assigned OPCON to the NCWRON. The NCWRON can operate in support of a tactical commander or independently. In either case, employment should be restricted to low-density threat operations (Paragraph 1.7 defines levels of threat).

1.4.3 Mobile Inshore Undersea Warfare Unit

The MIUWU is a deployable CR-I asset and provides command, control, and communications (C3) and surveillance support to the FPO or HDC. The MIUWU commander can function as the SSO during expeditionary NCW operations and has TACON of assigned units. The MIUWU operates in established water terminal/port facilities and logistics staging areas to protect high value assets (HVAs) from waterborne threats. MIUWU employment should be restricted to low-density threat environments.

1.4.4 Inshore Boat Unit

The IBU is a deployable CR-I asset. Each IBU has six C-130 deployable, shallow-draft, high-speed patrol boats for conducting surveillance, interdiction, and point defense (PD) operations. The IBU can provide limited C3 support to the FPO, SSO, or HDC during expeditionary NCW operations. In addition, the IBU deploys the various mobile surveillance sensors used by the MIUWU, such as passive acoustic arrays and active and passive sonobuoys.

1.4.5 Mobile Security Squadron

The MSS provides centralized planning, administration, and training of MSDs that perform physical security and PD of HVAs. The MSS is not a deployable asset but may provide various staff members to augment MSDs.

1.4.6 Mobile Security Detachments

MSDs are organized and equipped to operate independently, but in close coordination with the HVA, ship or aircraft, being protected and HN security and/or military forces. MSDs deploy for short duration operations, normally not to exceed 10 days. Detachments, or tailored elements of detachments, can deploy within 24 hours of notification and are ready within 24 hours of arrival to commence operations. EOD, military working dog (MWD) teams, and the EOD marine mammal system (MMS) may be assigned to assist MSDs for specific missions. When deployed in support of an operation plan (OPLAN), MSDs are integrated into the NCW organization as appropriate. Each MSD is equipped with three armed, 25-foot (ft) patrol boats, for conducting surveillance and interdiction operations to protect an HVA.

1.4.7 Port Security Unit

The PSU is a deployable USCG unit equipped with six, armed, 25-foot, transportable port security boats (TPSBs). The PSU conducts waterborne security, surveillance, interdiction, and PD operations.

1.4.8 Supporting Naval Coastal Warfare Forces

The nature of NCW operations will often require mission-specific tasks that are beyond the inherent capability of core NCW forces. Supporting forces from the Navy and USCG may conduct the following types of operations:

1. EOD
2. Mine hunting and clearance
3. Repair and salvage
4. Covert or clandestine special operations
5. Naval control of shipping (NCS).

1.5 NAVAL COASTAL WARFARE OPERATIONS

NCW forces conduct expeditionary operations OCONUS, and HLS and HLD operations in the United States. Expeditionary NCW operations support deliberate, crisis, and contingency combat operations. These operations protect HVAs and seaports of debarkation/embarkation (SPODs/SPOEs). NCW capabilities encompass seaward and landward security; however, the principal focus is on countering seaward threats.

NCW operations are:

1. Inshore surveillance

2. Port security and harbor defense (PSHD)
3. Harbor approach defense (HAD)
4. Antiterrorism and force protection (AT/FP)
5. PD
6. Joint
7. Military operations other than war (MOOTW).

These operations are briefly outlined below and specific details are provided in chapters three though eight.

1.5.1 Inshore Surveillance

An inshore surveillance operation locates, identifies, and interdicts waterborne threats to HVAs located in ports, harbors, and their approaches.

1.5.2 Port Security and Harbor Defense

Port security and harbor defense (PSHD) operations maintain an unimpeded and secure access of strategic shipping to SPODs/SPOEs and facilitate efficient port operations.

1.5.3 Harbor Approach Defense

HAD operations are an extension of PSHD operations into the seaward approaches to ports, harbors, or bare beach logistics staging areas and may include working with offshore forces.

1.5.4 Antiterrorism and Force Protection

AT/FP operations are done concurrently with all NCW operations to reduce vulnerability to the terrorist threat.

1.5.5 Point Defense

PD operations provide security for HVAs against attacks in areas where the local security infrastructure is inadequate. The MSD is specifically trained and equipped to conduct these operations.

1.5.6 Joint Operations

Joint operations include amphibious, MPF offload, and joint logistics over-the-shore (JLOTS). NCW forces conduct surveillance, interdiction, and PD operations to protect HVAs.

1.5.7 Military Operations Other Than War

MOOTW is not an NCW core competency, however, NCW support for noncombatant evacuation operations (NEOs) and humanitarian assistance (HA) operations may be required.

1.6 ASSUMPTIONS

The most demanding operating environment anticipated for the NCWGRU commander is supporting NCW operations in the littoral or coastal areas during wartime. Operations in this environment in cooperation with designated joint/allied forces will include provision of land and sea assets to provide protection of strategic shipping and naval vessels operating in the inshore/coastal area, anchorages, and harbors.

These operations are frequently characterized by confined and congested water and air space occupied by friends, adversaries, and neutrals. This environment makes identification and coordination profoundly difficult and reaction time critical. When in this environment, adversaries can concentrate and layer their forces. In an era when Third World countries, insurgents, and terrorists possess sophisticated weaponry, surprise attacks by submarines, coastal missiles, mines, sea-skimming cruise missiles, and theater ballistic missiles can be anticipated. Most operations in the littoral environment will be conducted in a joint, allied, combined, or multinational scenario.

The NCW concept of operations (CONOPS) encompasses the following assumptions:

1. Conducted in a joint/allied multiwarfare environment.

2. A limited number of platforms and personnel available to support NCW operations.

3. MIUWU, supported by IBUs, may deploy without the support of mobile ashore support terminal (MAST) II+.

4. MIUWU direct IBUs and MSDs to interdict threats in the area of operations (AO).

5. PSUs are available as another NCW asset for threat interdiction.

6. MIUWU surveillance information is integrated with all other sources of information to provide cueing for MIUWU assets.

7. Secure and reliable communications.

1.7 THREATS

Threats to NCW forces are conventional and asymmetric and exist throughout the range of NCW operations. These threats include "stateless actors," separatist and fringe "independence movements," insurgency operations, terrorist attacks, weapons of mass destruction (WMD), information warfare (IW), and conventional military tactics. These threats may be related or independently prosecuted, but their effects are frequently cumulative. Threats to NCW operations are usually theater-specific and are not limited to those outlined in this publication. Commanders must be aware that chemical, biological, radiological, and high-yield explosive (CBRNE) munitions may be used. NCW forces have only small arms and crew-served weapons to counter surface attacks. They have no organic antiair capability and rely upon the supported commander's capabilities to defeat these threats.

Threats in NCW rear areas are not likely to involve commitments of massive numbers of enemy troops to fixed battle zones. Instead, small terrorist units or paramilitary teams using sophisticated tactics and technologies for conducting surface, subsurface, or air attacks are the primary threat.

Threats to NCW operations are divided into three levels in order to provide a general description and categorization of threat activities, identify the defensive requirements needed to counter them, and establish a common reference for planning. This categorization does not imply that threats will occur in a specific sequence, or that there is an interrelationship between each level.

1.7.1 Level I Threats

Level I threats are composed of individuals who can be defeated with NCW self-defense measures. Some typical examples are listed below.

1. Enemy-controlled agents — Their primary missions include espionage, sabotage, and subversion. Enemy-controlled agent activity may include assassination of key military and civilian personnel, kidnapping, and suicide attacks.

2. Civilians sympathetic to the enemy — These may be a difficult threat to neutralize because they are normally not part of an established enemy network and their actions will be random and unpredictable. These indigenous groups are sympathetic to the enemy or simply opposed to the United States and can be expected to provide assistance, information, and shelter to the enemy.

3. Terrorists — These are among the most difficult threats to neutralize and eradicate. Their actions may be unorganized or employ disciplined tactics that span the range of military operations.

4. Civil disturbances — These include demonstrations and riots that in a host country may be sufficiently pervasive or violent enough to threaten the stability of the society. Commanders should be aware of the direct or indirect threats that may be posed to NCW operations.

1.7.2 Level II Threats

Level II threats are comprised of small tactical squads that can be defeated with NCW self-defense measures. Some typical examples are listed below.

1. Guerrilla forces — These are irregular and predominantly indigenous groups conducting guerrilla warfare that can pose serious threats to NCW forces and local civilians and can cause significant disruptions to the orderly conduct of local government and services.

2. Special operations forces — These are highly trained in asymmetric warfare techniques. They are normally inserted surreptitiously into the area before the onset of armed conflict. They establish and activate espionage networks, collect intelligence, carry out specific sabotage missions, develop target lists, and conduct damage assessment of targets struck.

3. Small tactical units — These are specially organized reconnaissance elements that can conduct raids and ambushes in addition to their primary reconnaissance and intelligence gathering missions.

1.7.3 Level III Threats

Level III threats are comprised of large tactical forces (platoon size and above) that can only be defeated with the augmentation of tactical combat forces to NCW self-defense measures. Some typical examples are listed below.

1. Conventional military forces — These forces have the capability of rapidly projecting combat power by land, air, or sea deep into the AO.

2. Air or missile attack — Conventional or asymmetrical forces may have the capability of launching air or missile attacks.

3. CBRNE weapons — These may be used in conjunction with other conventional or asymmetric attacks. CBRNE weapons may also be employed at threat levels I or II in order to accomplish political or military objectives.

1.7.4 Threat Priorities

Operations by enemy forces against targets in the AO will be characterized by efforts to perform the following: detect and identify targets; destroy or neutralize operational weapon system capabilities; delay or disrupt the timely movement of forces and supplies; weaken the command and control (C2) network of the joint force; disrupt support to combat forces; set the stage for future enemy operations; and create panic and confusion throughout the AO.

Typical examples of enemy priority targets include:

1. CBRNE weapon storage sites and delivery systems

2. Key C4I facilities
3. Air defense artillery (ADA) sites
4. Airfields and air bases
5. Port facilities
6. Main supply routes (MSRs) and MSR chokepoints
7. Key lines of communications (LOCs)
8. Reserve assembly areas
9. Troop barracks
10. Critical civilian and logistic facilities.

1.8 UNITED STATES COAST GUARD NAVAL COASTAL WARFARE FORCES

The USCG is a branch of the Armed Forces of the United States. The USCG is required by law to maintain a state of readiness to function as a specialized service under the Navy in time of war. A close alliance of USCG and Navy forces is increasingly crucial to contend with challenges to U.S. sovereignty and maritime security (MARSEC) that continually grow more diverse and complex. Continued teamwork by the Navy and USCG through the spectrum of naval operations provides the basis to deal with existing and emerging challenges to MARSEC that includes regional conflict, crisis response, sanctions enforcement, arms trafficking, weapons proliferation, illegal mass migration, smuggling, natural resource depletion, and AT/FP.

The USCG's readiness responsibility is complemented by a broad array of ongoing duties and authorities that include maritime law enforcement (LE), maritime safety, and environmental protection. These daily peacetime operations foster "core competencies" that include resources and capabilities that may complement naval operations in both homeland and expeditionary operations. The Navy and USCG have a long history of successful cooperation. In support of the USCG's counternarcotics and HLS missions, the Navy's broad communications, intelligence, surveillance, detection, and sea control capabilities significantly enhance the performance of these missions.

As the Navy and USCG align and integrate their individual Service strategies, there will be opportunities to attain even greater efficiencies and achieve increasingly effective operational outcomes. NCW is an important area where the Navy and USCG, as partners in MARSEC and in the interest of fiscal efficiency, should continue to develop complementary and interoperable approaches wherever appropriate as permitted under existing statutory authority. This should include coordinated research and development, planning, procurement, and development of doctrine, tactics, training, and techniques. This will enable NCW forces to better support the broad spectrum of national security requirements, from power projection to security and defense of the homeland.

The USCG has legislative mandates and authorities for the safety and security of U.S. ports including safeguarding harbors, vessels, and waterfront facilities from accidents, negligence, terrorism, and sabotage. Port safety is focused on preventing accidental damage to vessels and port facilities through activities such as inspection, hazardous materials (HAZMAT) loading supervision, and cargo transfer monitoring. Port security (PS), involving prevention of intentional destruction, loss, or damage to port assets, is usually carried out using LE authorities. Port safety and security are closely related, mutually supportive, and are often conducted concurrently. In the United States, NCW operations are likely to be focused on the SPOEs. Hand in glove with NCW operations, military outload (MOL) involves all port safety and security activities related to port facilities and vessels involved with the movement of military essential cargoes at SPOEs. It normally involves domestic SPOEs during deployment, but could include overseas SPOEs during redeployment.

1.8.1 USCG Operations

Domestically the USCG is:

1. The lead federal agency (LFA) for maritime homeland security (M-HLS) when responses require civil authorities

2. The Federal Maritime Security Coordinator in U.S. ports as designated by the Maritime Transportation Security Act (MTSA) of 2002

3. A supporting agency to Federal Emergency Management Agency (FEMA) for declared disasters or emergencies under the Federal response plan (FRP)

4. A supporting agency to the LFA for specific events under the provisions of the Federal Incident Management Plan or to support national special security events (NSSEs).

1.8.2 USCG OCONUS Operations

In an extremely dynamic national security environment, worldwide operations in multiple littoral regions have changed military requirements significantly and led to an increased dependence on rapid mobility and sealift. The USCG's capabilities have necessarily involved increased emphasis on expeditionary operations including better integration with other military and coalition forces. The USCG's core competencies in waterways management and coastal operations complement NCW littoral and Navy blue water operations, and enhance the United States' ability to conduct unrestricted naval operations worldwide amidst a greater likelihood of asymmetrical attacks and non-traditional military operations to oppose them. Overall these are likely to include operations in the following three primary areas:

1. Maritime interception operations (MIO) — These operations may be conducted either independent of, or in conjunction with, NCW, but support NCW operations by screening vessels that may pass through an NCW AO. USCG cutters and law enforcement detachments (LEDETs) are candidate resources to carry out MIO operations.

2. PSHD — USCG cutters, maritime safety and security teams (MSSTs), and MOL detachments are candidate resources to carry out PS operations in PSHD operations.

3. Military environmental response — These operations are intended to limit the potential disruption to military operations by intentional marine pollution incidents that could occur in the NCW AO. The ability to respond to significant marine pollution incidents in the posthostilities phase of a campaign is instrumental in successful war termination and the restoration of critical infrastructures. The USCG is the LFA charged with preventing and responding to marine pollution incidents in the United States and is also organized and equipped to respond to environmental disasters worldwide. Specially equipped USCG aircraft and sea-going buoy tenders (WLBs), and national strike force detachments are candidate resources to carry out these operations.

The broad spectrum of USCG operations is routinely conducted in coastal regions. This expertise can significantly enhance NCW operations. Close cooperation and integration of these forces are expected and necessary to effectively operate to support military requirements in an increasingly dynamic national security environment.

CHAPTER 2

Naval Coastal Warfare Employment Considerations

2.1 NAVAL COASTAL WARFARE EMPLOYMENT OVERVIEW

The core NCW forces required and their employment will vary with the mission. The concentration of core NCW forces in the Reserve Component (RC) requires careful consideration during the planning process.

NCWGRUs train, conduct operational planning, and direct the deployment of subordinate units. They also coordinate the deployment of detachments to augment site survey teams, provide logistics and administrative support to subordinate units (to include overseas deployments), and conduct crisis response planning. In addition, these staffs:

1. Assign personnel to augment subordinate units.

2. Provide liaison officers (LNOs) to operational commanders for NCW subject-matter expertise.

Appendix B outlines the LNO's responsibilities.

2.2 NAVAL COASTAL WARFARE COMMANDER

The NCWC is assigned to conduct NCW missions within a designated geographic area. These missions may be conducted independently or in support of other operations. The NCWC may assign subarea commanders for coastal sea control and harbor defense (HD).

The NCWC may be assigned supporting forces and can request USCG augmentation. The NCWC conducts liaison with force ashore through close coordination with the joint rear area coordinator (JRAC). Figure 2-1 depicts an OCONUS expeditionary NCW organization.

The following sections outline common NCWC responsibilities and roles in the tactical employment of NCW forces.

2.2.1 Organizational Relationships

The NCWC shall clearly define the organizational relationships among assigned NCW forces. As part of this process, the NCWC shall identify:

1. The landward security officer (LSO) and SSO

2. The FPO

3. The HDC

4. The captain of the port (COTP) in HLS NCW operations.

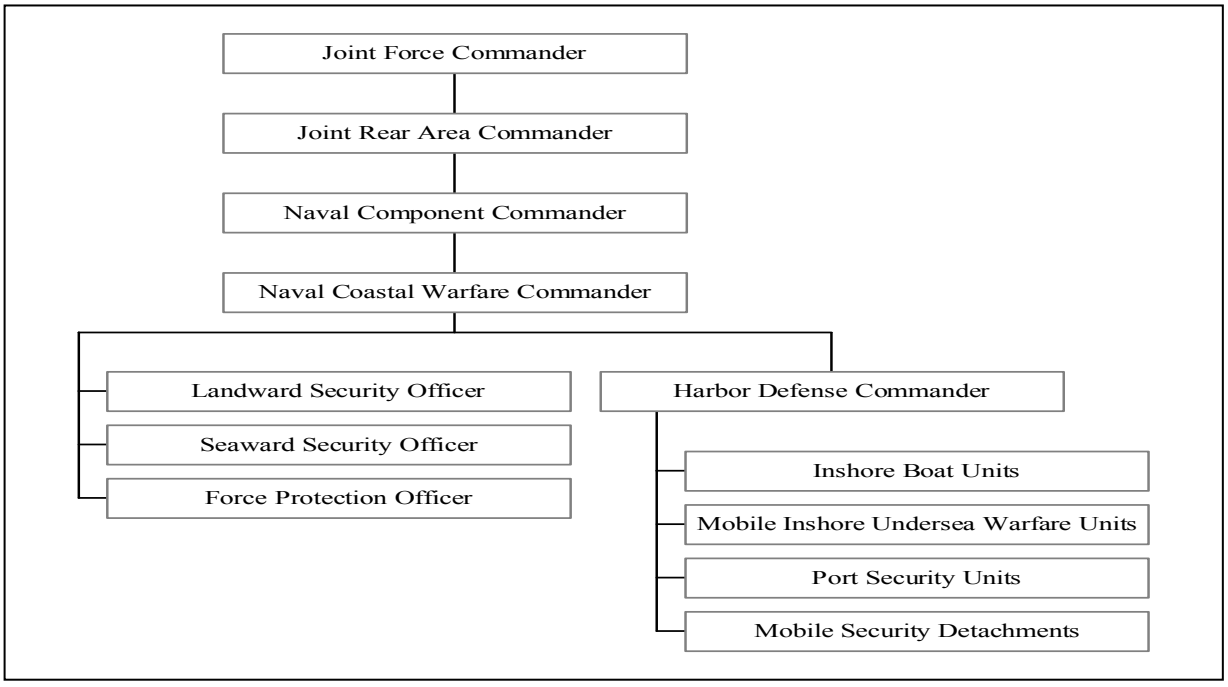

Figure 2-1. OCONUS Expeditionary NCW Organization

2.2.2 Roles of the Seaward and Landward Security Officers

The NCWC shall ensure that seaward and landward defense and security operations are closely coordinated to effectively respond to threats and deconflict the seaward and landward defense forces at the shoreline. Coordination and integration of landward security into the (HD) tactical response plan is critical to preventing gaps or seams in the protection package. Where operations overlap with land-based commands, LE authorities, and allied or HN forces, effective liaison must be established to coordinate and exchange information concerning interdiction and tactical responses to threats.

The SSO (usually attached to the MIUWU) reports directly to the HDC on seaward security matters. This individual is specifically trained within the NCW community for waterborne surveillance and FP. The SSO is responsible for the security around the radar/sonar surveillance center (RSSC) and has TACON of available waterborne assets (IBU/PSU, etc.). The SSO duties and functions are detailed in the MIUWU qualification program and, therefore, are not reproduced here.

The LSO maintains communication with the NCWC or HDC, as appropriate. The LSO may be assigned from a different organization, but is responsible to the FPO for physical security, security issues, and reports.

2.2.3 Force Protection Officer

The FPO is responsible for designing and maintaining a security program to safeguard personnel and facilities from the threat of sabotage and terrorism.

2.2.4 Harbor Defense Commander

The HDC's primary focus is waterborne PS. The HDC directs the SSO, who is responsible for the waterborne defense forces, and the LSO, who is responsible for the landward defense forces.

2.2.5 Captain of the Port

A COTP enforces regulations for the protection and security of vessels, harbors, and waterfront facilities, anchorages, bridges, safety and security zones, and ports and waterways. For example, he may designate restricted areas, such as around nuclear power plants; mandate the use of pilots for navigation into harbor; mandate prior notice of arrival for ships carrying hazardous material; and oversee other safety-related activities.

2.3 DEPLOYMENT OF NAVAL COASTAL WARFARE FORCES

NCW forces are deployed worldwide by CJCS in response to COCOM's request for forces.

2.3.1 Survey, Liaison, and Reconnaissance Party

On-scene site surveys are made by a survey, liaison, and reconnaissance party (SLRP) to evaluate the location to which an NCW force will be deployed. Site surveys identify characteristics associated with the site. Photographs, sketches, local maps, local points of contact (POCs), other military services, and hydrographic publications pertinent to the local area contribute to a thorough site survey. Site surveys should be conducted in advance of all NCW deployments as soon as possible after the requirement for NCW forces support has been identified. Appendix C provides an example of a site survey.

2.3.2 Deployment Considerations

Combatant commander OPLANs may contain provisions for the deployment of NCW forces. These forces are then included in the time-phased force and deployment data (TPFDD), a prioritized deployment time line for bringing the required forces in theater to execute that OPLAN. The TPFDD identifies the means, time, and SPOD/aerial port of debarkation (APOD) by which the NCW forces will be transported to theater.

2.3.2.1 Reserve Call-up

Significant portions of NCW capabilities are assigned to units in the Selected Reserve (SELRES). Accordingly, employment planning must consider the different administrative requirements for these units and personnel, the attendant degree of responsiveness of such forces, and the situation in which they will be employed.

NCW forces are part of the Presidential Reserve Callup Authority (PRCA); the President may augment active forces by involuntarily recalling units and individuals of the SELRES to active duty. The President can activate a total of 200,000 members from all Services for up to 270 days. Short of a declaration of war, or executive order, the Secretaries of Military Departments can call for Reserve volunteers who have needed skills, and activate them for short periods of time.

2.3.2.2 Transportation

NCW units are trained to rapidly deploy to SPODs in response to crisis situations. They deploy by a variety of means, including military sealift and aircraft, commercial sealift, railroad, and vehicle convoy. Consumables, spare parts, tools, and miscellaneous items required for field operations are prepared for deployments using International Organization of Standardization (IOS) containers to facilitate transportation and handling.

Regardless of the transport mode, the movement of an Initial Response Team (IRT) or augmentation force can be an involved and time-consuming undertaking. Operational requirements may not allow sufficient time for in-depth planning after notification of a pending movement. As a result, each NCWGRU has pre-prepared load plans that are modified, as required, to support contingency deployments. Each NCW unit is required to deploy as a self-sustained unit with 14 days of supply.

2.4 OPERATIONAL AND TACTICAL CONTROL

To support the mission, each NCWRON has the MAST, a mobile unit transportable by land, surface ship, or air, which provides versatile and efficient C4I capabilities. These mobile ashore C4I systems display the tactical situation as it develops ashore and at sea, and allows a commander ashore to fully integrate and interact with afloat commanders and platforms in an operational environment.

2.4.1 Operational Control

When increased C2 is required an NCWRON is deployed. The NCWRON normally assumes OPCON of all NCW units in the AO. In the absence of an NCWRON, the MIUWU assumes OPCON of these forces. The NCWRON is under the OPCON of the operational commander.

2.4.2 Tactical Control

TACON of boat units will normally be the responsibility of the command that offers:

1. The best tactical picture
2. The best communications facilities up and down the chain of command
3. The best real-time capability to manage the tactical situation within the AO.

For most operational deployments, the following units are typically assigned to the NCWRON: MSDs, IBUs, or PSUs. The MIUWU is under OPCON of either the NCWRON or NCWC.

When non-NCW assets are assigned (EOD, mine countermeasures (MCM), etc.), they are normally under the TACON of the MIUWU.

2.5 NAVAL COASTAL WARFARE OPERATIONAL TASKS

The following paragraphs explain the various roles NCW forces can fulfill in either a peacetime or wartime scenario.

2.5.1 Force Protection

NCW units can provide force protection (FP) forces against waterborne threats. NCW forces can conduct surface and subsurface surveillance and interdiction of threats, which may be combined with ashore-based radar, sonar, and visual surveillance in a layered defense. These units also provide personnel to the appropriate commander to augment common defense and security teams in the rear area. Organic personnel augmented by trained landward security teams provided by other service or HN units perform FP of unit encampment and operational sites.

2.5.2 Support to Maritime Pre-positioning Forces Operations

MPF operations include the offload of maritime pre-positioning ships (MPSs) conducted from anchorage (in-stream) using lighterage or alongside HN pier facilities. NCW forces are routinely deployed to protect these MPSs during arrival, offload, and back-load by providing security to ship-to-shore movement of boats and water/fuel lines. NCW operations may include the control of small craft and lighterage during conditions of restricted visibility and/or darkness.

2.5.3 Support to Joint Logistics-Over-the-Shore Operations

JLOTS are operations in which Navy and Army forces, under a joint force commander (JFC), conduct the loading and unloading of ships with or without the benefit of fixed port facilities. The operations are conducted in time of war in friendly territory, or in undefended territory during the phases of theater development in which there is no

opposition by the enemy. JLOTS operations are conducted over unimproved shorelines; through shallow draft ports not accessible to deep draft shipping; and through fixed ports with inadequate offload capabilities, are only partially accessible, or have limited pierside offload space. As with MPF operations, NCW forces provide surface and subsurface surveillance and threat interdiction, augment landward security functions, and may provide traffic and lighterage control during ship-to-shore movements.

2.5.4 Support to Mine Countermeasures Operations

The support NCW forces may provide to MCM operations is FP for MCM assets and logistics support for ashore staging areas in the AO.

With regard to FP, NCW forces may provide patrol craft to enforce a security zone encompassing the MCM operational area, in order to protect MCM forces from harassment or attack. Actual stationing of NCW patrol boats will depend upon the need to maintain a safe standoff distance from MCM assets on task. The following MCM assets can require special staging and support:

1. Airborne MCM helicopters such as the MH-53

2. EOD MCM dive detachments

3. MMS MCM detachments which have very specialized basing and security requirements.

Logistical support to MCM forces is limited to messing, berthing, and potable water supplies. In the event that logistics support is required, consideration should be given to basing MCM assets with or adjacent to NCW forces in order to economize security and logistics support.

2.5.5 Support to Amphibious Assault Follow-On Echelon Operations

During AFOE operations, NCW forces provide for the defense of inshore areas from surface and subsurface attack. NCW forces support this mission through the conduct of area surveillance and C2 of interdiction assets throughout all phases of the assault. An MIUWU may be deployed on a landing craft, utility (LCU), amphibious ship, or offshore asset, such as a gas and oil platform, to provide surveillance from seaward “looking in” to the coastline. After the beachhead has been established, NCW units can continue to provide area surveillance and security from ashore and afloat through termination of the operation, including the sustainment during the AFOE and back-load phases.

2.5.6 Support to Submarine Continuity of Operations

During submarine continuity of operations (SCOOP), NCW forces may provide waterborne FP functions at forward/remote locations during submarine crew changes, maintenance, and/or receives spare parts, weapons, or other consumables.

2.5.7 Port Security and Harbor Defense

PS missions involve the PD of designated water terminals, pier areas, HVAs (including escorts while transiting into and out of ports or harbors), and other designated facilities. These are conducted to ensure port and harbor areas are maintained free of hostile threats that would impact support and resupply operations. They also include port safety, security, marine environmental protection (MEP), waterway management, and search and rescue (SAR).

HD involves the employment of forces for the protection and management of harbors, ports, anchorages, shore facilities, strategic shipping, and naval vessels against waterborne and landward threats. The term “shore facilities” is broadly defined to include all U.S. and HN fixed, shore-based infrastructure supporting the movement of commercial or military cargo.

2.5.8 Support to Riverine Operations

Riverine operations integrate and employ various types of ships, craft, aircraft, weapons, and naval forces in a concerted effort to achieve and maintain control of the riverine area — an inland, coastal, or delta area comprising both land and water. NCW forces can provide small shallow draft patrol boats ideally suited to operating in these restricted waters.

The area is characterized by limited LOC and extensive inland navigable waterways that provide natural routes for surface transportation and communications. An effective program to control these waterways and interdict hostile movement requires unique capabilities and tactics to achieve success against hostile forces.

2.5.9 Seaward Security

Seaward security in the littoral region involves the employment of forces to ensure the unimpeded use of designated offshore coastal areas by friendly forces, and to deny the use of those areas to enemy forces. NCW forces refer to seaward security operations as HAD operations. This area, also known as a defensive sea area (DSA), is the transition zone between the open ocean ("blue water") environment and the tidal or shallow ("brown water") coastal environment.

2.5.10 Sea Lines of Communication/Chokepoint/Barrier Operations

Seaward security is a focused NCW maritime operation that complements broader naval operations designed to maintain sea lines of communications (SLOCs). The primary objective is to provide for the safe passage of strategic sealift to and from deep water, through a designated DSA, via a SLOC terminus, to OCONUS or U.S. ports, harbors, anchorages, or JLOTS locations, and to deny use of these areas to enemy forces. Similarly, NCW forces can be employed in a chokepoint (e.g., narrow strait or canal) to provide for the safe passage of friendly forces through that chokepoint. NCW units can be employed as part of a barrier force — air, surface, and submarine units and their supporting systems, positioned across the likely courses of expected enemy transit — for early detection and rapid warning, blocking, and destruction of the enemy.

2.5.11 Support to Maritime Interception Operations

MIO consists of military operations conducted to enforce the seaward portion of certain economic sanctions against another nation or group of nations. While NCW forces do not execute physical boardings, they may direct the diverting, or redirecting, of vessel traffic.

MIO are designed to halt the movement of designated items into or out of a nation or area. Units involved in MIO not only present the appearance of force, but may also use force if a vessel's captain is unwilling to cooperate. Each MIO varies significantly from the next. The specific political, geographic, and tactical factors, and the legal authority on which the MIO is based influence the enforcement procedures.

2.6 OPERATIONAL PLANNING

NCW forces are deployed in accordance with (IAW) Joint Operational Planning and Execution System (JOPES).

NCW Reserve forces typically deploy with 30 days of provisions but try to subsist off the local logistic supply chain. The active NCW forces (MSDs) usually take a minimum of 10 days provisions but can deploy for up to 30 days depending on the mission and duration.

PSUs are normally equipped and provisioned for an initial 30 days of sustained continuous (24/7) operations but require petroleum, oil, and lubricants (POL), and potable water from the supported commander.

2.6.1 Deliberate Planning

NCW forces are included in operation orders (OPORDs) and OPLANs as part of the deliberate planning process. As such, they can be deployed on short notice in support of these plans.

Deployment of NCW forces under existing plans will proceed IAW TPFDD directives.

A PSU is a commissioned USCG unit staffed mostly by reservists and a small number of active duty personnel. During Condition V, each PSU is to maintain staffing and readiness to allow for deployment of 117 personnel and all equipment within 96 hours of alert, and is to be able to establish operations within 24 hours of arrival at the AO. Although all PSU equipment is transportable by aircraft as small as the C-130, a larger aircraft is required to avoid the necessity for numerous sorties.

Under current regulations, area commands may schedule a PSU for voluntary active duty for up to 12 days in support of OCONUS, or in the U.S. NCW noncombat operations or exercises using the unit's active duty for training allotment. Longer duration missions may be accommodated through unit rotation. In addition, USCG reservists may be involuntarily activated not more than 30 days per four-month period or 60 days per two-year period in the event of serious natural or manmade disasters, accidents, or catastrophes. Depending on the statutory basis, other involuntary recalls of USCG reservists are only possible through Congressional or Presidential action. Recalls in connection with 9/11/2001 have been under the authority of a Presidential recall authorized by Title 10, Section 12302 of the United States Code, and may not be for more than 24 consecutive months.

2.6.2 Crisis Action Planning

Due to time constraints, crisis action planning (CAP) involves the NCW forces developing employment and operations plans. During the course of action (COA) development phase, the TYCOM will respond to evaluation requests by the supported commander. HN considerations and status-of-forces agreements (SOFAs) are factored into the planning process at this level. During the execution-planning phase, forces and movement requirements are identified and OPORDs developed.

For CAP, the NCWRON will participate in the COA development in conjunction with the TYCOM LNO for submission to the supported commander.

2.7 SITE ESTABLISHMENT

In the early stages of CAP, an NCW site survey team will be deployed to the AO to assess conditions and advise the supported commander on logistic and operational concerns for NCW forces.

Site selection is of great importance to NCW forces in mission performance. Selection of a campsite with good long-term habitability and surveillance sites with maximum tracking capability is crucial. Major obstructions (buildings, bridges, mountains, etc.) in the AO will degrade communications and surveillance capabilities. A typical NCW operation with NCWRONs, MIUWUs, MSDs, IBUs, and PSUs may consist of nearly 300 personnel. If required to relocate a campsite, consideration must be given to the logistics involved in moving part of or the entire infrastructure.

Habitability and transport to/from the operational site must be considered for the base camp. Refer to Appendix D for information addressing campsite issues.

2.8 LIAISON WITH OTHER FORCES

The NCWC shall assign NCW LNOs to other forces to assist in communication and in understanding the NCW mission. LNOs are particularly necessary during the early phases of an operation when other command centers may be forming and normal communication nets have yet to be established.

Other forces supporting NCW operations and their command relationships will be identified in OPORDs, or plans issued by the senior commander and refined as required by subordinate commanders assigned OPCON of the supporting units. TACON does not entail the authority to refine the mission, only to direct the local movement to execute it.

2.9 HOST NATION CONSIDERATIONS

PSHD operations in ports OCONUS require careful coordination with the HN. Particular attention must be paid to limitations placed on operations by HN sovereignty concerns. Skillful use of LNOs will help to mitigate HN concerns and NCWCs must continually work with the HN to obtain relaxations to operational limitations whenever possible.

It is important to understand what the HN can or cannot provide to support operations, as well as understanding the reliability and estimated effectiveness of that support over the duration of the mission. The degree of host-nation support (HNS) must be clearly spelled out and agreed to. Without resupply of water, POL, etc., NCW forces are limited to short duration deployments. Refer to Appendix E for detailed information covering HN coordination.

2.10 INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE

MSDs, IBUs, and PSUs are constrained in their ability to provide intelligence support as they have limited staffs. While PSUs have a larger staff and, thereby, greater flexibility to provide these services, it will come at the expense of crew rest or other functions. Further, due to limited communications capabilities, they may require other support to satisfy this requirement.

2.11 SECURITY

The NCW security program is focused on the threat level I and II environment. This is accomplished through the integrated application of combating terrorism, physical and operational security, and is supported by intelligence, counterintelligence (CI), and other security programs.

NCW security forces are organized and trained to provide limited shore-side security of a designated mission-essential vulnerable area, while maintaining limited physical security for their own personnel and equipment.

NCW security is based on 360-degree multiple PD positions, roving patrols, barriers/blockades, that are connected through a communications network. All NCW personnel can be utilized as a ready reserve response force should the situation require thwarting an attempt by hostile forces to penetrate the NCW perimeter. While NCW forces are responsible for PD and site security against squad-size threats, the JRAC is responsible for providing security for higher-level threats. In high-threat areas (increasing level II and level III threats), other security forces (e.g., Marine fleet antiterrorist security team (FAST) company, Army military police, HN assets, etc.) should be utilized to augment the NCW perimeter(s).

Additionally, NCW forces are not equipped to construct hardened defensive positions. They must work with the supported commander to strengthen perimeter defense capabilities. The Army or Marine Corps are normally responsible for landward security. HN military or LE may also perform these functions, either solely or in coordination with U.S. forces.

2.11.1 Concept of Operations

The FPO exercises TACON over the LSO and SSO to maintain security within the AO. The LSO must coordinate with the SSO and the FPO to ensure positive security control on the landward side of the NCW operating area(s)(OPAREAs). Security becomes a function of comparing the threats that exist and prioritizing them. Security solutions must factor in the specifics of each situation when selecting personnel and material assets. Rarely will all potential threats be adequately countered using only the NCW forces. Integration of all available security forces will help ensure mission success. The security force(s) must be flexible to respond to a changing

threat environment; thus the FPO must make timely intelligence information available to the LSO. Training, security tactics, access control, defined fields of fire, and reliable communications equipment are absolutely vital in maintaining a strong and effective security force.

2.11.2 Integration into Rear Area Security Forces

Integration of NCW forces with rear area security forces is essential for mutual support and deconfliction. Refer to US Army Field Manual (FM) 90-14, Rear Battle, when planning NCW operations and the rear area commander is an Army commander. Army rear battle doctrine integrates mutual support into a coordinated defense.

The NCW force's operational site and base camp are designated as bases and integrated into the JRAC's base defense plan. NCW security forces may be integrated into the landward security structure as required, or maintained as a ready response backup to the JRAC. The NCW security force may be required to operate independently, jointly with one another, or jointly with other forces. The NCW security force shall not normally be deployed outside of the NCW perimeter. The tasking of NCW forces to act as the principal security force for other facilities will degrade their ability to accomplish their primary mission capability and should be discouraged.

2.12 SAFETY

During the planning phase of NCW operations, safety considerations are incorporated into OPORDs, and are addressed specifically in NCW force directives. Safe operating procedures for NCW forces are coordinated during the planning phase in order to minimize loss, damage, or injury to own forces. Additionally, the NCWC may provide a staff liaison to address HN environmental safety regulations and sensitivities.

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ANNEX A TO CHAPTER 2

Supporting Naval Coastal Warfare Forces

2A.1 INTRODUCTION

Details of the USCG (exclusive of PSU) and other forces that may support NCW operations are addressed within the appendixes to NWP 3-10. The following paragraphs summarize the specific locations within the NWP.

2A.2 UNITED STATES COAST GUARD NAVAL COASTAL WARFARE FORCES

Information regarding USCG NCW forces may be found in NWP 3-10, Appendix B, as follows:

TAB C TO APPENDIX B — 210-FOOT MEDIUM ENDURANCE CUTTER (WMEC)

TAB D TO APPENDIX B — 110-FOOT CLASS PATROL BOATS (WPB)

TAB E TO APPENDIX B — COAST GUARD 87-FOOT PATROL BOAT (WPB)

TAB F TO APPENDIX B — 225-FOOT SEAGOING BUOY TENDER (WLB)

TAB G TO APPENDIX B — MARITIME SAFETY AND SECURITY TEAM

TAB H TO APPENDIX B — LAW ENFORCEMENT DETACHMENT (LEDET)/TACTICAL LAW ENFORCEMENT TEAM (TACLET)

TAB I TO APPENDIX B — NATIONAL STRIKE FORCE

TAB J TO APPENDIX B — MARINE SAFETY OFFICE (MSO)

TAB K TO APPENDIX B — COAST GUARD GROUPS

TAB L TO APPENDIX B — HELICOPTER INTERDICTION TACTICAL SQUADRON

2A.3 UNITED STATES NAVY FORCES

Information regarding U.S. Navy forces may be found in NWP 3-10, Appendix C, as follows:

TAB A TO APPENDIX C — SURFACE MINE COUNTERMEASURES (SMCM) MCM-1 AVENGER CLASS

TAB B TO APPENDIX C — SURFACE MINE COUNTERMEASURES (SMCM) MHC-51 OSPREY CLASS

TAB C TO APPENDIX C — AIRBORNE MINE COUNTERMEASURES (AMCM) HELICOPTER SQUADRON

TAB D TO APPENDIX C — EXPLOSIVE ORDNANCE DISPOSAL (EOD) FORCES

SUB TAB 1 TO TAB D TO APPENDIX C — EXPLOSIVE ORDNANCE DISPOSAL GROUP FORWARD (EODGRU FWD)

SUB TAB 2 TO TAB D TO APPENDIX C — EXPLOSIVE ORDNANCE DISPOSAL MOBILE (MOB) DETACHMENT

SUB TAB 3 TO TAB D TO APPENDIX C — MK 6 MARINE MAMMAL SYSTEM (MMS) DETACHMENT

SUB TAB 4 TO TAB D TO APPENDIX C — ORDNANCE CLEARANCE DETACHMENT (OCD)

SUB TAB 5 TO TAB D TO APPENDIX C — AREA SEARCH DETACHMENT (ASD)

SUB TAB 6 TO TAB D TO APPENDIX C — EOD COMBAT SERVICE SUPPORT DETACHMENT (CSSD)

SUB TAB 7 TO TAB D TO APPENDIX C — MOBILE COMMUNICATIONS DETACHMENT (MCD)

SUB TAB 8 TO TAB D TO APPENDIX C — FLYAWAY RECOMPRESSION CHAMBER (FARC) DETACHMENTS

SUB TAB 9 TO TAB D TO APPENDIX C — MINE LOCATION AND SCORING (ML&S) DETACHMENTS

SUB TAB 10 TO TAB D TO APPENDIX C — MOBILE DIVING AND SALVAGE DETACHMENT (MDSU)

TAB E TO APPENDIX C — PATROL COASTAL SHIPS (PCS)

TAB F TO APPENDIX C — NAVAL COORDINATION AND PROTECTION OF SHIPPING (NCAPS)

TAB G TO APPENDIX C — MILITARY SEALIFT COMMAND (MSC)

2A.4 PORT OPERATIONS AND RELATED UNITS

Information regarding port operations and related units may be found in NWP 3-10, Appendix D, as follows:

APPENDIX D — PORT OPERATIONS AND RELATED UNITS

TAB A TO APPENDIX D — US ARMY TRANSPORTATION GROUP (COMPOSITE)

TAB B TO APPENDIX D — TRANSPORTATION TERMINAL BATTALION (TTB)

TAB C TO APPENDIX D — TRANSPORTATION TERMINAL SERVICE COMPANY

TAB D TO APPENDIX D — MTMC TRANSPORTATION TERMINAL BRIGADE OR BATTALION (EFFECTIVE 1 JANUARY 2004, REDESIGNATED SDDC)

TAB E TO APPENDIX D — WATER TRANSPORT UNITS

TAB F TO APPENDIX D — PORT SECURITY COMPANY (PSC)

TAB G TO APPENDIX D — USMC COMBAT SERVICE SUPPORT DETACHMENT (CSSD)

TAB H TO APPENDIX D — USMC FLEET ANTITERRORISM SECURITY TEAM (FAST)

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CHAPTER 3

Inshore Surveillance Operations

3.1 PURPOSE

This chapter details the techniques associated with the NCW inshore surveillance mission. The NCW unit primarily responsible for inshore surveillance is the MIUWU.

3.2 OVERVIEW

Surveillance operations include the detection, classification, identification, collection, processing, evaluation, and dissemination of contact information in the assigned surveillance area. The MIUWU, as part of the NCW force, employs visual, radar, acoustic, thermal, and ES sensors as organic surveillance systems. Surveillance is a continuous and developing process that provides a composite picture of the designated area.

The basic surveillance environments that MIUWU forces operate in are ports, harbor approaches, and contiguous coastlines. These are the most difficult areas in the world in which to conduct surveillance. Defining sensor placement can be problematic with eventual positions resulting from compromises among factors such as topography, water column thermal dynamics, traffic patterns, sensor capabilities, acoustic interference, security concerns, and HN restrictions. Within harbor areas, the MIUWU must work closely with U.S. and HN forces and fully understand and comprehend what “normal” port operations are.

3.3 MISSION PLANNING

All units assigned to the surveillance area should be included in the mission planning process to maximize the overall effectiveness of their surveillance capabilities. Mission planning must include a site survey.

From both a mission planning and a deployment perspective, it is extremely important that the MIUWU’s sensors be deployed in a layered and overlapping plan. Planned sensor locations should consider sources of potential interference such as radio frequency (RF) or acoustic radiation. Although not normally a concern, consideration should be given to environments where ammunition or explosives are or may be present in the immediate area of the sensors or radio antennas. Sensor locations may be shifted from time to time, but generally once in place they will remain as located unless the threat changes.

Contact interdiction in the surveillance area does not allow time for in-depth contact analysis. The contacts may be detected from multiple sources (radar, sonar, visual, ES, etc.), with the best evaluation made by the MIUWU watch officer to direct the boats for interdiction as required and to report contacts to the operational commander.

NCW surveillance forces provide a layered sensor system to support the following:

1. MPF protection normally performed in conjunction with PSHD operations described in Chapter 4
2. JLOTS for the security of ships and support craft involved in the loading and unloading of cargo
3. MCM operations by directing patrol boats responsible for conducting area exclusion patrols to prevent unauthorized vessels in the operations area.

4. AFOE operations to provide surveillance in the amphibious area to ensure a safe and secure passage of the forces coming ashore.

3.4 NAVAL COASTAL WARFARE SURVEILLANCE CAPABILITIES

The MIUWU has visual, acoustic, electronic surveillance, and various communications capabilities that are coordinated from the RSSC.

3.4.1 Radar Sonar Surveillance Center

The MIUWU's surveillance system consists of the AN/TSQ-108A (V)4 RSSC with its dedicated portable sensor platform (PSP) and up to three mobile sensor platforms (MSPs). The RSSC and/or the MSP(s) can be located on land, piers, or aboard ships as dictated by the operation. The RSSC is sometimes referred to as the surveillance center.

The PSP is a mobile sensor antenna tower for the RSSC. Its primary function is to relay sensor signals to the RSSC. It is a self-contained, unmanned platform that is hard-wired to the RSSC. Therefore, it must be positioned within 150 ft of the RSSC. The PSP is transported on a 1-1/4 ton trailer.

The MSP is a highly mobile multipurpose vehicle with telescoping radar and other sensors. The MSP communications upgrade includes a cabmounted single-channel ground and airborne radio system (SINCGARS). All functions can be controlled remotely from the RSSC.

The RSSC communications suite consists of a full range of line of sight (LOS) and satellite voice, secure voice, and teletype (TTY) equipment. The communications upgrade to the RSSC includes the VICS and SINCGARS radios. The RSSC has a Global Command and Control System-Maritime (GCCS-M) capability. GCCS-M software is hosted on a tactical advanced computer (TAC) workstation (either a TAC-3 or TAC-4), which provides the user with access to multisource maps, the CTP, graphic display of tactical information, and briefing support.

The RSSC's graphical data fusion system (GDFS) is a real-time, multisensor correlation and graphical display system. Large quantities of incoming sensor data from radar, ES, thermal, acoustic, and visual imaging systems (VISs) are processed and displayed by the GDFS using standard naval tactical data system (NTDS) symbology. This information is superimposed on digital maps of the operational area. The GDFS operator can control and calibrate organic RSSC sensor systems. The GDFS also provides data recording and replay with permanent archive capabilities and automatic system recording. This information can then be passed to the operational commander.

3.4.2 Coast Watcher/Lookout

Coast watcher/lookouts should be equipped with night vision goggles (NVGs), night observation devices (NODs), binoculars, etc., as required by the mission. Each coast watcher must be equipped with a sanitized chart of the area and a compass (either hand-held or inherent to the optical device). They must also maintain radio communications with the MIUWU watch officer. They report contacts of interest (COIs) from stationary positions, and make no attempt to challenge or interdict contacts that do not pose a threat under the rules of engagement (ROE). They provide the following information IAW the size, activity, location, unit, time, and equipment (SALUTE) format as defined in Appendix F: bearing, range, target angle, position angle, lighting configuration, description, and identification. Visual detection ranges (DRs) may be affected by environmental conditions. Refer to Figure 3-1 for typical ranges.

3.4.3 Acoustic Sensors

MIUWU sonar operators supply tactical commanders with a real-time acoustic picture of contacts in the surveillance area. Surface and subsurface activity out to 12 nautical miles (nm) is integrated into the CTP. See Figure 3-2 for acoustic ranges.

Asset	Sensor	Track Type	Typical Detection Range
MIUWU	Big-Eye	Large Merchant	7 nm
Coast Watcher or	NVG/NOD	FF/DD	7 nm
Lookout	Binoculars	Patrol Boat	5 nm
	Unaided-eye	Surfaced Submarine	5 nm
		Soft Recreational Vessel	4 nm
		Periscope	0.5 nm
MIUWU	Binoculars	Large Merchant	7 nm
MSP	NVG/NOD	FF/DD	7 nm
	Unaided-eye	Patrol Boat	5 nm
		Surfaced Submarine	5 nm
		Soft Recreational Vessel	4 nm
		Periscope	0.5 nm
IBU/MSD/PSU	Binoculars	Large Merchant	7 nm
Craft	NVG/NOD	FF/DD	7 nm
	Unaided-eye	Patrol Boat	5 nm
		Surfaced Submarine	5 nm
		Soft Recreational Vessel	4 nm
		Periscope	0.5 nm

Figure 3-1. Visual Detection Ranges

Asset	Sensor	Track Type	Typical Detection Range
MIUWU	Sonobuoy	Surface/subsurface	2000 yds
RSSC SQR-17	LASS Array		20K–24K yds

Figure 3-2. Acoustic Detection Ranges

With the use of a combination of sonobuoys and underwater arrays, a complete acoustic barrier can be deployed, providing a very functional layered surveillance zone. The sonobuoys will provide coverage within 12 nm of the PSP, while the array will provide coverage out to 12 nm from the array. Figure 3-3 explains the advantages and disadvantages of each acoustic system.

In view of the environmental impact on acoustic surveillance, commands should consider the following recommendations in the mission-planning phase of MIUWU deployments with an acoustic surveillance mission:

1. Establish the surveillance field seaward of the port entry.

2. Provide three to four arrays per RSSC as a deployment standard.

3. Provide C2 and security forces to enforce exclusion areas in the surveillance area to maximize acoustic performance and prevent physical damage to the arrays or cables due to fishing or anchoring.

4. Provide acoustic intelligence on projected threat platforms.

5. Acoustic performance predictions must be performed for the expected threat.

6. Establish minimum watch team manning of three sonar technicians (STGs) with acoustic analysis and array training.

3.4.3.1 Light Array Sensor System

The light array sensor system (LASS) is a passive acoustic array that is deployed on the sea floor. It provides enhanced detection performance over the standard issue fleet sonobuoys as well as longer surveillance life. The LASS can detect surface and subsurface contacts.

The LASS consists of two major components: the array assembly and the fiber optic (FO) trunk cable.

3.4.3.1.1 The Array Assembly

The array assembly, 40 meters long, consists of 32 hydrophone-elements molded in-line, evenly spaced with a FO telemetry node at one end, and an electrical connector at the other end. Bottom-deployed to a maximum depth of 600 ft, the array is powered by an attached battery pack module with an expected operational life of over 90 days. Upon battery depletion, the array is brought to the surface and the battery pack is replaced. Power monitoring circuitry provides battery voltage information to the operator at all times along with other array health information.

3.4.3.1.2 The Fiber-optic Trunk Cable

The FO trunk cable provides the telemetry route to the RSSC for processing by the AN/SQR-17 (A) and analysis operators. The maximum length of the FO trunk cable to properly transmit the array telemetry is 20 km.

	Advantages	**Disadvantages**
Deployable Sonobuoys	Faster initial deployment Greater coverage area Fast expansion of the coverage area Various deployment vehicles available: surface craft, submarines, or air drop.	Best performance at water depth greater than 100 ft Performance degraded with multiple contacts Limited to 8 hrs Position uncertain Frequently jammed by commercial use of very high frequency (VHF) High interdiction cost for resupply.

Figure 3-3. Sonobuoy/Comparisons

3.4.3.1.3 Light Array Sensor System Configuration

Once the surveillance field has been determined, individual LASS arrays can be configured to maximize contact zones. Acoustic performance predictions are performed to obtain the median detection ranges (MDRs) to determine the spacing of the individual arrays. To function correctly, the array must be laid on the bottom with as little curving as possible.

Standard fleet sonobuoys can be utilized in conjunction with the LASS to fill in any gaps in coverage. Specific acoustic processor AN/SQR-17 (A) capabilities and LASS strategies are covered in the processor Computer System Operator's Manual and the Acoustic Surveillance Operational Guidelines.

3.4.3.2 Sonobouys

The types of sonobuoy deployed depend on the threat, surveillance area size, water conditions, and availability. Sonobuoy deployment may be from the attached NCW patrol craft. In addition, if supported, deployments could be made with craft of opportunity (COOP) or HN craft. Sonobuoys may be moored or free-floating and used to detect surface and subsurface contacts. Under very favorable conditions, submerged delivery vehicles (SDVs) may be detected; however, detection probably will not be possible in an area of high ambient noise, such as a harbor or shipping zone.

Sonobuoy data is transmitted via RF telemetry to the sonar antenna located on the PSP. All processing takes place in the AN/SQR-17A.

3.4.3.2.1 Sonobuoy Types and Characteristics

1. AN/SSQ-53D is the most common sonobuoy used. It has a directional and an omnidirectional capability, can measure ambient noise, and has an operational life of 8 hours. This sonobuoy can be free-floating or moored.

2. AN/SSQ-62 is an active buoy with a 4-hour life and 50 seconds of ping time. The sonobuoy provides an instant range and bearing to the contact for each command and active ping. This sonobuoy is free-floating or moored.

3.4.3.2.2 Sonobuoy Retrieval

Sonobuoys can be rigged to not automatically sink as designed when sonobuoy retrieval is required. Recovery crews must exercise care in handling sonobuoys due to electrical shock possibilities from the battery. Overcoming the automatic sink feature requires three distinct processes:

1. The first is to disable the "fuse" at the top of the float that keeps the antenna out of the water. The fuse should be broken in half.

2. The second process is to rig the sonobuoy to an anchor. The shipping container can be filled with sand or rocks and attached to the sonobuoy body.

3. The last step is to rig the microphone for the depth of the water. The sonobuoy is designed for deep-water deployment and the microphone cord comes standard with a deep-water lead. The lead must be pulled out, measured and tied to restrict its freedom to fully deploy.

3.4.3.3 The AN/SQR-17A Sonar System

The AN/SQR-17A sonar system with deployed sonobuoys and/or LASS can be effective against surface or subsurface contacts at limited ranges in the littoral. Most surface and subsurface contacts may be detected with the AN/SQR-17A.

The AN/SQR-17A sonar system centralizes all processing functions for acoustic search and localization with sonobouys and LASS. The system is fully digital for processing and display. This digital system is the heart of the MIUWU's underwater surveillance capability.

Two control stations provide the operators with system controls, search displays, and a geographic display for target localization. When operator analysis confirms an acoustic threat signature, track data is sent to the GDFS and integrated with all MIUWU sensor contacts for further analysis and correlation.

3.4.4 Electronic Sensors

The MIUWU electronic surveillance sensors consist of radar, thermal imaging devices, and ES. These are explained in the following sections.

3.4.4.1 Radar

In addition to surveillance operations, radar systems can be used for vessel traffic, acting as a control point for basic and safety of navigation for patrol craft.

3.4.4.1.1 Furuno X-Band Surface Search Radar

The Furuno Model 8100D X-band surface search radar is the primary sensor for target detection and is installed in the PSP and MSP. It is mounted on an extendable mast and has a range of approximately 12 nm. It provides automatic detection capability and digitized raster scan video. The radar uses multilevel quantization of incoming echoes to provide detailed and accurate target representations. It also interfaces with the GDFS via the PSP by a 150-foot cable that carries radar commands, track data, status, and video. It is marginally useful against low-flying, slow-moving aircraft and small surface contacts composed of little or no radar reflective material. The radar is significantly degraded over land.

The MSP radar data is transmitted to the RSSC by way of LOS microwave telemetry to the PSP. The MSP can also operate independently in a stand-alone mode, reporting as necessary via radio or sound-powered phones. The PSP is hard-wired to the GDFS.

3.4.4.1.2 IBU/MSD/PSU Patrol Craft

IBU, MSD, and PSU patrol craft are equipped with an X-band navigational radar. The boats are normally deployed in a patrolling and interdiction role, and the radar can be utilized to detect surface vessels, for radar mapping, and navigation aid and chart verification.

At the commencement of a surveillance mission, patrol craft should coordinate with the MIUWU watch officer and perform a radar mapping operation to validate the PSP/MSP radar's capability for detecting the boats, and to determine where radar "blind spots" may be. The patrol craft can then effectively provide radar coverage for the land-based radar "blind spots." See Figure 3-4 for nominal unclassified radar DRs.

3.4.4.2 Thermal Imaging System/Visual Imaging System

The thermal imaging system (TIS)/VIS is mounted on the MSP and can be controlled at the MSP or remotely from the GDFS within the RSSC. Detection is limited to LOS and can be significantly affected by fog, precipitation, and other environmental factors. The MSP should be located at a site where the elevation will maximize the effectiveness of the TIS/VIS while taking into consideration the capability of the MSP's radar.

The TIS is a forward-looking infrared (FLIR) camera. It is a closed cycle night vision sight (NVS) camera used to further assess surface targets identified by the radar and VIS. Its maximum range is approximately 15,000 yards (yds). Refer to Figure 3-5 for typical DRs. The brightness, contrast, focus, field of view, and polarity of the NVS camera are controlled by the GDFS operator or at the MSP.

The VIS is a closed circuit television (CCTV) camera, equipped with a variable focus, containing a solid-state charge coupled device (CCD) and a black and white or color video camera equipped with variable focus and zoom capabilities. It provides a daylight or spotlight illuminated black and white video or color image to the GDFS, or to the stand-alone unit (SAU) to further assess target identification. The RSSC has a video record capability.

3.4.5 Electronic Support

The RSSC is equipped with the AN/ALR-66(V) Road Runner ES system. This system detects electronic emissions occurring in the surveillance area. ES information is then correlated with contacts from other sensors to classify and identify the contact data. The ES system will typically detect emissions at 1.5 to 2 times the operational range of the emitter. The ES system also contains a threat library to help identify possible threats. This information may come from previous deployment of other units in the area.

The antenna is located on the PSP and is controlled from within the RSSC. The ES system contains a threat library that can be tailored to support the theater or mission, as appropriate.

It is necessary to correlate the ES information with intelligence data gained from organic, nonorganic or national sensors. This will allow for identification of type, class, and in some cases, specific platform correlation of surface contacts. See Figure 3-6 for ES DRs.

3.4.6 Surveillance Platforms of Opportunity

There are a number of platforms of opportunity that can be used to augment the organic surveillance capabilities in the MIUWU. These are explained in the following sections.

Asset	Sensor	Track Type	Typical Detection Range
MIUWU	Surface Search Radar	Large Merchant	20 nm
RSSC-PSP		FF/DD	12 nm
		Patrol Boat	9 nm
		Surfaced Submarine	9 nm
		Soft Recreational Vessel	5 nm
		Periscope	1.5 nm
MIUWU	Surface Search Radar	Large Merchant	20 nm
MSP		FF/DD	12 nm
		Patrol Boat	9 nm
		Surfaced Submarine	9 nm
		Soft Recreational Vessel	5 nm
		Periscope	1.5 nm
IBU/MSD/	Navigation Radar	Large Merchant	9 nm
Craft		FF/DD	7 nm

Figure 3-4. Asset Radar Ranges (Sheet 1 of 2)

		Patrol Boat Surfaced Submarine Soft Recreational Vessel Periscope	4 nm 4 nm 2 nm 0.5 nm
PSU Craft	X-Band Navigation Radar	Large Merchant FF/DD Patrol Boat Surfaced Submarine Soft Recreational Vessel Periscope	12 nm 10 nm 5 nm 5 nm 3 nm 1 nm

Figure 3-4. Asset Radar Ranges (Sheet 2 of 2)

Asset	Sensor	Track Type	Typical Detection Range
MIUWU MSP	TIS/VIS	Surface Land	4000 yd

Figure 3-5. Thermal/Visual Detection Ranges

Asset	Sensor	Track Type	Typical Detection Range
MIUWU PSP	ES-ALR-66(V)	All Electronic Emitters Landward and Seaward	50 nm

Figure 3-6. Electronic Emitter Receiver Range

3.4.6.1 Air

There are a number of U.S. and allied aircraft that could supplement or support the NCW surveillance mission. These include the P-3, SH-60, and other light aircraft. These assets can provide detection, sonobuoy delivery, and interdiction if necessary.

3.4.6.2 Surface

There are a number of U.S. and allied combatants or surface vessels that can supplement or support the surveillance mission. These include FFG, DD, CG, DDG, WHEC, WMEC, WPB, and other small craft. These ships can also provide detection, sonobuoy delivery, and interdiction if necessary. Detection capabilities include all onboard sensors: radar, sonar, lookouts, and ES. In addition, there may be opportunities to use HN vessels.

3.4.6.3 EOD/MDSU Units

Although EOD and MDSU units are not normally tasked to conduct surveillance missions in an NCW environment, these assets can be utilized to relay COI and critical contacts of interest (CCOIs) information that is gained from onboard radar or visual sightings.

3.4.6.4 Port Authority/Shipping Control Teams

Port authorities and other organizations such as shipping control teams (SCTs) (explained in NWP 3-10) can provide information such as vessel arrival and departure schedules, cargo, country of registry, port of departure, destination port, etc.

Depending on the mission requirements and availability of resources, it is recommended that SCTs be utilized to deconflict commercial vessel traffic and coordination with port authority officials.

3.5 ENVIRONMENTAL AND WEATHER FACTORS

Specific knowledge of the meteorological and oceanographic (METOC) environment will assist RSSC watch standers in predicting sensor DRs and assessing their capabilities. These same METOC factors can be used to predict safe stay times for watch standers directly exposed to the environment. Therefore, it is critical that tactical watch standers not only understand the environment, but also take steps to measure and record the environmental factors at least every 6 hours, IAW area of responsibility (AOR) operation task (OPTASKs)/OPORDS. Specific METOC support can be requested from mobile environment teams (MET) via the AO METOC center. It is recommended that these requests be tailored to the mission and are specific as possible to include electro-optics (EO) and electromagnetic (EM) emitters and targets for actual probability of DRs and forecasts for each sensor.

3.5.1 Moon Phase, Artificial Lights/Flares/Illumination Rounds

Moon phase, in particular full moon, may hamper the ability of the lookout(s)/coast watcher(s) to maintain concealment, but conversely increases visual DRs. Lookout(s)/coast watcher(s) are hampered when flares and illumination rounds are within the immediate surveillance area as NVG and TIS are severely degraded by artificial lights.

3.5.2 Rain, Snow, Fog, Clouds

Rain or snow can adversely affect sensors, and the lookouts/coast watchers abilities to detect targets at long range. Fog and clouds, depending on density, may reduce the lookouts/coast watchers to an aural-only ability. Severe rain or snow may lead to degradation of search sensor capabilities and the standing down of the watch station until conditions improve.

Rain normally lowers the thermal signature of a target. Fog and clouds may degrade the thermal signature of a target. Snow may enhance the ability of the TIS device by providing a lower background temperature and making heat signatures stand out.

3.5.3 Dust

Dust storms, a common event in many AOs, may decrease the ability to visually detect targets at any range (as determined by sand density) and search sensor capabilities.

3.5.4 Sunrise/Sunset and Temperature

Thermal detection is limited to LOS and can be significantly affected by environmental extremes, and degraded capabilities should be expected during sunrise and sunset.

DRs are dependent on a target's temperature differential with the ambient temperature. High background ambient temperatures tend to mask targets from the TIS camera. Placement of the TIS device should take background heat sources into consideration, as equipment set-up is normally a daytime evolution.

A camera's video quality is directly dependent on the clarity of the air or its water content. During the course of the day objects collect and store the sun's heat. Water evaporates and is absorbed into the air. During the cooler hours of night, the stored heat and moisture are released at varying rates dependant on the object's density and temperature differential.

3.5.5 Acoustic Factors

Acoustic surveillance coverage and sonobuoy effectiveness are functions of a number of environmental variables. Acoustic forecasts, based upon sonobouy type and actual oceanographic observations, may be provided by the MET or requested from the METOC centers.

3.5.5.1 Temperature Profile Versus Water Depth

Temperature differences in shallow water coastal areas to outer harbor deep-water areas can create a sound-limiting barrier reducing the ability of sonar sensor effectiveness in these transition areas.

3.5.5.2 Salinity Changes

Higher salinity allows for greater DRs. Prior to deployment in fresh-water conditions such as rivers or lakes, a sonobuoy should be tested to ensure water activation, because sonobuoys are activated by electrolytes in the water.

3.5.5.3 Background Noise — Shipping, Port Noises

Background noise in industrial harbors near acoustic sensors reduces the ability to detect valid targets at mean ranges. An attempt should be made to place sensors away from loud, sound-producing devices. Where applicable, acoustic devices should not be deployed in traffic zones. Ambient noise, especially in a shipping channel, will probably mask valid tracks and induce a false sense of security.

3.5.5.4 Bottom Depth/Shape/Composition

Smooth-shaped bottoms provide the greatest DRs, while jagged or rough-shaped bottoms will reflect sound, limiting DRs. Soft-bottom compositions absorb sound, reducing sensor range.

Bottom hazards may cause severe damage to the LASS during deployment and recovery. Bottom hazards may ensnare the trunk cable, damaging or breaking it, especially during recovery. The shore section of the cable, typically buried in the sandy beaches by the surf, requires significant effect to recover, and historically has broken repeatedly during retrieval operations. This section should be considered expendable for any deployment other than a week or less in benign conditions.

3.5.5.5 Sea State, Wind, and Current

High sea states may cause anchored hydrophones to bounce, reducing effectiveness, and may also cause an anchored sonobuoy to break free of the mooring line and drift.

A severe current will cause nonanchored sonobuoys to drift, scattering a set pattern. This may occur unbeknownst to the sensor operator, causing invalid sensor contact reports. Severe currents may cause an anchored sonobuoy to drift. Severe bottom current may shift the placement of the LASS array, but it is unlikely.

3.6 EMPLOYMENT OF SURVEILLANCE ASSETS

Mission scenarios and threat conditions will determine the actual location and employment of surveillance systems and sensors. Clandestine or restricted operations may dictate the placement of the RSSC, PSP, and MSP in locations that maximize cover and concealment. Commanding officers (COs) must consider any adverse effects on equipment and mission capabilities when maximizing RSSC concealment. Defiladed locations are preferred and all sites should maximize blending with the local topography. Open and/or exposed sites as well as ridgelines and hilltops should be avoided. Camouflage must be used whenever possible to improve concealment from air, land, and sea. If deployed on a pier or seawall, the RSSC or MSP should be collocated with other structures to the maximum extent possible.

3.6.1 Coast Watcher/Lookout

Primary consideration is to achieve maximum, unrestricted visibility of the OPAREA while maintaining communications with the surveillance center.

3.6.1.1 Deployment

For the most effective deployment, maximum concealment of the coast watcher should be considered. Placement of the coast watcher will be dependent on a number of variables, including visual presence in the surveillance area to potential threat. An overtly placed coast watcher can serve as a deterrent to the threat, but may become a target. A covertly placed coast watcher can minimize FP issues and allow for full reporting of contacts.

Dependent on the threat and assigned surveillance area, multiple coast watchers may be deployed to various locations to maximize visual detection and correlation of contacts. It is recommended that a minimum of two coast watchers be deployed in the surveillance area. The coast watcher should also be alerted to information regarding known COI and CCOIs in the surveillance area that have been obtained from organic, nonorganic and national sensors.

Prior to assuming the watch, the coast watcher should be briefed on current ROE, communications/RT procedures (e.g., essential elements of friendly information (EEFI), authentication procedures, force protection condition/antiterrorism condition (FPCON/ATCON), codes of the day, challenge and reply/duress codes, etc.), and appropriate intelligence. Each coast watcher should be debriefed at the end of the watch to provide complete information to operations and intelligence departments regarding environmental conditions, traffic patterns, threat data, etc.

3.6.1.2 Orientation

Distance from the surveillance center is dependent on communication and security of personnel (FP issues). Elevation should be considered for coast watcher team placement to enhance target acquisition. For overlapping coverage of coast watcher teams, the teams should not be located greater than 3 nm from each other. The exact position of the coast watcher must be known, and “calibrated” in order to correctly coordinate contact reporting.

3.6.1.3 Constraints and Restrictions

The coast watcher team is a stand-alone watch that may be vulnerable to a security threat. As the coast watcher is dedicated to the surveillance mission, the watch will not be performing any security function. The teams must have a copy of a sanitized chart of the AO for reference and contact reporting. The coast watcher must not carry any classified material or information relating to specific mission objectives.

3.6.1.4 Watch Considerations

Personnel should be rotated on a regular basis to maintain an alert watch, reduce fatigue, and reduce exposure to the elements. The coast watcher should have access to, or be provided with, sufficient amounts of drinking water during the watch. If placed a significant distance from the surveillance center or outside of on-site security, the coast watcher team must consist of a minimum of two personnel.

Consideration should be given to deploying additional teams during evening hours or during periods of reduced visibility. During times of inclement weather, the coast watchers must be equipped with proper foul weather gear. In addition, especially during times of dust storms, frequent radio checks should be performed to ensure communications.

3.6.2 Mobile Sensor Platform

The MSP is used to detect and report all contacts in the MSP surveillance area. The SAU of the MSP allows local operation and status display of the radar, TIS, and VIS.

3.6.2.1 Deployment

Distance from the RSSC/PSP must be considered for communications and security of personnel (FP issues). If the MSP is deployed with a PSP or other MSPs performing surveillance in the same operational area, consideration should be given for overlapping radar coverage. If the coverage area consists largely of small contacts or within a harbor environment, the units should not be placed greater than 9 nm apart.

When deployed with a RSSC/PSP, the MSP(s) must remain within 12 nm for microwave telemetry between the PSP and its dedicated MSP(s) due to LOS restrictions. Up to three MSP units can be deployed with one PSP/RSSC. (Site plug address on each MSP must not be the same and must be changed if necessary.) The RSSC is 40 feet long, 8 feet high, and weighs 23,000 pounds.

When deployed without the RSSC/PSP, the units may be deployed from 5 up to 20 nm from each other. Harbor surveillance constrains the distance between units to 9 nm.

Elevation should be considered for MSP placement for target acquisition. MSP elevation is always a compromise situation. Increased elevation will enhance typical TIS/VIS operations, increase radar range capabilities and range from the PSP, while degrading the small contact and close-in contact acquisition capabilities of the radar. The radar beam width is 11^{o} and is the determining factor for contact resolution verses range. For typical harbor surveillance or enemy special forces insertion detection missions, the MSP must be located at sea level (or as close as possible) for proper radar target acquisition.

Once placed and grounded, the antennas must be raised and oriented. The MSP microwave dish must be aligned to the PSP for proper microwave telemetry.

3.6.2.2 Constraints and Restrictions

The MSP, once established, can withstand winds up to 100 mph. If forecasts predict greater wind velocity, the MSP should be disassembled.

Proper grounding of the unit is important for operations, and moist soil is required for best ground rod connectivity. The MSP should avoid sandy or dry soil conditions, if possible. If the MSP must be located in a sandy environment (on the beach), the MSP watch must periodically pour water over the grounding rods.

3.6.2.3 Watch Considerations

Prior to assuming the watch, the MSP operators should be briefed on current ROE, and communications/RT procedures (e.g., EEFI, authentication procedures, FPCON/ATCON, codes of the day, challenge and reply/duress codes, etc.).

Personnel should be rotated on a regular basis to maintain an alert watch, reduce fatigue and reduce exposure to the elements. It is recommended that a structure be provided to MSP operators (tent, building, etc.) for set-up and operation of the MSP SAU, if available. MSP watch standers/operators should be provided with sufficient amounts of drinking water during the watch. If placed a significant distance from the surveillance center or outside of on-site security, the MSP watch must be supplemented with a security watch.

Each MSP watch team must consist of a minimum of two personnel; four or more personnel are recommended to enhance communications, security, and coast watcher capabilities.

3.6.3 Portable Sensor Platform

The PSP receives sensor data from the MSP via microwave telemetry, and passes that data to the RSSC through the 150-foot cable. It is equipped with surface search radar, ES, a global positioning system (GPS) antenna, a sonobuoy signal-receiving antenna, and microwave dishes for linking up to three MSPs. Primary consideration is to achieve maximum unrestricted LOS for radar coverage for the OPAREA and unrestricted LOS from the microwave dish(es) to the MSP(s). Elevation should be considered for PSP placement to enhance target acquisition.

3.6.3.1 Deployment

As with the MSP, the PSP's elevation is always a compromise situation. Increased elevation will increase radar range capabilities, while degrading the small contact and close-in contact acquisition capabilities of the radar. These factors must be considered in conjunction with the threat in determining the placement of the RSSC/PSP.

Again, if the PSP is deployed with an MSP(s) performing surveillance in the same operational area, consideration should be given for overlapping radar coverage. In this case, the units may be deployed from 5 up to 12 nm from each other. For proper microwave connectivity, the distance should not exceed the 12 nm limit.

3.6.3.2 Orientation

Depending on the number of MSPs assigned with an RSSC/PSP unit (from zero to three), the PSP may need to be oriented to best align the microwave dishes to the MSP(s) and sonar antenna to the surveillance area.

3.6.3.3 Constraints and Restrictions

The PSP has the exact same grounding requirements as the MSP outlined in Paragraph 3.6.2. Additionally, the PSP is restricted in distance to the RSSC by a 150-foot cable connecting the PSP to the RSSC. The RSSC generator watch is normally responsible for periodically pouring water over the grounding rods.

3.6.3.4 Watch Considerations

The PSP is located near the RSSC and does not require a standing watch after initial set-up. During the RSSC watch, the PSP should be checked by the RSSC generator watch for cable rigidity and ground moisture content around the grounding rods.

3.6.4 Sonobuoys

Sonobuoys should be deployed whenever possible as the first barrier in a layered surveillance zone to detect surface or submerged craft that may enter the surveillance area. Placement of the sonobuoy hydrophone should be at one-half the water depth in shallow areas, or as dictated by standard sonobuoy deployment procedures in deep water. The deeper the water the greater the DRs. The sonobuoys can be deployed out to a range of 12 nm, and will provide early detection of most surface and subsurface contacts for coordination with other surveillance assets. There must be an unrestricted LOS maintained between the sonobuoy and the PSP sonar antenna for reporting target acquisition. Recommended sonobouy deployment patterns, based on the METOC observations and forecasts, may be provided by the MET or requested from METOC centers.

3.6.4.1 Deployment

A typical sonobuoy deployment would consist of six to eight sonobuoys placed approximately 3,000 yds apart and a minimum of 2,000 yds (and up to LOS range) from the PSP, or as tactical and geographic constraints will allow. This will provide overlapping coverage between the sonobuoys and restricts the number of sonobuoys to a manageable number to maintain and replace. The maximum number of sonobuoys that can be monitored at any one time is eight, however the operator can shift sonobuoy channels as desired up to a maximum of 32 deployed sonobuoys.

Whenever sonobuoys are deployed in the shallow littoral, they must be rigged to ensure the microphone does not fully deploy and sink to the bottom. If this is not done, bottom bounce and drag will significantly degrade performance.

Since the LASS array does not have the flexibility to be easily moved from location to location, sonobuoys may be deployed with the LASS to increase acoustic coverage. The sonobuoys may be used in new or blind areas of coverage, or may be deployed between array strings to provide increased coverage in an area of higher interest.

Once deployed, boats should perform validation runs near the deployed sonobuoy to validate operation.

3.6.4.2 Orientation

Sonobuoys are passive omnidirectional and utilize RF telemetry to transmit data back to the PSP sonar antenna. The sonar antenna on the PSP must be oriented to the sonobuoy surveillance area during PSP setup.

3.6.4.3 Constraints and Restrictions

All sonobuoy deployment plans must consider ambient noise in the surveillance area. Sonobuoys should not be deployed in shipping channels or anchorages if possible. These areas introduce ambient noise that degrades the capability of detecting other contacts, especially submerged contacts.

The management of sonobuoys is a critical consideration. The sonar operator must have the following as a minimum:

1. Approved frequencies for the 32 sonobuoy channels
2. Bottom contour maps
3. Ability to replace sonobuoys as they expire
4. Ship traffic patterns.

An in-depth sonobuoy replacement plan must be generated and communicated to the IBU/PSU (or other unit) for complete planning during the watch. In addition, it is best not to load boats with replacement sonobuoys if they are not to be used immediately. Since there are no secure storage areas on the boats, loose sonobuoys can be damaged by impact in the bottom of the boats.

If required by the HN or regulations, deployable sonobuoys must be retrieved as explained in Paragraph 3.4.3.2.2. This will require the proper rigging of the sonobuoy to ensure it does not sink upon timing out and that it does not move with the currents.

3.6.5 Light Array Senor System

Determining LASS placement can be difficult with an eventual compromise between factors such as topography, water column thermal dynamics, traffic patterns, sensor capabilities, acoustic interference, and security forces.

3.6.5.1 Deployment

LASS is deployed and recovered using the small boat deployment system (SBDS) that is preinstalled on selected IBU craft. This system allows also for the maintenance of the LASS.

To function correctly, the array must be laid on the bottom with as little curving as possible. Because bending of the array can occur during deployment, phone location system (PLS) measurements must be taken to determine the location of the hydrophone elements relative to each other. This information is critical to ensure correct beam formations, sensitivity and ultimately, bearing accuracy.

The LASS is bottom deployed to a maximum depth of 600 ft. Configuration and operator search will be based on array characteristics defined by quantity, position, axis, and number of beams. The number of arrays used will be predetermined and will be based on area required for surveillance.

As with sonobouys, once the LASS is deployed, boats should perform validation runs in the vicinity of the LASS to ensure operation.

3.6.5.2 Orientation

Each array must be oriented to limit directional noise sources from the port (local traffic, anchorages, etc.), to as few beams as possible on the threat axis. Directional noise sources should be contained within the array's end-fire beams. Conical beam contamination doubles the number of directions contaminated and therefore doubles the number of multicontact beams, something every search should avoid. Any deployment must take into consideration ambient noise in the surveillance area. The LASS should not be deployed directly in a shipping channel. This will degrade the performance of the system, as the operators will not be able to distinguish some contacts.

3.6.5.3 Constraints and Restrictions

The acoustic environment and traffic patterns in the landlocked areas of ports and channels, as mentioned previously, seriously degrade acoustic surveillance efforts. These areas, generally endemic with merchant traffic, pleasure craft and other small boats, create a chaotic and confusing acoustic picture for the surveillance operator. Contributing to the surveillance problem is the typically short detection performance of acoustic systems in these areas. Limited to short-range system performance, operator contact holding will be short in comparison to deep-water environments.

Sensor positioning strategies should offset directional noise sources such as traffic lanes, harbor mouths, and anchorages. Typically, this means positioning strategies that orient the array's end-fire beams toward friendly territory. This eliminates the influence of friendly noise on the "seaward" beams, thus providing a cleaner beam display for detection of an inbound threat.

The sonar processor can select two or four arrays and up to 40 phones in any combination from up to three strings.

3.6.5.4 Watch Considerations

The watch team should consist of a minimum of two STGs (recommended) with acoustic analysis and LASS training. In some instances, depending on the threat and theater deployed to, it is strongly recommended to supplement watch standers with experts from other organizations — Office of Naval Intelligence (ONI) for example. ONI representatives can be requested to accompany the MIUWU during deployments.

3.6.6 Electronic Warfare Support

Due to the range of passive ES sensors, the ES watch may be able to alert other watch standers that a contact is in the area well before it may appear on any other sensor.

3.6.6.1 Deployment

The ES sensor is deployed as an integral sensor within the RSSC. The ES omnidirectional antenna is located on the PSP. Other than elevation considerations for the PSP in regard to the radar and microwave dish antennas, there are no specific deployment requirements for the ES sensor.

3.6.6.2 Constraints and Restrictions

Spurious radar signals are endemic in most coastal regions and can overwhelm an ES operator. Commercial surface radars normally operate in the same bandwidth, which may degrade the system's ability to distinguish between individual emission sources.

3.6.6.3 Watch Considerations

A cryptologic technician, technical (CTT) should man this watch. The ES watch is integrally connected to the GDFS and feeds contact information directly for evaluation and correlation.

3.6.7 Watch Officer

The watch officer is responsible for reporting contacts to the operational commander. These contact reports should include the correlation of all sensors: PSP radar, sonar, MSP(s) radar, visual, and TIS/VIS. The watch officer will normally have TACON of the patrol boats for surveillance and interdiction missions. If operating with an NCWRON, watch officer prebriefs will be given by the NCWRON prior to proceeding to the RSSC van. If not operating with an NCWRON, prebriefs will be given by the unit CO or his designate. The watch officer must ensure all members of the watch team are familiar with the RSSC standard operating procedure (SOP) and the following:

1. Watch team prebriefs/debriefs
2. Threat/intelligence brief
3. Shipping schedule in-bound/out-bound
4. Weather and sea state conditions/forecast
5. Schedule of events (SOE)
6. Sensor range conditions
7. MDR of acoustic and radar devices
8. Visibility range
9. Equipment status
10. Communications status
11. Boat crews and rotation schedule
12. Sonobuoy life and time of next drop
13. Sonobuoy deployment schedule.

3.7 SECURITY

The MIUWU is deployed to areas that are reasonably secure from any tactical combat operations. The implication is that nominally there is a friendly government or secure environment allowing the MIUWU to operate in their territory. The units can perform self-defense with organic weapons that allows operation in level I and level II threat areas. Within level II threat areas, it is expected that supporting landside security forces would be available.

Use of small arms for security and campsite/RSSC/MSP site defense shall be as dictated by the operational commander and ROE. All hands carrying a weapon will be knowledgeable in the use of force (UOF) and the ROE for the operation. The watch officer must review the ROE with all watch standers prior to each watch. All unit members must be alert and utilize FP measures and postures at all times. The watch officer and all watch team members should continuously vary operations (lookout, generator, and security watch), as the mission will allow, so possible threats do not see or understand a routine.

The RSSC must be protected from both a physical security and a classified material security perspective. The RSSC security watch, with secondary security supplied by the RSSC generator watch, normally performs on-station security for the RSSC. Depending on the mission and ROE, both of these watch standers may be armed. Typically, there is not an assigned "site security watch" for the immediate RSSC area (e.g., RSSC roving patrol). The RSSC is not mobile enough to evacuate in the event of a terrorist assault. Therefore, security must always be on the mind of all watch standers, with FP an integral part of all RSSC operations. To the greatest extent possible, the RSSC should vary routines to limit the vulnerability of the unit. This should include the watch section relief times and patrol of the area by watch standers. All watch standers must be briefed and understand that the RSSC is an aluminum shell that is not bullet proof. Armed watch standers must deconflict the RSSC from any lines of fire.

3.8 INTELLIGENCE

Effective intelligence is critical to determining the threats to the force, and identifying a threat early strengthens the overall FP effort. Intelligence support to the NCWC and subordinate commanders involves collection of tactical intelligence, threat analysis, and indications and warning (I&W) of immediate threats. It focuses on adversary capabilities, immediate intentions, and the environment. It is the responsibility of the NCWC to request any augmentation support and intelligence briefings of the expected threat within the AO. Each NCWGRU staff typically has one intelligence officer and two enlisted personnel assigned to support the immediate need of providing intelligence information to the NCW force. Intelligence, risk-based assessments, countermeasures, and awareness underpin every NCW operational effort. Appendix F provides more detail on intelligence requirements.

3.9 INFORMATION OPERATIONS

Information operations (IO) adds defense in depth to the offensive and defensive measures central to NCW operations. With support from the intelligence community, IO enables NCW forces to increase their understanding of the battlespace by gaining a level of understanding of the adversary's use of information and information systems. NCW forces may benefit from the assignment of full-time IO support. There are no IO planners currently assigned to NCW forces. NCW intelligence personnel may or may not have sufficient experience to fully utilize this capability. A complete description of associated IO tools along with the applicability to NCW operations is provided in Appendix H. Additionally, this appendix provides a recommended NCW IO cell organization.

3.10 HOST-NATION ASSISTANCE AND RESTRICTIONS

In some cases, NCW forces may not be required to maintain a complete surface radar surveillance picture because of existing infrastructure of the HN. Even so, the infrastructure, which may include both military and civilian assets, may not provide 100 percent coverage of the AO. The MIUWU, with its organic mobile surveillance assets, can complete the surveillance-detection capabilities of the HN.

Depending on theater requirements and HN policy, it may be the unit's responsibility to retrieve sonobuoys after deployment and having exceeded life expectancy. The battery contained in each sonobuoy is considered HAZMAT.

LASS and sonobuoys must be clear of fishing trawlers or other fishing activity using nets. The LASS is especially vulnerable to bottom-dragging fishing nets, as it is deployed at a greater distance from shore.

CHAPTER 4

Port Security and Harbor Defense

4.1 PURPOSE

This chapter describes NCW employment, including operational and tactical considerations, specific to the mission areas of PSHD. Tactically, each mission area could be thought of as mutually exclusive; however, NCW doctrine combines them both as one. Consequently, NCW forces support both mission areas in much the same way, and they are normally considered as one mission upon deployment.

4.2 OVERVIEW

NCW forces may be tasked to support PSHD operations by providing dedicated FP assets to defend against adversary threats. PS involves the safeguarding of vessels, harbors, ports, waterfront facilities, and cargo from threats such as destruction, loss from sabotage, or other subversive acts; accidents or thefts; other causes of a similar nature; or any nonair threat. HD includes defense of harbors or anchorages, and water approaches against internal and external threats. Potential HVAs in this context include moored, anchored, and underway naval, MPF, MSC vessels, and strategic cargo ships, as well as other specifically designated assets and/or infrastructure. This FP coverage also includes landside port facilities.

Depending on the complexity of the environment, the number and types of NCW forces assigned, and the rear area security situation, an NCWRON may be desirable in order to employ more capable C4I. For example, NCWRONs can coordinate waterborne traffic management with the landward traffic management functions of beachmaster units and/or TTBs. They can deconflict NCW unit efforts, minimize blue-on-blue situations, and coordinate interunit support. Finally, NCWRONs can operate as the COTP in a foreign country if HN port control organizations are not available, or could be tasked with joint rear area coordinator JRAC functions in a joint expeditionary environment. When HN port control organizations are established and fully supported, an NCWRON can provide the liaison functions to gain HNS.

4.2.1 Operating Environment

For PSHD, the geographic environment typically consists of the landward area around the harbor/port facilities extending out to the sea buoy, or as required, at the entrance to the port or harbor. The actual area is defined by the NCWC or JRAC. In some cases, it may be possible to deploy buoys or use existing navigational buoys to define the seaward limit to provide clear radar and visual reference points for the patrol boats and the RSSC as well as provide visual references for possible fields of fire.

It is not uncommon in littoral regions for international borders to be in dispute and/or are not clearly defined. It is imperative that NCW forces locate, chart, and respect these borders in their AO. In some cases waterways may mark the border between countries. For instance, the Shatt al-Arab waterway, Iraq's main link with the Persian Gulf, divides Iraq and the Islamic Republic of Iran. The waterway that delineates part of the Iran-Iraq border has long been a source of tension between the two neighbors. In a confined body of water and in bad or reduced visibility weather it is easy to cross an unmarked border. The result of an unintentional violation of international borders by NCW forces can range from what is considered only a minor border incident up to a major diplomatic crisis.

The operational environment also impacts the NCW operation. PSHD missions will normally be conducted in a level I or level II threat environment as defined in Chapter 1.

4.2.2 Threats

NCW forces counter a wide range of threats, including surface craft, submarines, SDVs, swimmers, and land forces. The objective of these threats may include the destruction or disabling of military vessels, port infrastructure, or the collection of intelligence. The ability for the NCW forces to detect and act upon any of these threats is dependent on the force mix and deployed assets.

Although the operational directive may contain summary threat information, specific threat capabilities and operating profiles should be obtained from a variety of sources, including intelligence publications, OPLANs, joint intelligence centers, and intelligence support agencies. Current in-theater threat information, including AT/FP conditions, may be obtained from the supported commander's intelligence directorate of a joint staff/Navy component intelligence staff officer/Army or Marine Corps component intelligence staff officer (J-2/N-2/G-2). It is important to understand how the threat may operate in order to devise an adequate layered defense and response/interdiction plans. NCW forces include limited intelligence specialists (ISs) to gather, evaluate, and disseminate threat information appropriate for the AO. Specific threats to be countered by NCW forces are identified, and tactics and disposition of forces are tailored to meet them.

The nature of a level I or level II threat environment is such that it is often difficult to separate friend from foe. In unclear situations, NCW patrol boats are required to determine hostile intent before an intruder can close within range of the defended asset. The high-speed nature of boat operations reduces reaction time and makes it imperative that early identification of intent is obtained. It is vitally important for all personnel to have a thorough understanding of the ROE in force at all times.

4.3 MISSION

The missions assigned to NCW forces are defensive in nature. The primary purpose of PSHD operations is to provide FP and security in US/OCONUS ports and harbors in order to maintain an unimpeded, secure access for friendly shipping, and to facilitate efficient port operations. This environment provides for the uninterrupted flow of strategic sealift shipping to and through the theater's SPODs (spanning international commercial seaports to the bare beach environment) to sustain combat operations. Critical supporting NCW tasks include:

1. Inner and outer harbor boat patrols
2. Waterborne surveillance and reconnaissance
3. Deployment of electronic surveillance devices
4. Waterborne protection of HVAs
5. Interdiction and security inspection of suspect vessels
6. Support for EOD forces
7. Support for land-based security forces.

FP encompasses a spectrum of measures taken to protect personnel, equipment, and material from threats ranging from the individual terrorist to organized level II threats. This entails both seaward and landward security for the AO. Seaward security includes the surveillance and interdiction of threats utilizing all available NCW resources and assets. For example, MIUWUs perform surveillance; IBUs, MSDs, and PSUs interdict threats. FP involving landward security measures is limited to the physical security of the immediate port area and self-protection of NCW assets. FP measures primarily provided by MSD forces stationed ashore involve those actions taken to protect fixed assets such as buildings, campsites, equipment, supplies, vehicles, and personnel from sabotage and other acts of destruction that may be perpetrated by threats operating on land. NCW units have limited self-defense capabilities against level I and level II threats. Augmentation by U.S. and/or coalition landward security elements must be considered in all PSHD scenarios.

4.4 WATER TERMINAL AND PORT PLANNING CONSIDERATIONS

A water terminal consists of piers, quays, and anchorages normally located within sheltered coastal waters adjacent to rail, highway, air and/or inland water transportation networks. The terminal could be a stand-alone facility or part of a much larger port complex linked geographically by a common inland transport system.

Ports can be differentiated in two ways based on capability:

1. A minor port is a port that is limited to the discharge of cargo from lighters or coasters only.

2. A major port is a port with two or more berths and facilities and equipment capable of discharging 100,000 tons of cargo per month from oceangoing ships.

4.4.1 General Port Data

This section provides a general listing of the port information that the NCW planner requires in order to design a FP plan:

1. Map sheet number (series, sheet, edition, date)

2. Nautical chart number

3. Grid coordinates and/or latitude and longitude

4. Port capacity and method of estimation

5. Dangerous or endangered marine and land animals in the area

6. Names, titles, and addresses of port authority and agent personnel

7. Port regulations

8. Frequencies, channels, and call signs of the port's harbor control

9. Complete description of the terrain within 25 miles of the port

10. Locations of nearest towns, airports, road infrastructure, and military installations

11. Status of navigational aids

12. Ferry/lighterage schedule.

A more detailed port data questionnaire may be found in Appendix I. A PS questionnaire may be found in Appendix J.

4.4.2 United States Terminal Commander

Understanding a U.S. terminal's infrastructure and operating requirements is essential for the execution of effective PSHD operations. This section defines the responsibilities of the Surface Deployment and Distribution Command (SDDC) terminal commander or Department of Defense (DOD) single port manager.

The SDDC terminal commander is normally responsible for the overall operation of the terminal, to include the following:

1. Planning and operations (e.g., notification of consignees, port clearances, vessel scheduling, and availability of local pilots)
2. Statutory and regulatory constraints
3. Military construction
4. Environment and natural resource preservation
5. Facility readiness
6. Safety
7. Security
8. Warehouse operations
9. Pier operations
10. Cargo movement control and documentation
11. Contract management
12. Stevedores and related terminal services
13. Performance work statements
14. Ship scheduling, on and off berth
15. Proper handling of hazardous material and cargo
16. Crisis response and/or clean-up facilities, POL, or hazardous material accident or spills
17. Manifesting of retrograde cargo or transshipments.

4.5 ROLES OF NAVAL COASTAL WARFARE FORCES

The PSHD mission is supported by the full NCW complement of resources including selected members of the NCWGRU staff. NCWRONs are the primary NCW force and the commander, NCWRON will usually be the NCWC. During extended deployments and as theater manning levels permit, the staff should be used to ensure smooth turnover and continuity between relieving units by arriving on scene early.

The following sections identify specific roles in the execution of PSHD operations.

4.5.1 Harbor Defense Commander

The function of the HDC is to provide centralized planning, control, coordination, and integration of NCW forces employed for PSHD. These responsibilities are normally carried out by the NCWRON, but may be assigned to another NCW force component or to an HN entity. A HDC may function as the SSO and will have OPCON of subordinate NCW units.

The HDC is responsible for coordination with the ground forces commander to deconflict the seaward/landward defense missions at the shoreline (normally the high-water mark). Where operations overlap with land-based commands, law enforcement agencies (LEAs), and allied or HN forces, effective liaison must be established to coordinate and exchange information concerning interdiction and tactical responses to threats.

4.5.2 Naval Coastal Warfare Squadron C4I

The NCWRON provides the supported commander with appropriate C4I capabilities that allow for centralized planning, control, coordination, and integration of PSHD operations. These C4I capabilities are provided by the MAST/RSSC, increasing situational awareness and displaying a seamless CTP. The NCWRON has an organic tactical data processing and messaging capability. The staff may provide the command center for the SSO during expeditionary warfare operations. Actual personnel composition may be tailored to fit the mission.

The NCWRON works closely with the HN for vessel traffic management consistent with the SOFA but may assume these responsibilities if the HN is not capable of these operations. The functions of the HDC/FPO/SSO within the NCWRON do not have the same full legal/statutory authority over local HN harbor and merchant vessel activities as a USCG COTP has in a U.S. port. However, SOFA and other theater-related agreements and directives provide adequate authority to satisfy mission requirements.

4.5.3 Mobile Inshore Undersea Warfare Unit

MIUWUs use GCCS-M or a Global Command and Control (GCCS) variant to integrate and correlate the common operational picture (COP) and can provide an all-inclusive tactical picture to the supported commander. Additionally, the MIUWU is capable of satellite communications (SATCOM), high frequency (HF), VHF, and ultrahigh frequency (UHF) communications, but is typically constrained to two channels for each.

MIUWUs can also provide positive traffic and lighterage control during any offload operations.

4.5.4 Mobile Security Detachments/Inshore Boat Units/Port Security Units

MSDs, IBUs, and PSUs use patrol boats to provide waterborne security, interdict surface and subsurface contacts, and deploy sensors in the vicinity of a port or harbor. These patrol boats also provide waterborne point defense, and can contribute to FP for critical piers and quays. Additionally, MSDs have security personnel who are trained and equipped to operate as a shore-based security force to patrol and defend shore facilities against a landward threat.

PSUs have security personnel who are trained and equipped to provide limited physical security for the unit's land-based operating and living areas. While the PSUs have visual, radar, and subsurface surveillance capabilities and self-contained VHF/UHF communications, the MIUWU provides significant enhancements to each capability.

4.6 NAVAL COASTAL WARFARE HOMELAND DEFENSE CONCEPT OF OPERATIONS

In the United States, NCW operations are conducted within the context of M-HLS and maritime-homeland defense (M-HLD). Defined responsibilities for HLS/HLD NCW operations are covered by law under the cognizance of the Department of Homeland Security (DHS), DOD, USCG, National Guard, the Federal Bureau of Investigation (FBI), and other U.S. federal, state, and local law enforcement and civil agencies.

4.6.1 Homeland Security

HLS is the prevention, preemption, deterrence of, and defense against, aggression targeted at U.S. territory, sovereignty, domestic population, and infrastructure as well as the management of the consequences of such aggression and other domestic emergencies. HLS is a national team effort that begins with local, state, and federal organizations. Terrorism targeted against the United States is fundamentally a HLS matter that is usually addressed by LEAs. The DHS was created with one single overriding responsibility: to make America more secure.

4.6.2 Homeland Defense

HLD is the protection of U.S. territory, domestic population and critical infrastructure against military attacks emanating from outside the United States. In understanding the difference between HLS and HLD, it is important

to understand that law, including the Posse Comitatus Act (PCA), governs military operations within the United States that prohibit direct military involvement in LE activities.

4.6.2.1 Posse Comitatus Act

The PCA was enacted after the Civil War and has come to symbolize the separation of civilian affairs from military influence. PCA generally prohibits U.S. military personnel from interdicting vehicles, vessels, and aircraft; conducting surveillance, searches, pursuit, and seizures; or making arrests on behalf of civilian LE authorities or LEA. Prohibiting direct military involvement in LE is in keeping with long-standing U.S. law and policy limiting the military's role in domestic affairs. However, Congress has enacted a number of exceptions to the PCA that allow the military, in certain situations, to assist civilian LEAs in enforcing U.S. laws. The PCA applies to the uniformed services within DOD (Army, Air Force, Navy, and Marines) but not to the USCG. These considerations influence the employment of NCW forces for HLD operations.

4.6.2.2 Military Operations in the United States

The U.S. Constitution gives the President inherent authority to defend the country. Although the military is prohibited from domestic LE, when called by the President, the military can support federal, state, and local enforcement agencies. The military may provide assistance to civil authorities IAW U.S. laws and as directed by the President or Secretary of Defense (SecDef). Military assistance is always in support of a LFA, such as the FEMA. Military civil support includes domestic disaster relief operations that occur during fires, hurricanes, floods, and earthquakes. Support also includes counterdrug operations and consequence management assistance, such as would occur after a terrorist event employing WMD. Generally, an emergency must exceed the management capabilities of local, state, and federal agencies before the military becomes involved.

4.6.2.3 United States Northern Command

The DOD established United States Northern Command (USNORTHCOM) in 2002 to consolidate under a single unified command existing missions that were previously executed by other military organizations. The command's mission is HLD and civil support, specifically:

1. Conduct operations to deter, prevent, and defeat threats and aggression aimed at the United States, its territories, and interests within the assigned AOR.

2. As directed by the President or SecDef, provide military assistance to civil authorities including consequence management operations.

USNORTHCOM plans, organizes, and executes HLD and civil support missions, but has few permanently assigned forces. The command will be assigned forces whenever necessary to execute missions as ordered by the President. USNORTHCOM's HLD mission is directed against military threats emanating from outside the United States. LFAs can also be supported by USNORTHCOM when directed by DOD.

USNORTHCOM has a cooperative relationship with federal agencies working to prevent terrorism. These organizations share information and work together to coordinate plans and actions. This level of cooperation and information sharing improves the effectiveness of HS efforts overall, and may result in the prevention of threats, attacks, and other acts of aggression against the United States.

USNORTHCOM has overall responsibility for HLD and its naval component commander (NCC), United States Naval Forces North (USNAVNORTH), has responsibility for M-HLD-specific missions through a joint force maritime component commander (JFMCC). In the event of an actual attack and declaration of HLD operations, the JFMCC is activated and the USCG area commanders serving as Commanders, Coast Guard Forces East and West (CGFOREAST/WEST) may provide and/or control forces for M-HLD missions.

4.6.3 Area of Operations

Every United States port and the entire American coastal area are potential AOs for NCW operations. However, there are two types of ports carrying the highest priority in the United States for NCW operations: the "Strategic Seaports of Embarkation," and "Controlled Ports."

4.6.3.1 Strategic Seaports of Embarkation

The U.S. Army's SDDC, in coordination with the Maritime Administration (MARAD), designates specific ports as strategic SPOEs. MARAD issues a port planning order (PPO) to commercial port authorities at the SPOE for the exclusive or priority use of marine terminals and facilities that have been determined to be vital by the SDDC for their use during deployments.

The port authorities can then make plans for minimal disruption of commercial business. Procedures for assigning priority of use and exclusive-use port terminals for military operations are in 46 Code of Federal Regulations (CFR) 340. A National Shipping Authority Service Priority Order (NSPO) directs that priority of use be given to the movement of DOD cargoes. A National Shipping Authority Allocation Order (NAO) gives DOD exclusive use of port facilities. Both of these documents refer to specified terminals and facilities within a port, and both are legally binding. These documents are issued by MARAD at the request of SDDC and give port authorities 48 hours to prepare for military use.

4.6.3.2 Controlled Ports

Controlled ports contain sensitive military facilities, and access to controlled ports is limited for vessels labeled special interest vessels (SIVs) from countries designated by the national command and controlled by the USCG SIV program. Detailed TTP for the treatment of SIVs can be found in the United States Coast Guard Commandant's Instruction (COMDTINST) M16000.12, USCG Marine Safety Manual, Vol. VII, Chapter 8.

4.6.4 Homeland Defense Organizational Relationships

The conduct of NCW is the responsibility of the cognizant unified commander, which for NCW in the United States and Puerto Rico is USNORTHCOM and USPACOM for Hawaii, Guam, and Pacific Trust Territory Islands. Accordingly, when required for the nation's defense, responsibility for harbor defense, HAD, and sea control in the U.S. littoral is shared between the Navy and the USCG.

4.6.4.1 Navy-Coast Guard Relationship

Following NCW doctrine, established in NWP 3-10 and COMDTINST M3501.38, the USCG is an integral element in NCW mission execution. All USCG statutory authorities remain in effect at all times, including when USCG units are assigned to M-HLD operations or when the USCG, as a specialized naval service, is transferred to Department of the Navy (DON). When USCG forces conducting M-HLD operations are needed to exercise specialized USCG authority, the appropriate CG forces (CGFOR) commander will determine when those forces will be made available.

4.6.4.2 Command and Control

The 2002 Unified Command Plan established Commander, USNORTHCOM. The FY 2003 Interim Forces for Unified Commands assigned the flag officer serving as Commander, US Atlantic Fleet (COMLANTFLT) to serve separately as COMUSNAVNORTH, the Navy component commander to USNORTHCOM. Chairman of the Joint Chiefs of Staff (CJCS) Operation Noble Eagle exercise order (EXORD), 111500Z FEB 2003 directed the establishment of the JFMCC NORTH under USNORTHCOM. To exploit the existing USCG C2 infrastructure during M-HLD events, the USCG Atlantic and Pacific area commanders serve as Commanders, CGFOR EAST/ WEST and report directly to JFMCC NORTH. The MHD C2 structure parallels the USCG C2 structure to ensure that there is a seamless transfer of command authority from the peacetime USCG operational chain of command to the Navy joint forces organizational chain of command. For all other traditional USCG operational missions

and statutory responsibilities that are being performed concurrently with M-HLD operations, follow the USCG peacetime chain of command. See Figure 4-1.

When activated for M-HLD operations, CGFOR commanders conduct NCW operations within their AOs. The appropriate fleet or forces commander exercises control over U.S. NCW operations. A similar organization exists for PACOM M-HLD operations involving a JFMCC, PACFLT, and CGFOR PAC.

4.6.5 Incident Command System

To ensure interagency coordination, the incident command system (ICS) will normally be used as the tactical C2 organizational structure in the United States for NCW mission execution at the port level. ICS 100 level training, which outlines the basic ICS C2 system, is available through the Internet at: www.akrrt.org/D17mor/ICSTest.html.

The ICS organizational structure is loosely based on the traditional military functional staff divisions found in the N-code staff elements (e.g., the ICS operations section equates to the N-3; the ICS planning section equates to the N-35; the ICS logistics section equates to the N-4). Maritime Defense Zone (MDZ) OPORDs issued using JOPES are generally executed at the port level through the use of ICS tactical incident action plans (IAPs). IAPs cover the next 24- to 48-hour tactical operational period.

4.6.6 Limited Availability of NCW Forces for Homeland Defense/Security Operations

It is very likely that concurrent expeditionary requirements will limit the availability of Navy and USCG expeditionary NCW forces (e.g., PSUs) for PSHD operations. Under such circumstances, NCW operations will rely heavily on existing USCG and local LEA assets and their associated C4I networks. All USCG operational forces, from small boats to high endurance cutters and the entire inventory of fixed-wing and rotary-wing aircraft, have the potential to be tasked with conducting NCW operations. As is the case with other RCs, the USCG Reserve may be tasked to provide supplemental forces.

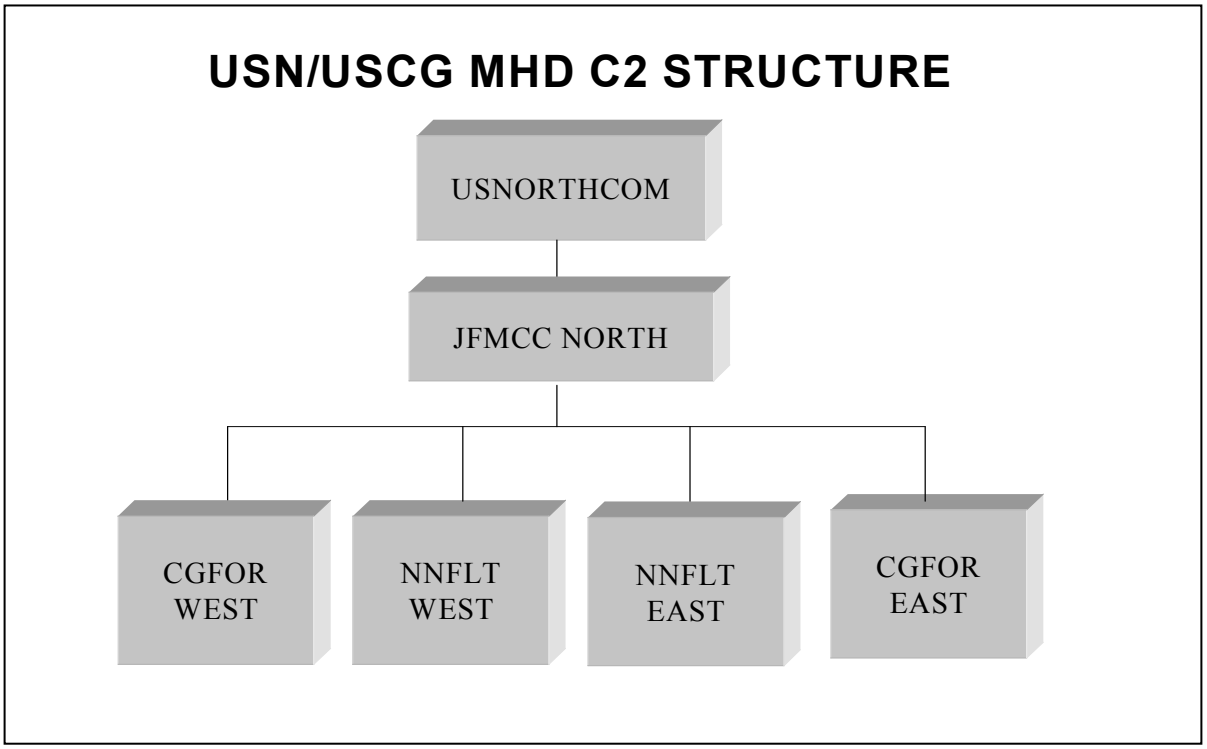

Figure 4-1. Maritime Homeland Defense Command and Control

4.6.7 Command and Control

The USCG will use its existing organizational C2 structure to conduct and coordinate coastal defense operations

4.6.7.1 Coast Guard Task Force

All coastal defense operations will be done in concert with the Navy regional commands, Second and Third Fleet commanders, FBI, FEMA, National Guard, SDDC, Joint Task Force-Civil Support (JTF-CS), and other appropriate U.S. federal, state, and local agencies and civil authorities. The appropriate USCG OPLAN will guide the USCG commander in the execution of coastal defense operations in such circumstances.

4.6.7.2 Captain of the Port

The authority of the COTP is established by federal regulations and includes responsibility for PS and safety missions inside U.S. ports and adjacent territorial seas. As mentioned earlier, the COTP will normally act as the harbor defense commander and exercise TACON of assigned NCW and supporting forces to conduct PSHD operations under the applicable OPORD. The practical effect of assigning a harbor defense commander at an SPOE is that it places all USCG forces and any other assigned naval forces under a single naval operational commander at the port level. It is the harbor defense commander's responsibility to coordinate all naval and strategic shipping activities at an SPOE with the Army forces (e.g., the SDDC single port manager) operating within the port. Additionally, the harbor defense commander will coordinate support from other government and civil agencies to accomplish the NCW mission.

4.6.8 Planning and Coordination

The MTSA of 2002 outlines specific requirements for area and facility planning. The concept plan is integrated with CG AREA OPLAN 9700/9800. At the maritime component commander level, the appropriate USCG OPLAN in combination with the CONPLAN/CG AREA OPLAN is used.

4.6.8.1 National Port Readiness Network

To ensure the coordination of water terminal security, explosive loading, and the control and movement of shipping in and out of the SPOE, effective coordination links between the harbor defense commander, the SDDC port manager, the FBI, and the local port authorities must be established. This is accomplished through the national port readiness network (NPRN) at the strategic level and the NPRN-sponsored port-level port readiness committees (PRCs) at the operational and tactical level of warfare.

The NRPN has established local PRCs at U.S. strategic SPOEs. PRC membership is made up of military, federal, state, and local agencies and port authorities within the port's local maritime community and is an effective peacetime interagency coordinating organization that establishes the port-level working relationships that can ensure prompt and effective response to situations requiring HLD PSHD operations. The local PRC sponsors port readiness exercises to test interagency communication, identify port weaknesses that could affect a military out-load, and strengthen the working relationships among all PRC members. For HLD NCW operations, the harbor defense commander uses the PRC as its primary interagency coordination channel.

4.6.8.2 Port Readiness Committee

The key to successful NCW operations is allowing those who "live and work" in the SPOEs to plan and organize NCW operations at the port level. The PRC provides the primary forum for developing the command and interagency relationships necessary to optimize secure port throughput at the SPOE.

The USCG COTP, as the port-level PRC chairman, has the primary responsibility to develop and test local port contingency plans (CONPLANs) that address the concerns and issues of the responsible fleet commander and

interagency community. Therefore, a U.S. NCW operation by its nature is an interagency operation that requires significant liaison and coordination at all levels, from the tactical and the operational levels to fleet/forces commander level.

Through the port-level PRC, the Navy, USCG, National Guard, FBI, SDDC, U.S. Fleet Forces Command (FFC), FEMA, other agencies, and local military commands and civil authorities coordinate their interlinking roles in NCW operations depending on the particular situation and geographic location. Liaison with the National Guard is required to address issues of the Protection of Critical Infrastructure Program (PCIP) (formally, Key Asset Protection Program (KAPP)) and response to possible attacks by terrorists or rogue nations using WMD. Liaison with the SDDC is required to coordinate NCW operations with the activities of the transportation battalions, transportation terminal groups, deployment support brigades, and port security companies (PSCs). Liaison with the FBI is necessary to limit and defend against asymmetric threats to the port. Protection of shipping and SDDC-established water terminals in a port requires close coordination and cooperation among multiple civil authorities, agencies, and military commands.

4.6.9 Interagency Liaison Officers

Depending on the situation, LNOs should be assigned to a lead agency to act as spokespersons for the providing commander. The effective conduct of the NCW mission requires the harbor defense commander, with authority from the NCWC (NCC for expeditionary operations or maritime defense command (MARDEFCOM) for HLD operations) to establish liaison and coordinate activities with other military commands and federal, state, and local government agencies at appropriate levels. Commands or government agencies with which may liaison as necessary to provide valuable support to the NCW operational tasks are shown in Figure 4-2.

1. U.S. Coast Guard
   a. COTP/MSO
   b. USCG group and small boat station forces
   c. Cutter force (WPBs, WMECs, WHECs, and WLBs)
   d. Surveillance and response aircraft (fixed- and rotary-wing)
   e. National strike team
   f. Vessel traffic services (VTS)
   g. PSU (if not deployed OCONUS)
   h. LEDETs
   i. MSSTs.
2. U.S. Navy
   a. Core NCW forces (e.g., MSD, MIUWU, IBU, PSU)
   b. Fleet support units (e.g., MDSU, EOD)
   c. Mine countermeasure units
   d. Naval Criminal Investigative Service (NCIS)
   e. Navy master-at-arms (MAA) forces.
3. U.S. Marine Corps
   a. FASTs
   b. Chemical biological incident response force (CBIRF).

Figure 4-2. Stakeholders in NCW Mission Support (Homeland Defense/Security)

4. U.S. Army
   a. Surface Deployment and Distribution Command-Deployment Support Command (SDDC-DSC)
   b. PSC.
5. FBI
6. JTF-CS
7. FEMA
8. MARAD
9. Bureau of Immigration and Customs Enforcement (ICE)
10. National Guard
    a. State area coordinators (STARC)
    b. Domestic support teams (DST).
11. State and local LEAs
12. Port authority security forces.

Figure 4-2. Stakeholders in NCW Mission Support (Homeland Defense/Security)

LNOs can serve at government agency headquarters (HQ) and with field teams to clarify operational concepts and terminology and to assist in the assessment of military requirements. Exchange of LNOs among key agencies significantly enhances the unity of effort. The ICS emphasizes the importance of LNOs, with the authority to commit their agency's assets, subject to the incident command post command staff's approval (see also ICS 100 level training booklet).

4.6.10 Military Support to Civil Authorities

Requests for military support by civil authorities are made to the DOD through the LFA except in emergency situations when the on-scene military commander may provide immediate assistance/relief. Once authorized, the harbor defense commander will coordinate support with USNORTHCOM through the maritime component commander. The intrinsic capabilities of military units to perform nontraditional roles may not be readily apparent to other agencies, but are important in describing the military contribution to the Federal response. Conversely, agency LNOs working with the military force can assist the force commander in maximizing agency core competencies and concentrating the resources of the engaged agencies.

Some examples include:

1. Service engineer units have significant capabilities to repair damaged facilities or construct temporary ones.
2. Military aircraft can perform essential reconnaissance, SAR, and airlift.
3. Navy surface combatants and auxiliaries possess important medical and industrial repair capabilities, have powered public electrical utilities following disasters, and have provided temporary billeting and feeding for the dispossessed.
4. USCG air and surface units possess SAR, maritime LE, and environmental protection capabilities.

4.6.11 Operational Considerations

In U.S. territorial waters, many of the responsibilities of the NCWC regarding NCW and environmental defense are consistent with the existing statutory functions of the USCG COTP (e.g., U.S. harbor defense commander). COMDTINST M16000.12, Chapter 1, references specific legal authorities under which the USCG conducts certain LE and security activities in and around ports. COMDTINST M16000.12, Chapter 7, provides detailed TTP for the conduct of PS operations in U.S. ports. COMDTINST M16247.2, Chapter 3, provides guidance for the conduct of interdiction operations. The following addresses statutory activities that may be employed to support in the U.S. NCW operations.

4.6.11.1 Security Zones

Security zones to safeguard harbors, vessels, and waterfront facilities against sabotage or other subversive acts may be established by the cognizant COTP under the authority of 50 USC 191 and 33 CFR 6.04-6, 165.30, and 165.5.

4.6.11.2 Safety Zones

Safety zones to limit access to vessels, structures, and shore areas for safety or environmental protection purposes because of hazardous conditions may be established by the cognizant COTP under the authority of 33 USC 1221, 33 CFR 165.20 and 165.5.

In U.S. waters, the USCG enforces naval vessel protection zones (NVPZs) around naval vessels (see Paragraph 4.6.13).

4.6.11.3 Regulated Navigation Areas

Regulated navigation areas to provide for the safety of navigation may be established, through the cognizant USCG district commander, under the authority of 33 USC 1221, 33 CFR 165.11/165.5.

4.6.11.4 Port Facility and Vessel Access Control

An NCC, NCWC, or harbor defense commander who determines that a need exists to restrict access to port facilities and vessels to essential personnel must request that the cognizant COTP institute access controls. See 33 CFR, Parts 6 and 125, and COMDTINST M16000.12, Chapter 3, for amplifying information.

4.6.11.5 Harbor Patrols

Harbor patrols can be implemented to monitor military essential waterways for unsafe conditions and conduct surveillance of anchorages, established water terminals, and other critical port infrastructure per 33 USC 1221.

4.6.11.6 Vessel Movement Control

Various authorities are available for controlling the movement of civilian vessels in the navigable waters of the United States. If the need for controlling the movement is based on safety or environmental concerns, the NCC/NCWC should refer the request to the cognizant COTP to take action under the Ports and Waterways Safety Act, 33 USC 1221 and 33 CFR 160. COMDTINST M16000.11, Chapter 1, contains amplifying information. If the need for controlling the movement of civilian vessels in the navigable waters of the United States is based on national security concerns, during times of declared national emergency, or when the President determines that national security is endangered, the NCWC should refer the request to the cognizant harbor defense commander (e.g., COTP) to take action under the authority of the Magnuson Act (50 USC 191) and 33 CFR6. COMDTINST M16000.12 contains amplifying information.

4.6.12 Coast Guard Maritime Domain Awareness

Maritime domain awareness (MDA) consists of comprehensive information, intelligence, and knowledge of all relevant entities and activities within the U.S. maritime domain that could affect the United States' security, safety, economy, or environment. The USCG will provide the capabilities, processes, architecture, and interagency relationships necessary to achieve MDA. Further, it will work with DHS, DOD, and other federal agencies to fully plan, coordinate, and integrate developmental, emerging, and existing MDA capabilities into a cohesive and seamless MDA system for the Nation.

The USCG has already established systems to track vessel movements within U.S. waters, through the National Vessel Movement Center and the Inland River Vessel Movement Center, and is working to expand that capability. The National Vessel Movement Center was established in October 2001 in Martinsburg, WV, to centralize the system of tracking vessel arrivals in U.S. ports through the 96-hour Advanced Notice of Arrival (ANOA) notification process. The Inland River Vessel Movement Center was established in April 2003 at St. Louis, MO, to track barges carrying certain dangerous cargoes (CDCs) in the vicinity of large population centers on crucial inland rivers. Some major ongoing USCG initiatives include:

1. Long-range (vessel) tracking
2. Nationwide automated identification system (AIS)
3. Joint harbor operations center (JHOC)
4. Integrated command centers (ICCs).

4.6.12.1 Long-Range (Vessel) Tracking

Long-range (vessel) tracking is intended to aid operational commanders in detecting, classifying, and identifying vessels so they can sort and prioritize those vessels that warrant further investigation.

4.6.12.2 Nationwide Automated Identification System

The AIS is intended to compliment long-range tracking by providing the near-shore/harbor component of the operational picture.

4.6.12.3 Joint Harbor Operations Centers

The JHOC model employs sensors and surveillance systems to assist in AT/FP activities under joint USCG-Navy control. The initial JHOC prototype locations are Norfolk, VA, and San Diego, CA. JHOCs will eventually be located in every key Navy port.

4.6.12.4 Integrated Command Centers/South Florida Surveillance Initiative

The ICC concept is based upon the idea of a single unified command within a specific geographic area. The creation of a prototype ICC in south Florida will further USCG efforts to improve the operational capability and enhance MDA within this critical area. The ICC will incorporate advanced sensor and surveillance systems with a robust C2 system, fusing the CTP as part of the larger COP. The increased use of technology (anomaly detectors, track management functionality, EO/IR sensors, fused COP, etc.) will reduce the need of patrolling cutters for surveillance missions near the port.

4.6.13 Protection of Naval Vessels

Effective beginning June 15, 2002, the USCG established regulations for the safety and security of U.S. naval vessels in the navigable waters of the United States. These regulations, published in 33 CFR 165 subpart G, establish a NVPZ around U.S. naval vessels greater than 100 ft in length overall at all times in the navigable

waters of the United States, whether the large U.S. naval vessel is underway, anchored, moored, or within a floating drydock, except when the vessel is moored or anchored within a restricted area or within a naval DSA. As defined in the regulation, a NVPZ is a 500-yd regulated area of water surrounding large U.S. naval vessels that is necessary to provide for the safety or security of these vessels. Figure 4-3 depicts an NVPZ.

When within an NVPZ, all vessels shall operate at the minimum speed necessary to maintain a safe course, unless required to maintain speed by the navigation rules, and shall proceed as directed by the USCG, the senior naval officer present in command, or the official patrol. When within an NVPZ, no vessel or person is allowed within 100 yds of a naval vessel unless authorized by the USCG, the senior naval officer present in command, or official patrol.

4.6.14 Force Protection and Physical Security at DOD Facilities

DOD has primary responsibility for protecting its own facilities, including NCW force encampments. This authority extends to waters that are exclusively under DOD control. DOD has comprehensive policies and procedures to prevent and respond to terrorist activities. FP on both the shore side and waterside of a DOD facility is the responsibility of the facility commander.

4.6.15 Use of Force Policy

USCG forces shall enforce federal law and maintain public safety; all personnel assigned LE duties shall be fully qualified per COMDTINST M16247.2. The USCG UOF policy for law enforcement operations (LEO) applies as modified by the operational commander. Personnel should always be prepared to respond professionally to provocation from any group. When necessary to protect the safety of those involved, actions should remain impartial, minimize UOF, and strive to defuse enflamed situations. In all cases where any party violates, or is about to violate, federal law, USCG personnel will use all reasonable force to keep the intruders from entering the security zone. It cannot be assumed that intruders are merely protesters wishing to exercise rights of free speech. Strive to maximize effective use of officer presence and verbal commands.

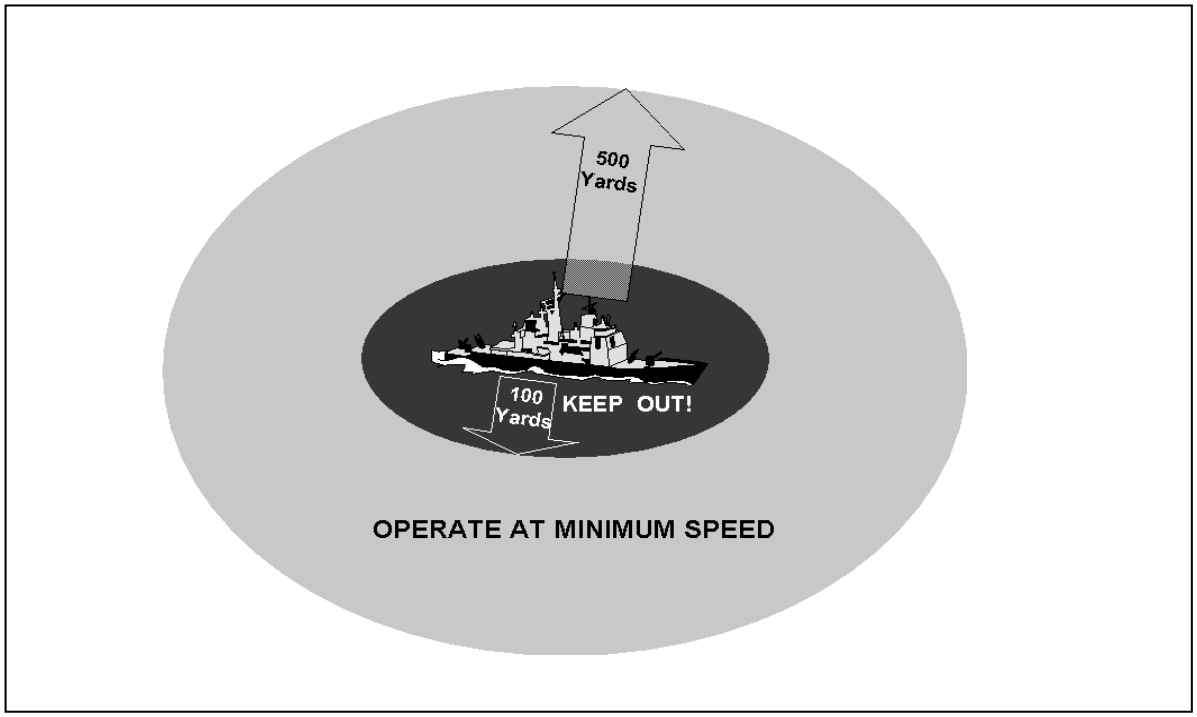

Figure 4-3. Naval Vessel Protection Zone

Make assertive (vice aggressive) use of public address systems and very high frequency-frequency modulation (VHF-FM). Provide a reasonable opportunity to comply. If a situation develops where there is significant risk to human safety or property, use the minimum force required to stabilize the dangerous situation and enforce the law, up to and including placing a boarding team aboard a violating vessel. In a situation involving an apparent violation of the law without significant risk to safety or property, document the violation for further processing; take immediate, prudent actions if hostilities or grossly negligent operations are observed. Standard UOF policy applies IAW section 12.d.8 of the above instruction and specifically describes ramming incidents. Any actual or attempted ramming is considered an assault. If a ramming or attempted ramming poses a threat to either a USCG unit or a third party, the situation may be considered one of self defense or defense of others. The formal ROE regimes the USCG will apply are unit and collective self-defense. Both require demonstrated hostile intent or observed hostile action. When applying these rules, USCG forces shall use the minimum force required and must stop the UOF if a subject complies with lawful requests or breaks off their hostile intent/action. Unit self-defense is defined as the responsibility of CO/officer in charge (OIC)/coxswains to protect the lives of their crew. Neither national self-defense (the responsibility of a unit or individual to assist or defend U.S. personnel and their property, other than U.S. forces in the area) nor collective self-defense (the responsibility of a unit or individual to assist or defend other countries' nationals threatened by hostile intent/action) is not inherent and must be requested by the unit to the proper level of approval. However, it is the responsibility of a HN to protect all persons regardless of nationality to the best of its ability and to equal extent when on its land or in territorial waters. Obtain theater- and mission-relevant ROE card.

The requirement for absolute professionalism cannot be overemphasized. Protest groups may tempt law enforcement officials into taking aggressive actions against them to which may then be exploited through the media and may act at all hours due to international media deadlines. USCG personnel should not hesitate to proactively approach members of the public to let them know USCG expectations of behavior.

USCG personnel should allow individuals their constitutional right to peacefully protest, outside of designated regulatory regimes, but shall also remain vigilant to maintain security of COTP enforcement.

4.6.16 Domestic Terrorism

The FBI is designated the LFA in responding to domestic maritime terrorist incidents out to 12 nm. As the nation's primary maritime LEA, the USCG will be substantially involved in responding to any domestic maritime terrorist incident. The National Guard has the responsibility to respond to domestic terrorist attacks when WMD are used. FEMA is the LFA for the coordination of consequence management for a WMD incident response. The US Joint Forces Command (JFCOM) coordinates military support to civil authorities (MSCA) for the consequence management phase of a WMD incident using procedures found in USJFCOM CONPLAN 0500.

The International Maritime and Port Security Act (46 USC 1801-1809), the amended Ports and Waterway Safety Act (33 CFR 1221, et seq.), and 33 CFR 160 authorize the USCG to carry out specific measures. The measures include inspections, port and harbor patrols, establishing security and safety zones, land developing CONPLANs, and procedures to respond to acts of terrorism.

4.6.16.1 Interagency Coordination in Response to Acts of Terrorism

Coordination of responses to domestic terrorism incidents involves the interagency process and the use of the ICS to ensure unity of command. For additional information see JP 3-07.2, Joint Tactics, Techniques, and Procedures for Antiterrorism. (It may be found in the Joint Electronic Library (JEL) at www.dtic.mil/doctrine/jel/index.html.)

4.6.16.2 National Contingency Plan

The National Oil and Hazardous Substances Pollution CONPLAN, more commonly called the National Contingency Plan (NCP), is the federal government's blueprint for responding to both oil spills and hazardous substance releases. The NCP is the result of our country's efforts to develop a national response capability and promote overall coordination among the hierarchy of responders and CONPLANs. Terrorist acts that result in hazardous material and/or pollution incidents are responded to per local USCG and interagency CONPLANs and

the NCP. The potential exists for additional DOD assistance from the JTF-CS if the hazardous material incident is classified as a WMD incident.

Under this plan the USCG has maritime federal on-scene coordinator responsibilities. The NCP can be found at the Environmental Protection Agency (EPA) website: www.epa.gov/oilspill/lawsregs.htm.

4.6.17 Intelligence Support

See NWP 3-10, Chapter 4 and Appendix G in this publication for support on intelligence-gathering related to NCW operations in the United States.

4.6.17.1 United States Port Threat Assessment Study

SDDC Transportation Engineering Agency (SDDC-TEA) manages the Ports for National Defense (PND) Program. SDDC-TEA has the responsibility to conduct and issue port threat assessments for each U.S. port that has the potential for use as an SPOE. The PND program's primary goal is to ensure the identification, adequacy, and responsiveness of defense-important U.S. port infrastructure in both peacetime and wartime. SDDC-TEA does this by analyzing strategic planning documents and providing input into the deliberate planning process, and coordinating workload requirements with COCOMs, SDDC-DSC, and MARAD.

HDCs may request the port study for ports in their AO via their MARDEFCOM from SSDC-TEA, 720 Thimble Shoal Boulevard, Newport News, VA. The SSDC-TEA's website address is: www.tea.army.mil/sitemap.htm. The USCG Headquarters Maritime Safety Waterways Protection Branch provides guidance to USCG MSOs for the development of port threat assessments that take the port infrastructure–based SDDC-TEA studies and integrate them with an assessment of the waterways threat. The MSO has the ability to field a port assessment team made up primarily of USCG Reserve port security specialists (PSS).

4.6.17.2 Liaison with Local Intelligence Sources

Port-level intelligence information is usually most readily available from organizations located at the local port. Local LEAs, and local offices of state and federal agencies often have the best information available concerning threats in the local area. The harbor defense commander should use the PRC organization to establish close liaison with local intelligence sources. The NCIS, Air Force Office of Special Investigations (AFOSI), Army criminal investigation division (CID), USCG Investigative Service (CGIS), FBI, and local LEAs can be appropriate sources for intelligence. Give the highest priority to reviewing legal restrictions against gathering intelligence directed at U.S. citizens.

4.6.17.3 Access to National Level Intelligence

Some general intelligence information is available via the SECRET Internet Protocol Router Network (SIPRNET). When intelligence requirements cannot be satisfied at the port level, the harbor defense commander and MARDEFCOM will submit a request for information (RFI) via the MDZ TF chain of command.

CHAPTER 5

Harbor Approach Defense

5.1 PURPOSE

This chapter describes the HAD mission and the tactics employed by NCW forces. These forces protect and defend strategic shipping by ensuring the unimpeded use of the littoral region (deep-water approaches to ports and anchorages) by establishing a DSA and, as appropriate, denying the use of those areas to enemy forces.

5.2 OVERVIEW

HAD involves the employment of NCW forces (surface and air) to conduct coastal sea control by tracking, identifying, and interdicting, if necessary all surface and subsurface threats within the designated DSA. HAD operations are an extension of PSHD operations into the transition zone between the "blue water" environment and the tidal or shallow "brown water" coastal environment and (for major ports) are normally conducted by Navy and USCG ships trained in MIO and capable of remaining dozens of miles offshore for weeks at a time, operating day and night in all weather. This area normally extends well beyond territorial waters to ensure that timely intercepts of inbound shipping are made; boardings are completed prior to entry to minimize commerce disruption and to ensure that WMD remain well outside valuable ports.

HAD operations are overt and defensive in nature, conducted primarily by ships and aircraft operating typically 3 to 50 miles offshore in military rear areas to defend critical logistics against adversary threats. NCW assets supplied by Navy and USCG will be surface vessels and aircraft, with the aircraft being a combination of rotary- and fixed-wing aircraft. While patrolling, ships and cutters will normally be under the TACON of the COTP or assigned in support of the COTP when conducting U.S. HLD operations, and under the TACON of the NCWC when OCONUS or conducting US HLD operations. Aircraft will be under the TACON of the senior (or most capable) ship on scene conducting HAD. The focus of operations in HAD is to:

1. Show an overt harbor-approach presence by conducting area patrols to deter or preempt attacks.

2. Investigate and intercept inbound shipping, ensuring that all or some are boarded and searched for hazards that might intentionally (or unintentionally) pose a danger to the port, while protecting outbound shipping.

3. Extend visual and sensor detection and intelligence collection capabilities.

4. Provide an immediate armed response upon seaward threat detection or classification.

5.3 MISSION

The initial overseas primary mission of HAD operations is to provide for the safe passage of strategic sealift (including MPSs) to and from deep water through the designated DSA to ports, harbors, anchorages, or logistics over-the-shore (LOTS) locations, and to deny use of these same areas to the enemy. The primary U.S. mission and subsequent overseas primary mission of HAD operations is to ensure the safety of friendly and neutral shipping in and near the port, and to deny entry and operation of hostile forces.

5.4 COMMAND AND CONTROL ORGANIZATION

The HAD C2 task organization is established by the operational commander and will vary depending upon the size of the port geographically, and in terms of the number and size of ships entering and departing. Usually one ship's CO will be designated the on-scene commander (OSC) and will take TACON of other ships and aircraft within the harbor approach to coordinate intercepts and boardings. This ship will in turn report to either the COTP (in the United States during HLS) or the NCWC (OCONUS or in the United States during HLD). A major port with three traffic separation lanes entering a central precautionary area might require four ships (one in each lane and a central coordinating ship covering a holding area) and several aircraft providing continuous coverage of areas not covered by radar or other sensors flying from several airfields.

5.4.1 Sea Control

The operational commander has overall responsibility for sea control tasks to protect friendly assets in the designated area and to counter enemy efforts. HAD operations are a subset of sea control and involve the surveillance and protection of friendly sealift assets, friendly naval vessels, and neutral shipping using the SLOCs that represent the sea approaches to harbors, ports, or the LOTS area. HAD operations are by definition stationary and should not overlap or interfere with traditional blue water sea control operations in terms of C2, although blue water forces may transit through a HAD area. Control of HAD forces may be transferred from the NCWC to the NCC or a naval task force (TF) commander when they are needed to conduct coastwide MIO or other naval sea control operations. However, their absence from the HAD mission will greatly decrease the safety of the port as PSHD forces are trained in escort and HD, not boarding operations.

5.4.2 Tactical Control

In most overseas and U.S. HLD NCW scenarios, the NCWRON will exercise TACON of assigned HAD forces and designated supporting forces, including patrolling aircraft. The MIUWU and the senior (or most capable) HAD ship or cutter will maintain a tactical picture of the HAD area. The RSSC watch will establish radar, sonar, ES, thermal, and visual image surveillance to identify, designate, and track COIs anywhere within the assigned HAD and will use the ships and cutters within the harbor approaches (about 3 to 60 miles offshore depending on the size of the harbor) and aircraft patrolling the approaches to build and extend the tactical picture. COIs will be classified under criteria as designated by the officer in tactical command (OTC), but all inbound neutral vessels must be checked for intentional threats (e.g., WMD or use of a large merchant as a battering ram) and unintentional threats (e.g., failure of steering gear, unsafe HAZMAT stowage, accidental groundings, etc.) to the port. External voice (HF, UHF, VHF, SATCOM, landline) and GCCS-variant reports from the MIUWU and OSC on COIs will occur at detection, classification, and identification and at specified intervals. The results of boardings must be sent to the NCWC or COTP before entry permission is granted to a neutral vessel. COTPs and NCWCs may also want to consider imposing advance notification requirements or other actions to improve their TACON ability. U.S. ports currently require a 96-hour advance notice, and failure to notify can be grounds for refusal or can result in a very thorough and time-consuming preentry inspection. High interest vessels (HIVs) are those that are deemed to potentially pose a threat due to intelligence, cargo, crew nationality, or other factors used by the COTP or NCWC and should be actively searched for and intercepted as early as possible.

5.5 ROLE OF NAVAL COASTAL WAREFARE FORCES

Secure movement of friendly and neutral shipping and warships in the sea defensive area is an overriding operational principle. Patrol boats and ships will vary depending on the tactical objectives of the HAD mission, the warships and shipping present in the HAD AO, and the tactical environment. To establish and maintain security within the AO, NCW forces conduct harbor security patrols and show of force patrols, or harbor approach inspection patrols.

5.5.1 Security Patrols

These are meant to deny the use of the DSA to the enemy, interdict the movement of enemy forces and contraband, provide security for civilian and military waterborne traffic transiting the area and shore-side facilities

and bases, and gather intelligence. Boats should patrol randomly in the harbor security zones, varying course and speed frequently to avoid forming patterns. Use of "sprint and drift" tactics can improve the crew's ability to note moving contacts as well as hear small, unlit craft such as rubber boats.

5.5.2 Show of Force

At times it will be necessary to show presence to deter hostile action within the harbor. Some goals for this are to conduct aggressive patrols, conspicuously anchor at highly visible locations, establish waterborne guard posts (WBGP) at chokepoints and key locations, and establish and maintain shore bases throughout the AO.

5.5.3 Inspection

The harbor approaches extend offshore. After an initial military action, these approaches will often be filled with shipping that is neither clearly friendly nor hostile. Most of these ships will have legitimate business in the port, and denying them entry may cause significant economic harm to the HN and possibly other countries as well. They must be inspected to ensure that they will not cause harm, intentional or unintentional, to the port. NCW boats provide internal harbor security, but their extensive training and core competencies do not include visit, board, search, and seizure (VBSS). Navy ships with trained boarding teams (or with sea-air-land team (SEAL) teams embarked) and USCG cutters conduct these boardings in the approaches before ships enter the port. Navy ships and cutters can remain underway for weeks at a time and ensure that problems are defused before an inbound ship is close enough to present a threat to the port. Once an inbound ship is screened by the Navy ships or cutters and is cleared to enter (by NCWC or COTP), NCW and USCG boats escort the ship (if necessary) and provide security in and near the mouth of the harbor.

5.6 LIAISON WITH NON-NAVAL COASTAL WARFARE FORCES

Commanders should coordinate their efforts to ensure synchronization of operations in one coastal area with operations in adjacent areas. Where operations overlap with other commands, law enforcement authorities, and allied or HN forces, liaison must be established to ensure legal authority to operate exists and to coordinate and exchange information concerning activities.

NCW forces may request services from other DOD organizations, LEAs, HN law enforcement and HN armed forces. Additionally, other U.S. Navy forces may provide boat interdiction assets to the NCWRON/MIUWU. These forces include, but are not limited to, special boat units (SBUs) and NBG assets. These assets are assigned and coordinated by the operational commander, and their levels of training and capability must be considered.

NCW patrol craft units normally integrate their operations with surveillance systems, static weapons emplacements, and HN land and waterborne forces. Embarking HN LNOs often improves communications and authority with local boat traffic, and provides greater knowledge of the OPAREA. Port security boats must also coordinate with offshore harbor approach ships and cutters from time to time, and distances and operations may require the NCWRON or COTP to assist.

5.7 OPERATIONAL CONSIDERATIONS

The following information summarizes operational considerations associated with deploying NCW forces to conduct HAD.

5.7.1 Site Survey

NCW personnel should be part of any SLRP or advance party in order to conduct a site survey for selecting a campsite. The site must be defensible against a level I threat.

Other assets may be required to assist NCW forces with the deployment of surveillance sensors and with the movement of equipment from the debarkation point to the operational site.

5.7.2 Harbor Familiarization

The first measure for any boat deployment is to perform a detailed reconnaissance sweep. This is done by a minimum of two boats, always operating within sight of each other. This sweep is done at slow speed to avoid floating or underwater hazards and to facilitate log keeping and chart making. Coxswains verify charted aids and hazards to navigation, tide range, and currents, and identify possible threats, likely targets, and potential ambush sites that could be used against them. If suitable nautical charts are not available, the boat crews are required to draw detailed harbor maps. At this time, radar mapping of MIUWU MSP and PSP blind spots should be conducted. The boats should look for any communication "dead zones" where radio transmission and reception are poor or impossible.

The layout of patrol sectors must take these blind spots and dead zones into consideration. Use of "five minute" radio checks during the sector familiarization will accelerate the identification of communication dead zones. The installation of taller base station antennas or repeater stations may be necessary.

Boat crews, ships, aircraft, and NCWRON watch standers should coordinate a set of navigation references prior to commencing operations. This facilitates easy, rapid communication of contact reports and movement direction. For example, the boat pier may be "Point Alfa," the end of a breakwater "Point Bravo," and so forth. Hence, a contact can be reported as being 500 yds north of Point Alfa, and an intercept and escort (I&E) boat could be directed to proceed to a point 1,000 yds east of Point Bravo. This method is much faster and easier than using latitude/longitude for identifying positions and is more easily modified from time to time to increase security. One application where latitude/longitude references is preferred is when placing sonobuoys IAW a written sonobuoy plan, because boat crews can program the points into GPS and navigate throughout the entire plan.

The harbor familiarization should include type and amount of shipping in and out. In most cases, traffic resumes even if stopped for several days during an invasion or occupation. It helps to know what type and amount of shipping and traffic to expect. Inbound shipping needs to be inspected for threats and this burden can be tremendous if the port is a major one.

After the initial invasion or occupation of a port overseas, the "blue water" forces need to depart. HAD likely needs to transfer to a few Navy ships and/or USCG cutters that remain behind offshore. The OSC should meet and discuss operational and logistics goals with senior NCWRON staff. Ideally the supporting ships should send a representative, and pilots who will be flying the approaches each day should attend. As time goes by and turnovers take place, a standard briefing package for new HAD ships and pilots is useful.

5.7.3 Weather Considerations

NCW boats can operate effectively in a range of weather conditions; however, weather extremes affect mission capabilities and crew endurance. Prioritization of HVAs for protection may be necessary, in order to match the operational risk assessment with force capabilities.

Likewise, ships and cutters conducting HAD inspection patrols offshore will be affected. Although fatigue will not normally be an issue, the ability to safely intercept and accompany inbound ships in poor visibility with reduced radar ranges will decrease. Further, the ability of a fully outfitted inspection team to climb 50 ft up a tanker's Jacob's ladder in the rain at night will be a safety concern that can only be evaluated on scene. Ships that cannot be boarded and inspected should be required to anchor at a distance from the port that would preclude danger from a WMD detonation. Since cellular phones can be used to detonate bombs, this distance should normally exceed cell phone range. If the depth and topography prevent anchoring, these vessels must be required to steam slowly outside a prescribed distance. This can be problematic due to language barriers and reduced visibility and radar ranges, or if shipping backs up, increasing the number of vessels "meandering" outside a port. Plans should be developed to accommodate this based on shipping volume and anticipated periodic bad weather. Plans should either direct the inbound neutral shipping back to sea, or direct them to predesignated holding areas outside the port.

5.7.4 Patrol Orders and Reports

Patrol orders for HAD operations are written by the boat unit commander. These orders utilize the standard five-part format situation, mission, execution, administration and logistics, and command and signal (SMEAC). The boat unit watch officer should give patrol orders to the boat crew. An example of the specific SMEAC format is found in Appendix K.

All boat crew COIs and end-of-mission debriefs will be reported using the standard SALUTE format. An example of the specific SALUTE format may be found in Appendix F.

Navy ships and USCG cutters shall receive an OPTASK HAD from the NCWC or COTP. This OPTASK shall contain basic guidance, chain of command, communications frequencies and call signs, coordinating instructions, logistics considerations, ROE, and predesignated reference positions, and schedule. In addition, daily updates on inbound shipping (e.g., from a 96-hour notice of arrival summary) and patrol aircraft availability should be provided to the OSC.

5.8 TACTICAL CONSIDERATIONS

The fundamental concept in HAD operations is defense in multiple defense zones and in multiple layers.

5.8.1 Intelligence and Surveillance Plan

From both a mission planning and a deployment perspective, it is extremely important that HAD surveillance assets be deployed in a layered and overlapping plan. It is the responsibility of all units to ensure that contacts are coordinated and reported as quickly as possible. Contact interdiction in the littoral does not allow time for in-depth contact analysis. MIUWU contacts in the harbor and in the near coastal region are detected by multiple sources (radar, sonar, visual, TIS/VIS and ES), and must be passed quickly with the best evaluation possible to the operational commander who directs the boats (or Navy ships as appropriate) for interception. Farther offshore Navy ships and USCG cutters will be stationed in the inbound approaches to detect and respond. Farther still, patrol aircraft (fixed- and rotary-wing) will detect inbound ships to ensure that Navy ships and USCG cutters can intercept in time. Ships and aircraft will report contacts to the NCWC. Ideally, intelligence and the requirement for prearrival reporting (often 96-hour advance notice) will provide cueing for ships and planes prior to actual radar detection. To accomplish this will require two-way communication between the NCWC and the OSC.

5.8.2 Mobile Inshore Undersea Warfare Unit Capability

Whenever operationally possible, the MIUWU RSSC should be deployed to provide comprehensive radar, TIS and VIS coverage of the surveillance area.

The sonar capability should be deployed if operationally feasible. All sonar contacts must be correlated with any visual or radar contacts. The LASS and sonobuoys should be deployed together to enhance coverage and eliminate blind spots. When this coverage is combined with radar, visual, TIS/VIS, and ES, the MIUWU can provide a wide surveillance area in and around the harbor.

5.8.3 Boat, Ship, and Aircraft Capabilities and Planning

In and around the harbor, normally two or more patrol boats operate together for coastal sea control operations, to ensure mission effectiveness, mutual support, safety, and ambush protection. Single-boat operations are only to be undertaken in a safe haven under low-threat conditions and will never be undertaken in the approaches or out in the open ocean.

The patrol boats may be supplemented in a protected harbor by COOP, such as landing craft mechanized (LCMs), LCUs, etc., with weapon emplacements. These craft may be anchored or stationed in a position to augment the boat patrols. This may be especially important when a limited number of patrol boats are available. To integrate other such craft into a port defense plan under a workable C2 structure, issues of TACON over these craft and the

parameters of operation must be resolved. An HN boat or COOP may also serve as a backup boat. In this scenario it is imperative that all boats are operating using the same doctrine, or forces must be segregated to ensure deconfliction and prevent fratricide.

Boat capabilities are further explained in the appendices of NWP 3-10 and in Appendix L of this publication.

Navy ship capabilities and most large USCG cutter capabilities are described in appropriate class tactical manuals (CTMs) in the Navy Doctrine Library. A summary of USCG cutter capabilities is contained in NWP 3-10. In general, each class will have an optimal on-station duration and each will have specific logistics requirements (LOGREQs) (water, fuel, etc.). The NCWRON must ensure that Navy ships and USCG cutters conducting HAD are relieved on station to prevent gaps in coverage.

Aircraft coverage of the outer and inner approaches should come from a mixture of fixed- and rotary-wing aircraft. Helicopter flights should originate and terminate ashore to reduce warship and cutter crew fatigue and increase their availability for intercepts and boardings. Helicopters should patrol the inner approaches and precautionary area, and fixed-wing aircraft (ideally with 6–12 hours of endurance) should patrol the outer approaches.

5.8.4 Harbor Security Patrols and Harbor Approach Patrols

An inner defensive layer is provided by MIUWU sensors and by periodic harbor security patrols undertaken by security boats to monitor activities and vessels in the harbor, and to detect possible threats to friendly vessels and facilities. These patrols provide good deterrent value, and will be conducted randomly and at slow speed. Often these patrols should be conducted prior to or after another scheduled evolution (e.g., HVA escort, sonobuoy placement, etc).

Thorough logs should be maintained. These logs will include dates, times, areas patrolled, and details on all vessels encountered. The vessel information should include ship's name, country of registry, type of vessel, draft, course, speed, position, and any other pertinent information.

Specifically, during a security patrol boat crews should:

1. Check all shipping, noting any HIVs, (SIVs), and COIs.
2. Inspect aids to navigation.
3. Inspect submerged or partially submerged pilings and wrecks.
4. Establish contact with shore-side security patrols in the coastal area.
5. Inspect barriers if applicable.
6. Cover the total patrol area in a random pattern on a nonregular schedule.

In order to avoid establishing regular, predictable patterns when patrolling boats, crews should employ an effective technique called the "dice plan" patrol as shown in Figure 5-1. The boat coxswain marks six numbered positions on the chart within the patrol area. Using a single die, the coxswain rolls the die and proceeds to the indicated position. This is repeated at each position. In this manner, the boat coxswain can be assured of a totally random patrol that cannot be discerned by the enemy. High-speed transit to the different areas can increase the level of deterrence as long as slow patrolling of the numbered position is conducted once the boat has reached its destination.

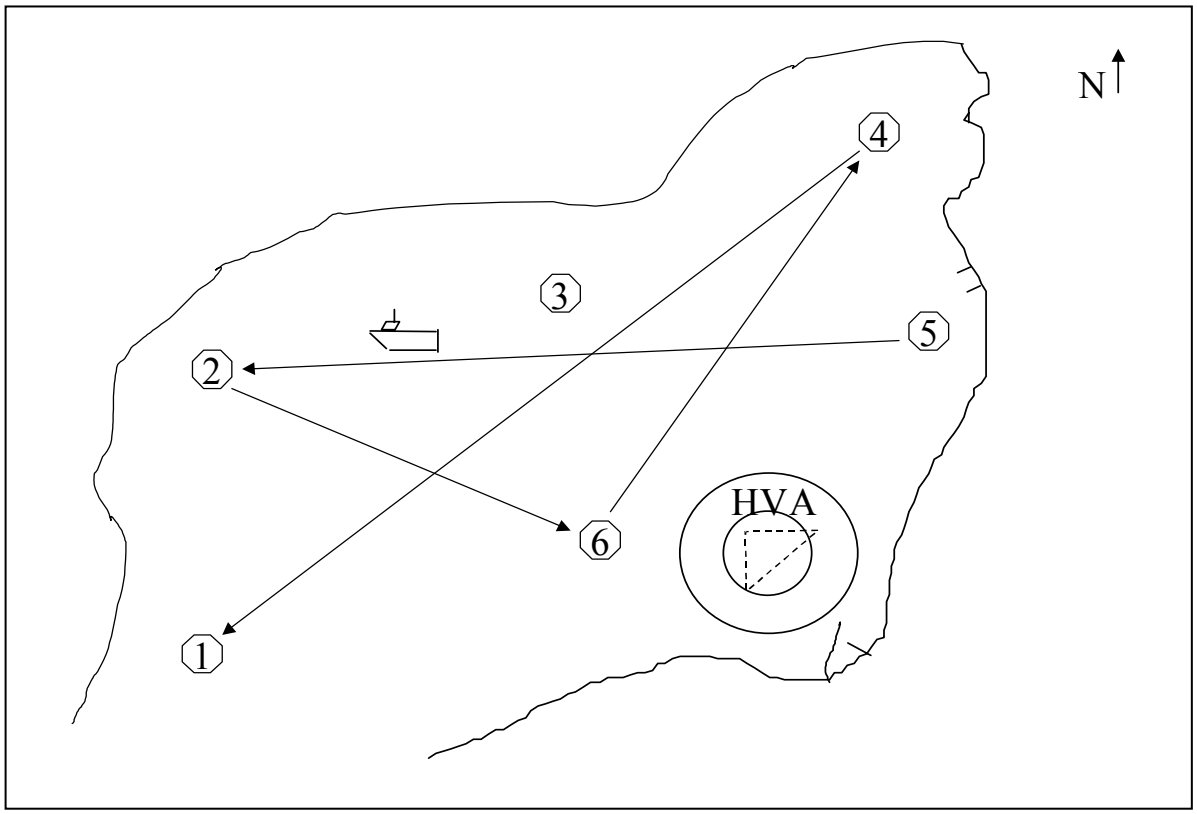

Figure 5-1. Dice Plan Patrolling

Warships and cutters should be stationed outside the harbor in the approaches to provide a middle defensive layer that overlaps with MIUWU sensors. The number and location of MODLOCs or barriers will depend upon the harbor. Often an inner "pouncer" can catch "leakers" and facilitate communications with security boats and the NCWC and between the outer HAD warships and cutters. Rotary- and fixed-wing patrol aircraft will often have sufficient altitude to communicate with the "pouncer" making this the ideal location for the OSC. When coastal topography prevents this, it may be best to have the OSC operate farther out and use the "pouncer" as a relay. A sample geography in Figure 5-2 shows typical aircraft patrol areas with warships and cutters positioned to provide optimum intercept coverage and facilitate communications at a major port. Rotary-wing aircraft patrol inside the indicated arc and fixed-wing aircraft patrol outside.

The HAD warships and cutters should sprint out to intercept inbound ships at a distance that permits them to accompany the ships at a safe but slow speed and complete the boarding prior to arrival at the precautionary (central) area where the OSC is located. Typically, boardings that run over 1–2 hours will require the inbound ships to stop or proceed at bare steerageway. The HAD warships should then reposition prior to the next arrival. If air coverage is adequate, the warships and cutters can move from their lanes into other lanes to provide backup. Even if there are traffic separation lanes as shown in Figure 5-2, some inbound merchant ships will not enter these lanes, and warships, cutters, and aircraft must be ready to fall back and intercept.

The NCWC or COTP will inform the OSC well in advance of vessels inbound for that day. The information should include anticipated time of entry as well as the entries anticipated for the next three days and which ones must be boarded before entry. Information should also include name, cargo, crew information, and any pertinent details. Ships and aircraft will look for the inbound vessels keeping in mind that weather and other factors often affect arrival times reported to agents by up to 12 hours. Once a vessel is located, then a decision to board is made based on info from the warship and NCWC information. Upon completion of a boarding, the warship or cutter should call the NCWC or COTP and request entry clearance for the inbound. Security boats may escort the inbound if desired.

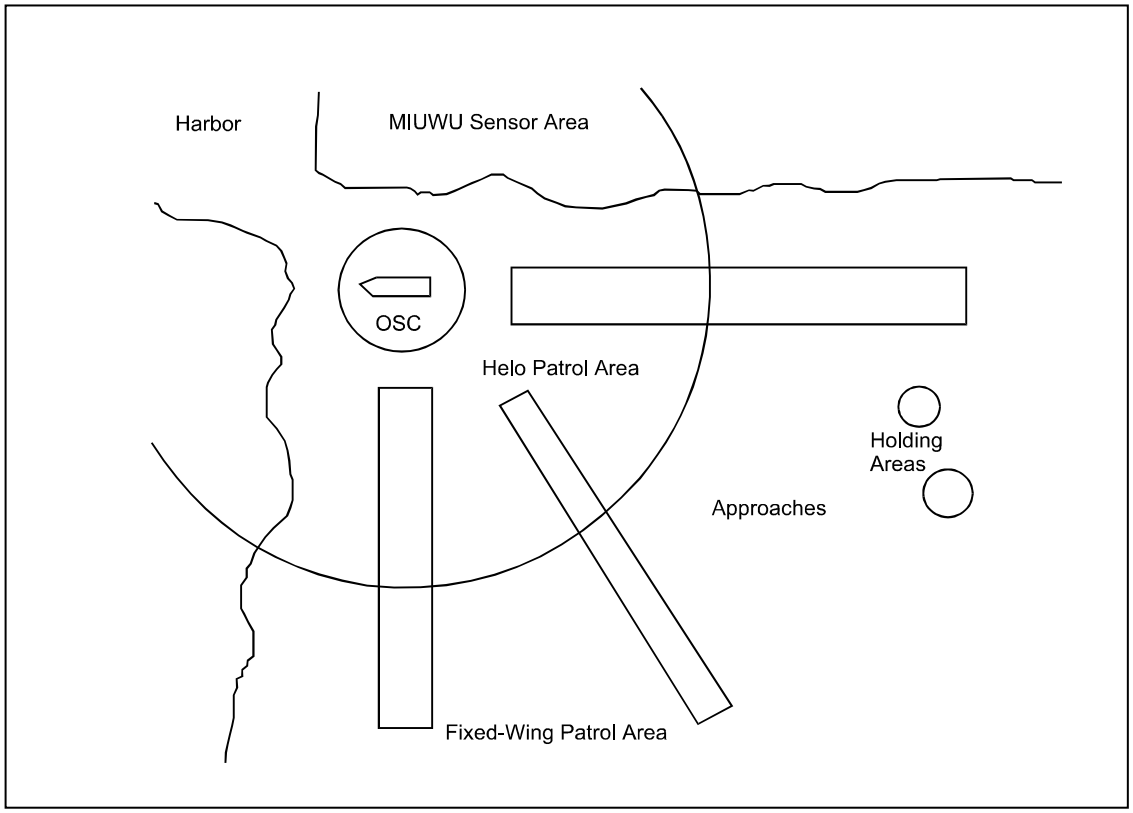

Figure 5-2. Harbor Approach Defense

Any time a threat is observed or expected, warships and cutters will respond based on the ROE. The NCWC should be prepared to obtain combat air support on short notice, but warships and cutters should be tasked appropriately to the general threat environment and should normally be able to handle any challenge that arises.

5.8.5 Considerations by Vessel Type

Daily tonnage and vessel type will vary significantly from port to port. Boarding teams will need to check living spaces, machinery spaces, containers, and holds (including those containing hazardous and possibly explosive cargoes). Boarding teams must be alert for WMD, conventional bombs, hijackers, and even unintentional hazards such as those posed by ships with old and unreliable steering gear, faulty engines, or generators. Certified and current USCG marine inspectors can greatly assist with this process; one should be assigned to each boarding team whenever possible.

5.8.5.1 Tankers

Tankers often carry cargoes in bulk that are inherently dangerous including flammable liquids, otherwise hazardous liquids, and liquefied gases. They make attractive targets to enemy forces due to the magnified effect of a successful attack. Outright explosions, toxic spills that force personnel withdrawals, and spills that require resources to contain them all impair an active port. These ships must be carefully inspected for intentional and unintentional destructive potential, and must be escorted by security forces within the harbor. Boarding teams will be greatly limited in their ability to determine level of risk without a certified and trained USCG marine inspector in the boarding team. Not all tanks can be accessed at sea even by certified inspectors, and some vessels may need to be denied entry simply due to country of origin.

5.8.5.2 Container Ships, General Cargo Freighters, and Coastal Freighters

Large container ships may have hundreds of stacked containers onboard. Opening and searching each at sea is impossible and some cargoes can be harmed by opening. Country of origin data is critical. Boarding teams will still want to search living spaces, study crew documentation, and look at ship's machinery. NTTP 3-07.11, Maritime Interception Operations, contains excellent information on factors to consider. Smaller container ships, general cargo freighters, and coastal freighters can often be inspected satisfactorily at sea, but care must be taken and boarding teams must be adequately trained in confined space entry, HAZMAT, and MIO procedures.

5.8.5.3 Tugs and Tows

Tugs and towed barges can be particularly dangerous to board at sea. Tows should be shortened prior to boarding, and speeds reduced to the minimum necessary to keep the barge under control. There will often be no crewman on a barge to lower an accommodation ladder. If the country of origin or crew manifest indicates a potential threat, it may be necessary to turn the vessel away due to the difficulty presented in searching a barge at sea. Advance operations at the SPOE can facilitate inspection operations at the SPOD.

5.8.5.4 Fishing Boats

Fishing boats range in size from over 100 meters/2,000 tons to less than 5 meters. They are found in territorial seas and well out into the approaches of most harbors. There are often living compartments, processing areas, and freezer spaces found in larger vessels. Small boats may be of an open construction and completely visible. Random inspection of vessels departing the harbor will be conducted before heading out to fish and will be monitored by security boats while fishing in the harbor and by warships and cutters while fishing in the harbor approaches. If a list is maintained of inspected and cleared fishing vessels, they will be easier to detect when a fishing vessel is entering the approaches from seaward and needs to be boarded by a warship or cutter.

5.8.5.5 Working Harbor Craft

Harbor craft range in size from 25 meters/50 tons to less than 5 meters. These craft could include tugs, ferries, pilot vessels, push boats, and a myriad of other types of working craft designed for specific functions. PS forces need to inspect and clear these vessels for operation in the harbor and monitor their movements. Exclusion areas can be used to reduce the level of effort needed to protect friendly and neutral ships from potentially harmful harbor craft captured or used by enemy agents or forces.

5.8.5.6 Pleasure Boats

Pleasure boats normally range in size from 50 meters/100 tons to less than 5 meters and are the most complicated type of vessel to inspect, although smaller boats will have less area to deal with. They usually have numerous living compartments because of industry design criteria to provide maximum comfort for the passengers. PS forces need to inspect and clear these boats for movements in the harbor and monitor their movements, or enforce exclusion areas to reduce the level of effort needed to protect friendly and neutral ships from potentially harmful pleasure boats used by enemy agents or forces.

5.8.6 Intruder Vessel Evasive Tactics

NCW forces shall be aware of the tactics that may be employed by intruder vessels to avoid detection of hostile intent. These may include:

1. Using radar reflective decoys to divert patrols from the area
2. Using a larger vessel as a radar screen by hiding in the ship's radar shadow
3. Operating disguised as legitimate commercial or pleasure craft

4. Using multiple boats as decoys to lure patrol boats from the area

5. Using a larger vessel to transport small boats and personal watercraft

6. Hijacking a legitimate crew and vessel and using the vessel as a ram or decoy

7. Placing a bomb in a container or in the cargo of a legitimate freighter or tanker and activating the bomb by cell phone from shore or other means to block a channel, damage port infrastructure, or obtain terrorism value

8. Placing a limpet mine on any legitimate inbound vessel and scuttling it in a channel

9. Using a smaller boat or vessel to get alongside and detonate a weapon against a warship or a neutral freighter or tanker.

It should be noted that in many of the AOs where NCW forces may be required to operate, waterborne smuggling operations are prevalent. Patrol boats should not automatically assume all evasive vessels are a FP threat.

5.8.7 Inspecting Contact of Interest

NCW security boat core competencies do not include VBSS, boardings, or shipboard inspections to enforce international law, United Nations (UN) sanctions, or conduct any other law enforcement action. Although military personnel can enforce international law if tasked, and, if acting in support of HN agencies or forces as contemplated by the SOFA or other international agreements, training of security boat personnel for this capability is precluded due to preexisting extensive NCW training requirements. HN military, law enforcement officers, or specially trained Navy or USCG boarding teams may be embarked aboard NCW patrol craft to fulfill this requirement.

5.9 MISSION PLANNING

The NCWC is responsible for the planning and conduct of NCW operations to ensure maritime strategic mobility and provide a safe haven for U.S. and allied forces in or near a port. All units assigned to PS and HAD operations should be included in the mission-planning process to maximize overall effectiveness and surveillance capability of assigned tasking.

When alert orders or planning orders (PLANORDs) are received and forces allocated, NCW planners gather representatives from the units involved to effect coordination of tactics, C3 issues, safety and deconfliction, and UOF/ROE.

5.9.1 Sensor Capabilities

Deployment of PS assets should always optimize sensor capabilities. LOS is required for most sensors, and therefore major obstructions such as buildings, bridges, mountains, other vessels, etc., should always be considered. Surveillance assets may be shifted from time to time, but generally once in place will remain as located unless the threat changes.

Deployment of HAD assets should take into account approach geography and environment, anticipated neutral shipping, the capabilities and endurance of anticipated HAD warships and cutters, the proximity of airfields, and the capabilities of anticipated assigned aircraft.

5.9.2 Threats

All mission planning should be centered on the expected threats and the anticipated environment. The expected threats and missions determine the placement of sensors, concealment, security forces, location of HAD warships, number and location of patrol flights, etc. Threats could be waterborne or come from shore areas adjacent to the

port and its approaches. The primary focus of NCW and HAD forces is FP. Waterborne security forces and HAD forces must be aware of the full spectrum of threats within their patrol areas. These threats are discussed in Paragraphs 5.9.2.2 thru 5.9.2.8 and Appendix M.

5.9.2.1 Small Arms

Personnel armed with small arms often are not capable of sinking a patrol boat but could inflict personnel and equipment casualties. However, crew-served weapons could inflict substantial damage on a steel-hulled military or commercial ship and pose a significant threat to personnel on deck, radar, or other electronic equipment.

5.9.2.2 Explosives

Assaults by explosives-laden boats or personal watercraft are typically crewed by a suicide squad. In this case, it is much harder to determine hostile intent because the explosive charges will probably be out of sight.

Another method for delivering an explosive device is to float the device on the incoming tide. The device is constructed such that it is of near-neutral buoyancy and then released into the target area. Detonation may be by contact or by remotely operated devices. A significant disadvantage for the enemy is that they must get very close to the target to be effective.

Tankers, container ships, and merchant ships can be used as bomb transport vehicles. In addition, the timed scuttling of any major vessel can effectively block a port, possibly for an extended period of time.

5.9.2.3 Rocket-Propelled Grenades

Hit and run attacks by small boats equipped with shoulder-fired rocket-propelled grenades (RPGs) are extremely effective. In the littorals this is one of the likeliest and most dangerous threats. The effective range of an RPG is approximately 1,000 meters and an RPG round can inflict significant damage. The weapon is easily concealed, fired very quickly, and several weapons may be carried on board a single small boat. Similar capabilities are associated with antitank weapons such as recoilless rifles and wire-guided missiles.

Patrol craft must be observant of coastal threats as well as waterborne threats because these weapons can be fired from adjacent shorelines. HAD warships and cutters must consider what their reaction would be to a hijacking where use of such weapons is possible or probable from a neutral or even friendly ship. SEALs and special USCG teams may be more appropriate than normal HAD assets.

5.9.2.4 Swimmer Delivery Vehicles and Minisubs

SDVs and minisubs may be used by enemy special forces to insert reconnaissance personnel, saboteurs, mines, or torpedoes. Their target will normally be an HVA and not a patrol boat, but the patrol boat will probably be the first line of defense against them.

An MIUWU may initially detect these threats using acoustic sensors; however, it is extremely difficult to identify and track these targets in congested, shallow coastal waters. Patrol boats may use concussion grenades against them, though with limited effectiveness. EOD can provide charges to assist in neutralizing an identified submerged aggressor.

5.9.2.5 Mines

Mine clearance is not to be a mission of NCW units. However, patrol boats can be used to detect or prevent mine-laying operations by hostile forces and to escort MCM units. HAD units must be aware of any minefields and keep themselves and neutral shipping clear of these areas. This may be problematic in poor weather and at night. NCWCs may want to consider requesting interpreters from the HN and other sources for use in major ports.

5.9.2.6 Aircraft

Though patrol boats and HAD warships and cutters can use machine guns to engage hostile small aircraft such as light planes, helicopters, ultra-lights, and hang gliders, detection and engagement can be difficult. Warning zones, broadcasts, and procedures must be established consistent with ROE.

5.9.2.7 Neutral Shipping Machinery Casualties and Navigational Errors

Unintentional blockage of a major port or waterway due to machinery casualties, or navigational errors by an inbound or outbound merchant can pose a major threat to a port. HAD warships and cutters must conduct boardings of inbound vessels to ensure that they are seaworthy for entering port. PS boats must ensure that they know the boundaries of shipping channels and can warn vessels when they stray. NCWCs may decide it is necessary to put armed and trained USCG or Navy and HN personnel on the bridges and in the major machinery spaces of inbound and outbound merchant vessels to ensure that mistakes are minimized and a hijacking does not threaten closure of a key port.

5.9.2.8 Weapons of Mass Destruction

HAD warships and cutters must ensure that WMD are not transported intentionally or unintentionally into the port. Boardings must be conducted in the approaches outside of cell phone range, and these boardings must be executed by trained boarding teams. Procedures must be developed to deal with the discovery and disposition of WMD. Ultimately such weapons must be neutralized and cannot simply be sent back out of the approaches.

5.10 RISKS AND LIMITATIONS

Operations in restricted waters can occur with little or no warning, dramatically reducing response time and options. Quick reaction time is absolutely critical because of the potential high speed of COIs. Reaction time and ability to respond are crucial in thwarting an attack.

5.10.1 Patrol Area

When the DSA patrol coverage exceeds the available security and HAD patrol assets, the commander must make an operational risk assessment based on likely threats, the threat vectors, and the number and type of patrol assets available. This may lead to a decision to fully patrol/defend portions of the area, provide limited or no patrol coverage in other portions of the area, or hold forces in ready status prepared to respond to specific threats.

5.10.2 Nonsecurity Tasking

Boat resources to support nonsecurity requirements should not be drawn from “on station” boats. Similarly HAD warships and cutters should not be pulled off-station for logistics transfers. The absence of these interceptors at a key moment can leave a port unguarded and at risk.

CHAPTER 6

Point Defense Operations

6.1 PURPOSE

The purpose of this chapter is to provide the TTP for conducting PD security operations for HVAs, primarily in the coastal region. In light of the attack on USS *Cole* and other recent terrorist events, the Navy recognized the importance of, and requirement for, PD security when Navy vessels are operating near land.

6.2 OVERVIEW

Ports and harbors, both OCONUS and in the United States, represent an extremely difficult environment in which to protect Navy assets from terrorist and enemy threats. Restricted waterways, close proximity to land, reduced sensor capabilities in the port or harbor environment, and the inability to use major weapons systems make HVAs in these areas vulnerable to short-range attack, and security operations are challenging.

Security is achieved through the presence of NCW forces armed with crew-served and individual weapons. All NCW forces are capable of providing PD measures to some extent. IBUs, MSDs, and PSUs are equipped with patrol boats and are ideally suited for demonstrating an armed, overt, waterborne security presence.

These patrol boats are heavily armed, highly maneuverable, and manned with experienced crews. Their capabilities permit them to rapidly position themselves and supply overwhelming, accurate, and suppressive firepower against hostile contacts at close ranges. Their operations should be integrated with other NCW capabilities in the area, including surveillance assets, static weapons emplacements, and HN land and waterborne forces to provide PD.

The MSDs, in addition to their waterborne capability, are also trained and equipped for, but not limited to, establishing defensive landward perimeters and flight-line security.

6.3 MISSION

The primary role of NCW forces in PD operations is to provide FP to USN ships, aircraft, and other DOD HVAs against attack in locations where U.S. or HN security infrastructure either is inadequate or does not exist.

All Navy ships are capable of providing for their own FP to some degree, but in many situations they still require augmentation to counter nontraditional threats coming from adjacent waters and piers, or when operating in coastal or restricted waters. Theoretically, the NCW forces could be absorbed into a Navy ship's security force and assigned explicit roles, but this rarely happens. Instead, there is normally a division of responsibility, and the FP plan has the ship patrol within its lifelines and immediate area while the NCW force is tasked with providing extended coverage outside the lifelines. They accomplish this task through the use of fixed and roving foot patrols and patrol boats.

MSC ships are the Navy's noncombatant, civilian-crewed fleet, and they have no organic self-defense capability. As such, they require security augmentation in heightened threat areas. Due to the fact that MSC ships are particularly vulnerable to attack, MSD forces are routinely embarked to provide FP. There are numerous MSC ships that are considered HVAs operating worldwide, performing combat logistics support, special missions, and DOD cargo movement.

6.3.1 Protection of a High Value Asset Pierside

A ship moored to a pier presents an attractive, static target to the enemy, and the problem of securing waterside access is demanding. With an HVA moored in a busy harbor there is considerable difficulty in determining friend or foe, even under the best circumstances. Safe navigation may make strict enforcement of waterside perimeters established to protect an HVA difficult, as these rules of navigation allow for emergencies, tidal and wind action, and even eager but less skilled operators of vessels or craft to err. Normal recreational and commercial activity outside the perimeter of an installation, pier/port facility makes detection, classification, and identification of enemy threats very difficult. The focus of PD is on intelligence collection, a surveillance plan that includes sensors and boat patrols, and, ultimately, deterrence. Integration of the above combined with situational awareness will allow for early detection and identification of potential threats.

6.3.2 Protection of a High Value Asset at Anchor

An anchored HVA has a larger threat area around it than a ship pierside and more challenging environmental conditions that require additional FP assets and logistics support. Boats patrolling an anchorage area will generally operate at higher speeds and, since they cover larger, more open areas, have increased fuel consumption. Sea conditions will often be heavier in anchorage areas, as many anchorages are not in enclosed harbors. These conditions tend to decrease operating speeds and crew endurance. In this scenario, the Mk 6 MMS, listed in Annex A to Chapter 2 and explained in NWP 3-10, is ideal for protection of anchorages and detecting enemy swimmers and divers.

6.3.3 Protection of a High Value Asset Underway

At times, it may be necessary to provide PD for an HVA or friendly vessel entering and leaving port or through a restricted channel or chokepoint. This may be accomplished by embarking security detachments onboard the HVA, assigning patrol boats for escort duties, or both.

6.3.4 Protection of an Aircraft/Flight Line

Elements of the MSD have a limited capability of providing FP for naval assets on airfields and flight lines as well as OCONUS congressional delegation (CODEL) mission support. For CODEL missions, the MSD provides an onboard security team that provides PD for CODEL aircraft. An MSD can normally expect up to seven CODEL missions a year with each mission lasting up to two weeks in duration. FP missions for airfields and flight lines are similar to CODEL missions with the exception being the asset (i.e., aircraft) is not assigned to carry members of Congress.

6.4 COMMAND AND CONTROL

As part of any mission-planning process, defining C2 procedures and designating the commander that has TACON of NCW forces are essential. When protecting a Navy ship or aircraft, the senior line officer present will take TACON of the MSD forces. When operating within the United States augmenting an LFA, TACON will be maintained by the OIC of the NCW force. When protecting an MSC asset, C2 is to a certain extent situational, and for that reason is explained in detail below.

6.4.1 Command Relationships for Military Sealift Command Ships

The presence of an NCW security detachment on an MSC-owned or MSC-chartered ship raises questions regarding the respective areas of authority for the ship's master and OIC of the security detachment. The ship's master and OIC share responsibility for the safe delivery of the ship's cargo and, where applicable, the transit to the SPOE for the next shipment. This section will explain the authority to order UOF, including deadly force, and will apply to all instances where NCW forces are embarked on MSC vessels.

6.4.1.1 Ship's Master

The ship's master is responsible for the safe navigation of the vessel, ensuring safe and seaworthy conditions in the vessel, maintenance and operation of its equipment, and the health and welfare of all persons on board.

The ship's master will cooperate with the NCW OIC to provide the services necessary for the security detachment to perform its mission, such as use of communications equipment. Within this specific area, the OIC's relationship with the ship's master is similar to that of a U.S. Navy department head with the CO of the ship.

6.4.1.2 Officer in Charge of Naval Coastal Warfare Security Detachment

The OIC of the NCW security detachment is responsible for protection of the vessel, its cargo, and all personnel on board from attacks by hostile forces. In this regard, NCW personnel are authorized to use force in self-defense and in defense of the vessel on which they are embarked.

The OIC shall keep the ship's master informed of the FP plan the security detachment will employ; however, the ship's master does not have the authority to direct the OIC to change the plan. Consultation between the OIC and the ship's master prior to the employment of protective measures is recommended when feasible, but not required in the event of urgent circumstances.

The decision of the security detachment to use force against hostile or potentially hostile forces shall rest with the members of the NCW security detachment, and will be in compliance with authorized ROE. IAW U.S. Navy Regulations, Article 0847, the ship's master is relieved of responsibility for actions taken by the NCW forces when acting in self-defense or to protect the vessel, its cargo, and all personnel on board from attacks by hostile forces.

6.5 PREDEPLOYMENT PLANNING CONSIDERATIONS

Planning will revolve around the HVA to be protected, the location, the duration of the operation, and the threat. A vulnerability assessment will have been completed prior to deployment outlining the HVA and its defendability. Whenever possible, an SLRP should be sent to refine the vulnerability assessment and to perform other tasks such as contracting for vehicles, berthing, etc.

Some predeployment considerations are to:

1. Initiate planning and arrange for a site SLRP.
2. Request recent imagery of the site and utilize all available topographic products to conduct detailed port/harbor analysis.
3. Review existing CONPLANS, SOPs, and lessons learned.
4. Request direct liaison authority to identify security procedures, interoperability problems with HN forces, location of possible campsites, communications, and LOGREQs.
5. Determine ROE.
6. Identify requirements for special equipment as dictated by terrain and weather, especially as they affect the employment of NVGs and other observation devices.
7. Analyze the terrain and determine key terrain and major avenues of approach.
8. Define the command structure and support relationships.
9. Develop an FP plan based on intelligence and reconnaissance information.

10. Integrate all available fire support means into the FP plan.
11. Determine requirements for barriers, antitank/antivehicle defense, and other defensive measures.
12. Establish early coordination with the HVA to refine the FP plan.
13. Consider medical support augmentation.
14. Identify weapons allowed or authorized for deployment.
15. Schedule a mission brief and conduct rehearsals prior to deployment of forces.
16. Organize according to the mission assigned, enemy threat, available assets, and policy limitations.
17. Consider special skills and equipment of all units.
18. Consider LNO personnel for assignment to the HN with adequate communications assets.
19. Identify interoperability problems with supported units.

6.6 NAVAL COASTAL WARFARE SECURITY FORCES EMPLOYMENT

Security forces should arrive on scene early enough to prepare for the arrival of the HVA. The following procedures should be accomplished prior to the HVA arrival to validate the assumptions and training conducted prior to deployment:

1. Verify pier or anchorage assignment with the harbormaster.
2. Survey port configuration.
3. Survey pier access areas.
4. Verify pier and adjacent area is secure.
5. Verify HN land and sea security forces are on station at assigned locations.
6. Verify HN security planned responses to specific situations (taking nothing for granted).
7. Verify planned observation posts (OPs) and crew-served weapons emplacement locations are valid.

The NCW/MSD OIC should be prepared for changes in the HVA's schedule. The OIC needs to think ahead and be ready to move OPs and weapons to new locations. He must also anticipate a significant volume of pier traffic when the HVA arrives. Cranes, forklifts, delivery trucks, etc. may force the reconfiguration, relocation, or delay of weapons emplacements. Ideally, the OIC boards the pilot boat and meets the ship at the pilot pickup point. On arrival, the OIC reports to the Navy CO/MSC master and briefs him/her that security forces are on station and the area is secure.

Prior to the arrival of the HVA, the pier area must be carefully inspected for possible pre-positioned explosive devices. This is normally conducted by EOD detachments or other designated dive teams. Throughout the vessel's stay, the pier and hull should be reinspected periodically and randomly.

On arrival, the ship receives various briefings by HN or port personnel prior to commencing in-port routine. The NCW/MSD OIC attends these arrival briefings to determine any impact on providing security. Possible impacts may include delivery schedules, services received (oil barge, booms), and planned maintenance. The OIC briefs his FP plan for providing vessel security and ship's force security training to the CO/MSC master and their

security force representatives. At the conclusion of the brief he presents his written FP plan to the CO/MSC master for review. Possible arrival conference briefs may include the following:

1. NCIS threat briefing to ships force
2. HN security plan briefing
3. Husbanding agent briefing
4. Maintenance briefing
5. Morale, welfare, and recreation (MWR) briefing
6. MSD security briefing.

At the conclusion of the arrival conference briefings, the ship's CO/MSC master and MSD OIC finalize any remaining coordination issues. Protective defensive zones are established around the HVA and each zone has its own criteria for action and what action to take. The zones are further defined in sections below.

6.6.1 Defense in Depth and Defensive Zones

The fundamental concept in static HVA defense is defense in depth where multiple defensive zones or layers proceeding outward from the HVA are established.

Employing a defense-in-depth strategy using defensive zones increases the reaction time of the security forces to respond to imminent threats. Incorporating the HVA's surveillance and weapons systems, if so equipped, is to be included in the planning of zones. The establishment of defensive zones can be thought of as providing enhanced physical security rings. The goal of a defensive zone strategy is to retain operational capability and mission functionality while also providing the greatest level or protection to the HVA (see Figure 6-1).

Operations in restricted waters occurs often with little to no warning, dramatically reducing response time and options. Quick reaction time is absolutely critical because of the potential high rate of speed of COIs; closing speed of COIs and security boats may exceed 90 knots (kts). It is necessary to determine hostile intent and take appropriate action as far from the HVAs as possible, often in times measured in seconds rather than minutes.

6.6.1.1 Threat Zone

The HVA is located within the innermost ring of security called the "threat zone." No potentially hostile threat is allowed to approach the HVA (or in some case multiple HVAs) inside this minimum distance. The actual distance for this zone is normally based on the FPCON/ATCON in effect for that AO. The threat zone is where unidentified or potentially hostile contacts are engaged with increasing levels of force until they retreat outside of the zone or are no longer a threat. An attempt to penetrate the threat zone, after being warned off by security boats, could constitute hostile intent under the ROE.

6.6.1.2 Warning Zone

The "warning zone" is established to increase the time to react to a threat. The warning zone is a ring around the threat zone and the HVA in which access is controlled. Personnel and vehicle/boat access control points are constructed to control access from outside the perimeter to this security zone. Security boats hail and warn away craft in this zone. Its distance is established based on the scope of activity expected within a port and the corresponding threat analysis. The warning zone is typically divided into two or more sectors based on the number of available boats.

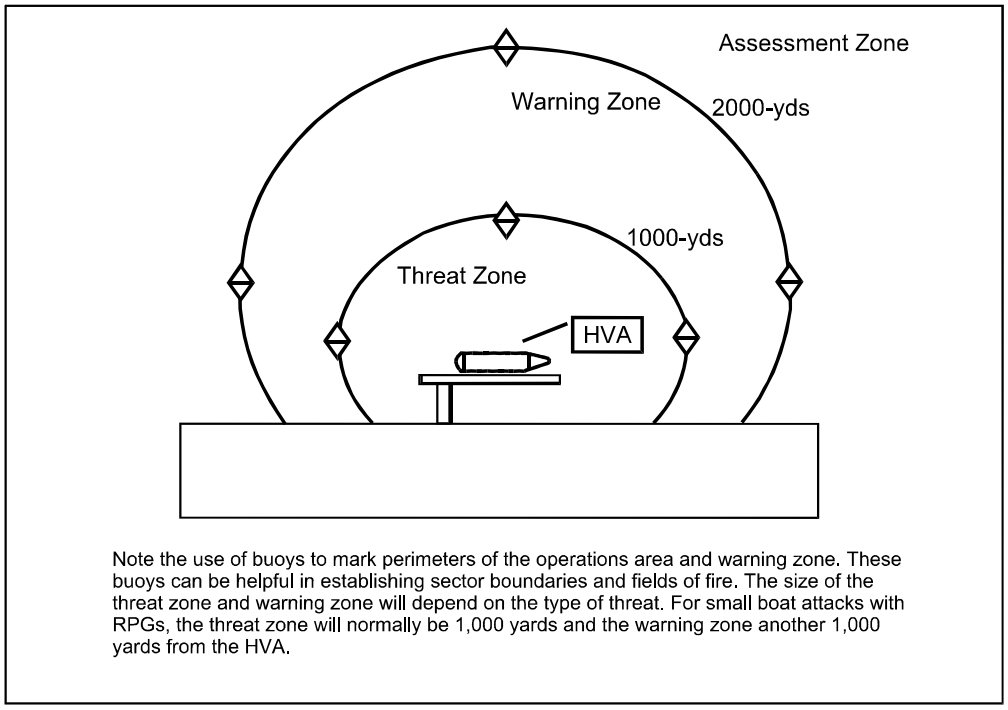

Figure 6-1. Defense in Depth

6.6.1.3 Assessment Zone

The outermost zone is the "assessment zone" and it is where surveillance systems monitor activities within the zone and beyond it. The size of the assessment zone is determined by the range at which an expected threat weapon can be employed against the HVAs unless interdicted. The outer limit of the assessment zone should extend well beyond the estimated range of enemy waterborne weapons.

6.6.1.4 Zone Considerations

The size and layout of the defensive zones should be the minimum necessary to ensure the safety of the protected asset, while minimizing the impact on legitimate port operations. In the case of RPG-armed surface craft, the threat zone should be 1,000 yds, and the warning zone should be 1,000 yds outside it. Figure 6-2 provides data on some likely threats and their ranges for planning purposes.

The speed of the security boats and the predicted enemy/terrorist boats' weapons' effective employment range should also be considered when determining zone size. The threat zone should be extended if needed to allow time for security boats to interdict a contact. For example, if four boats are assigned and each boat's area is relatively small, interdiction times may be shorter. When only two boats are assigned, each boat's AOR is larger, and more time should be planned to allow for interdiction prior to a contact's entry in the threat zone.

It will not always be practical to establish 1,000-yd defensive zones due to channel width, port size, traffic patterns, nearby friendly shore facilities, and other considerations. In this case, shore-side security forces should be employed in support of waterborne security operations to provide quicker reaction to threats from the nearby shorelines or on the water.

WEAPON	EFFECTIVE EMPLOYMENT RANGE	MAXIMUM RANGE
Rocket-propelled grenades	400–1,000 yds	1,000 yds
TOW missiles or other anti-tank weapons	400–1,000 yds	Varies
Heavy machineguns (.50 cal)	1,500–2,000 yds	7,000 yds
Light machineguns (.30 cal)	1,200 yds	3,000 yds
Rifle (M16)	400 yds	1,500 yds
Explosive charges	0–15 yds	15 yds
Grenades	40 yds	40 yds

Figure 6-2. Weapons Range Matrix

Defending a single HVA is uncommon in PD operations. More frequently, there are multiple HVAs pierside or at anchor as depicted in Figure 6-3 that require defense. The defensive zone principle should be extended to protect all ships. The HVAs are placed in the center of the zone and the zone extends in a 360-degree circle around them. However, this may require the commander to prioritize the defense of HVAs based on the available patrol assets. The operational risk assessment based on the likely threats, the criticality of each HVA, and the number and type of patrol assets available enable the commander to determine the level of protection provided to each HVA. These priorities often change based on port activity, arrival and departure of vessels, and threat levels.

6.6.2 Additional Defensive Measures

The following paragraphs describe additional measures and resources sometimes available to the MSD security forces when conducting PD operations.

6.6.2.1 Craft of Opportunity

COOPs, such as pleasure craft, port small craft, LCMs, or LCUs, with weapon emplacements, may supplement the security boats. These craft may be anchored or stationed in a position to augment the security patrols. Utilizing COOPs is especially important when few security boats are available. When integrating COOPs into a MFP plan, the C2 structure and TACON over these craft must be considered.

6.6.2.2 Host-Nation Support

A HN generally has a variety of assets that may complement or extend the ability of MSD forces to provide PD. These include military, LE, and civilian PS personnel. They may also offer sensor capabilities, such as shore-based radar, lookouts, and surveillance cameras. Sensitivity to HN sovereignty concerns must be maintained when conducting combined operations, and MSD forces may be limited in their ability to operate because of HN restrictions.

6.6.2.3 Floating Barriers

Floating barriers (e.g., Dunlop Barriers, camels, logs or log booms, nets, and concertina wire) or lines of demarcation may be deployed to augment the waterborne defense of HVAs and increase the defense-in-depth zones. This is especially important when few security boats are available. A line of barges, secured bow to stern between a mooring buoy and the pier, makes a very effective barrier that can deflect or absorb a large portion of the blast from an explosive-laden vessel. These barges can also be used for additional static weapon emplacements and patrol boat berths.

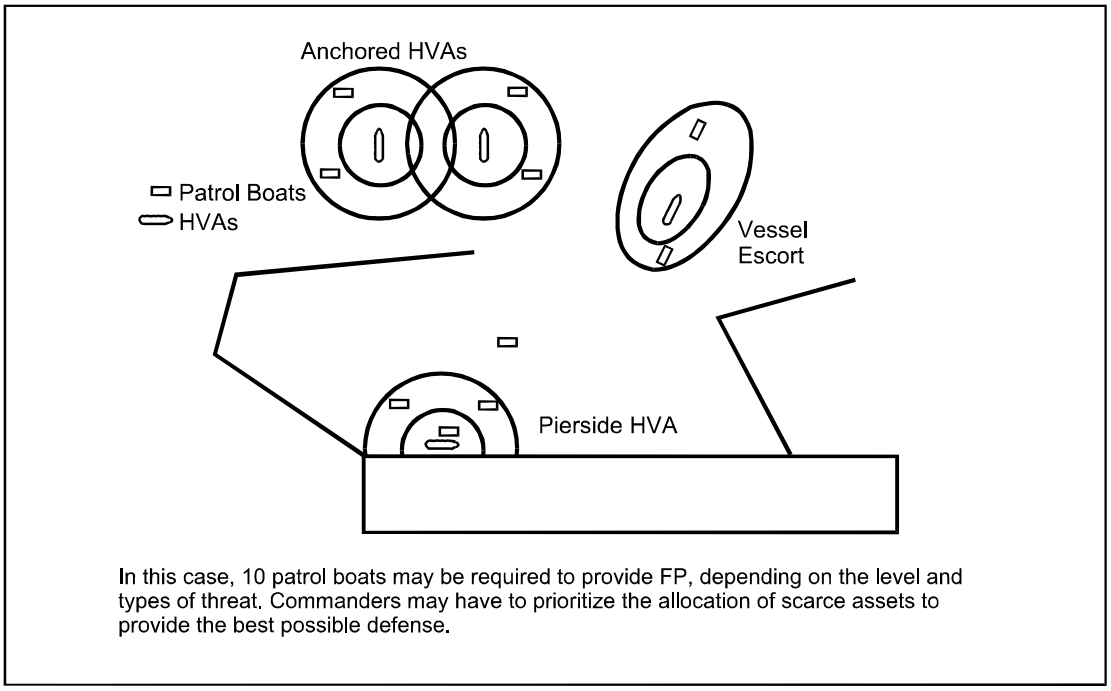

Figure 6-3. Multiple-Defended Assets

6.6.2.4 Static Weapon Emplacements

Static weapon emplacements may be positioned on piers, anchored or moored vessels, or the HVA to complement waterborne assets. Close coordination and positive communications are required to prevent blue-on-blue engagement.

6.6.2.5 Electronic Sensors

In many cases, boats are deployed in conjunction with an MIUWU, which will use radar, sonar, TIS/VIS, and other electronic sensors to detect and classify potential threats. Specific capabilities of MIUWUs are detailed in Chapter 3.

6.6.2.6 Observation Posts

OPs complement the visual detection capabilities on the boats and HVAs. Generally, OPs are more protected from the elements and provide an integral part of security zone surveillance operations.

6.6.2.6.1 Characteristics of an Observation Post

The overriding characteristic of an OP is that it must dominate its AOR. When selecting a suitable location, there is always a tendency to put a priority on height. In an urban operation this can be a mistake. While the greater the height attained allows the observer to cover a greater area, it may also detract from surveilling the immediate surroundings. For example, if an OP is established on the tenth floor of an apartment building to monitor a road beneath, the observer must lean out of the window, which may compromise security.

The number of incidents that an OP might have to contend with are largely unpredictable, but the ranges will be relatively short. Consequently, an OP must cover its immediate surroundings as well as middle and far distances. In residential areas this is rarely possible as OPs are forced off of ground level because of possible discovery by passing pedestrians.

6.6.2.6.2 Manning an Observation Post

Before moving into an OP, observers must have the following information:

1. The exact nature of the mission
2. The local situation, including current threat and intelligence
3. Procedures and timing for entry
4. Emergency evacuation procedures
5. Communication procedures
6. Anticipated movement of any friendly forces
7. Procedures and timing for exit
8. Any special equipment needed
9. Health, comfort, and sustainment issues.

6.6.3 Weapons Deconfliction

Employing static weapons to cover defensive zones necessitates well-planned maneuvers by security boats to remain outside static weapons fields of fire. While there are several methods to deconflict waterborne and static weapons, one suggested measure involves dividing the OPAREA between static weapons' fields of fire zones and boat OPAREA, marked by visible landmarks such as buoys or day-markers. Boats will remain clear of these fire zones, and each team may pass contact information to the other via the TACON authority. This is the preferred approach when employing static weapons from forces nonorganic to NCW assets. This approach permits boats and static weapons emplacements to direct fire in an area without direct communications or incurring a blue-on-blue engagement. Figure 6-4 illustrates a deconfliction scheme involving static weapons ashore and patrol boats.

When geographical considerations do not permit this scheme, it may be necessary to have static weapons' fields of fire covering areas in which boats operate. When this is the case, static weapon crews must hold fire until the boats report or are visually confirmed to be clear of the weapon's field of fire. A static weapon crew may visually observe a boat exit its field of fire, but the boat may quickly return to the field, necessitating a clear signal that the boats are clear. This communication should take place on the boat net or the landward security net. In either case, additional radios may be necessary so that continuous monitoring is possible. The greatest potential for fratricide exists when clear, concise, and rapid communications are not employed between shore-side and waterborne forces.

When using NCW boat tactics, screen boats will have responsibility for exiting the fields of fire for the reaction boat. In these cases, the reaction boat will hold fire until the clearing screen boat has reported that it is clear of the field of fire over the boat control net. Boat coxswains, patrol leaders, watch officers, and the TACON authority must have a clear understanding of the dynamic nature of their fields of fire to avoid blue-on-blue situations and collateral damage to the friendly shoreline. Thorough reconnaissance, frequent navigation plots, and constant alertness are also crucial to avoid these adverse situations.

6.6.3.1 Preventing Collateral Damage

In some cases, protection of HVAs may require weapons engagement of targets that may result in collateral damage to friendly assets or facilities. Hostile craft may intentionally attack from a friendly shoreline or with HVAs behind them in an attempt to cause confusion and hesitation among patrol boat and static weapons positions crews. Fields of fire for boats and the placement of static weapons will be designated in advance by the

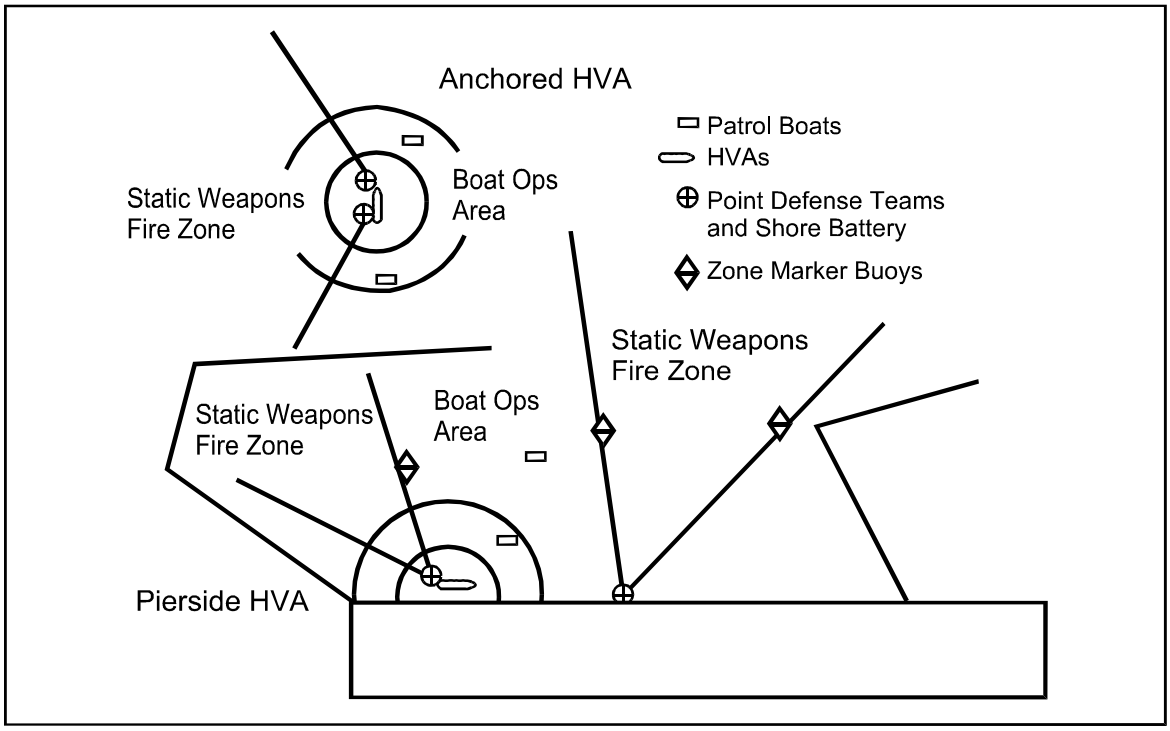

Figure 6-4. Static Fire Zones and Boat Operations Area

TACON authority. It is critical that all participants understand their assigned fields of fire and exercise proper discipline. Fields of fire should overlap for maximum effectiveness, while keeping boats and static emplacements out of each other's fields.

In designating fields of fire, the TACON authority should consider the capabilities of each weapon platform, the likely threat axis, and the danger of collateral damage to friendly territory. When considering collateral damage, the maximum range and not the maximum effective range of each weapon must be used. (See Chapter 10 for weapon ranges.)

Collateral damage is always a consideration in weapons deployment of any kind and it should be either prevented or minimized if at all possible; however, it should never prevent the use of means necessary to enforce unit's inherent right to self-defense if necessary.

6.6.3.2 Deconflicting Night Operations

During night operations or conditions of reduced visibility, the importance of coordination with surveillance platforms such as the MIUWU becomes magnified. Early detection of contacts is required to provide boats with sufficient time to intercept and investigate. At night, contact detection and identification are more difficult and take place at shorter ranges. Spotlights may be used for illuminating surface targets. When engaging surface targets with guns it is useful to backlight the target to improve accuracy. Boats should be equipped with parachute flares to backlight targets, and may coordinate with indirect fire elements, such as artillery or mortars, to illuminate preplanned locations.

6.6.4 Surface Security Interdiction

Prior to assuming security duties, boats should first perform a harbor reconnaissance sweep. This is done by a minimum of two boats, which always operate within sight of each other. The boats locate and plot communication "dead zones," and if working with an MIUWU, look for radar blind spots. Chapter 3 provides greater detail on this procedure.

6.6.4.1 Screen Boats

Boats operating in the warning zone are designated "screen" boats and detect, identify, investigate, classify, report, warn off, and, if necessary, engage COIs.

6.6.4.2 Reaction Boat

The reaction boat positions itself between the threat and the HVA. If the COI proves hostile, the reaction boat waits until the screen boat clears a field of fire before taking the hostile craft under fire.

6.6.4.3 Intercept and Escort Boats

At times, depending on boat availability and threat conditions, it may be desirable to station one or more boats outside the warning zone for initial contact and escort. The use of I&E boats extends the initial DR of a COI entering the area. They can also be used to warn approaching vessels of the warning zone and request them to slow or stop prior to entering the zone. Figure 6-5 depicts an I&E deployment.

The use of I&E boats is especially important when the security and threat zones must be contracted to less than 1,000 yds due to harbor size or channel restrictions. However, in these conditions the boats should be attuned to threats from adjacent coasts. They may also be required to escort inbound and outbound HVAs and perform other surveillance and harbor patrol missions.

6.6.4.3.1 Friendly or Neutral Contacts of interest

If a COI is determined to be friendly or neutral, the TACON authority may in certain conditions authorize transit of vessels declared nonhostile through the warning zone. The COI is escorted through the warning zone until safely past the HVA. When possible, avoid conducting escorts through the warning zone, and direct traffic to alter harbor patterns consistent with safe navigation. This requires close cooperation with the port authority.

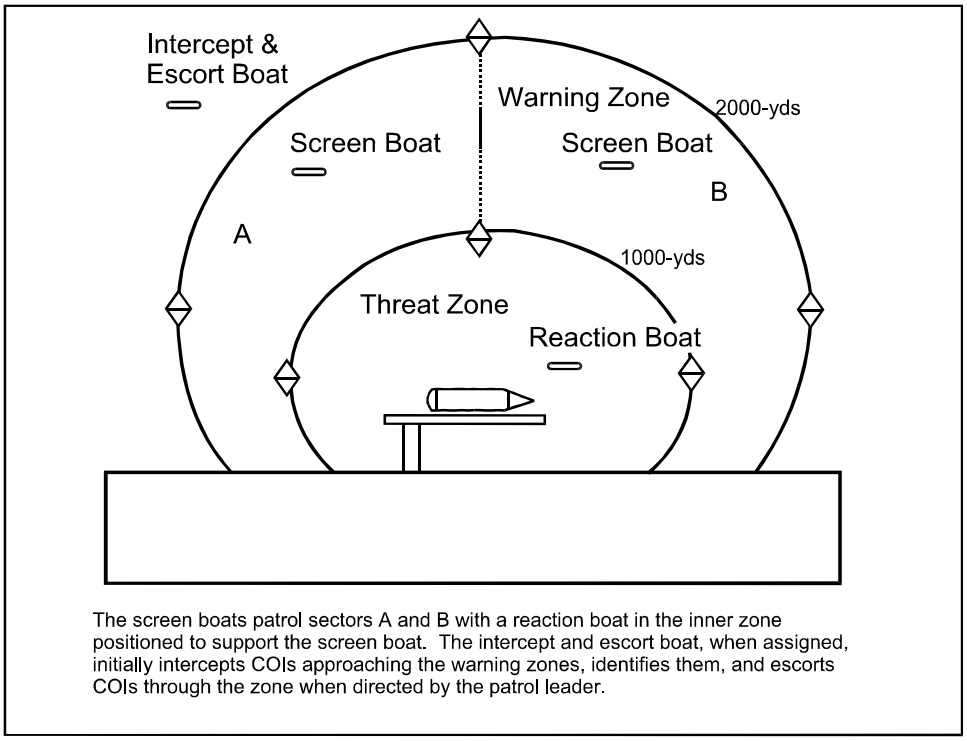

Figure 6-5. Intercept and Escort Boat Procedures

6.6.4.3.2 Hostile or Unknown Contact of Interest

If a COI violates the warning zone or demonstrates an intent to violate the warning zone, the security boat closest to the intruder proceeds at the highest safe speed to intercept. An intercept vector may be provided by the controlling authority or determined by the boat coxswain. The COI should be intercepted as far as possible from the HVA.

1. Head-On Approach — The initial approach will normally be head-on. As the COI turns to avoid the risk of a head-on collision, the security boat turns in the same direction onto a parallel course. The security boat should endeavor to maintain a position at all times between the COI and HVA, taking position on the port or starboard quarter of the COI.

   This type of approach has several advantages:

   a. Minimizes the target presentation

   b. Provides the fastest possible intercept time

   c. Diminishes a faster opponent's speed advantage

   d. Forces the COI to turn away from the HVA to avoid collision.

2. Determining Hostile Intent — The primary goal of the initial interception is to quickly determine the degree of threat posed by the COI. In most cases, COIs will not be classified "hostile." The security boat is therefore required to determine the COI's intent by employing the UOF continuum explained in Paragraph 6.7.3.

3. Warning the COI — As the security boat approaches the COI, it shall use every means available to extend visual and verbal warnings. This may include flashing spotlights, flares, loud hailer, and VHF radio calls on marine band hailing channels. In general, the security boat should avoid shining a white spotlight at the bridge of another vessel in the dark, unless absolutely necessary, due to the danger of night blindness that could increase the risk of collision.

   The security boat should clearly inform the COI that it is entering a warning zone and request it clear the area. Normally, if the COI is truly friendly, these measures are sufficient to stop it from entering the area. The boat must give the COI sufficient time and opportunity to respond, based on vessel characteristics.

   Because of the hazardous nature of interdiction operations, it is essential to have communications procedures established with all participants. The following information should be provided by the security boat to the controlling authority for proper coordination:

   a. Location

   b. Identity of the COI

   c. Intent to inspect (if staffed, equipped, and authorized)

   d. Any special requirements (e.g., request for additional support, and direction of the COI to another location for inspection)

   e. Completion of search

   f. Disposition of the COI.

4. Identifying the COI in Radio Hails — The initial radio challenge must be worded to provide a clear and unambiguous identification of the vessel being hailed. Hailing the vessel by name, flag, type, or proximity to a charted landmark may do this ("Inbound fishing vessel at Buoy 6, this is..." or "Outbound red-hulled fishing boat east of Point Lookout, this is...").

   The following hail should be used for a vessel approaching the warning zone: "Inbound/outbound vessel (identify by type, markings, name, position from navigation mark), this is a U.S. security boat (directly ahead, on your port/starboard bow/quarter). You are entering a restricted area. Stop your vessel immediately." If the COI responds and stops, the security boat should order it to shift from a hailing channel to a working channel for further instructions.

5. Blocking the COI — If the COI does not respond to the warnings, the security boat should attempt to block the COI's advance taking care not to give the intruder a clear line of attack against the HVA. The blocking action provides another means of evaluating the intruder's hostile intent. The obvious actions of a manned and armed U.S. military combat craft, warning with loudhailer and radio calls, and blocking the incoming vessel's course of advance should deter any friendly craft from attempting to penetrate further. If the COI persists in attempting to reach the HVA, its actions may be interpreted as showing hostile intent.

   The security boat coxswain maneuvers the boat to force corresponding movement by the COI away from the HVA. Once the COI has been halted or diverted, the boat coxswain should attempt to maintain position on the stern of the COI and between the COI and the HVA. By doing this, the coxswain can avoid the intruder's forward field of fire. This position also makes it easier for the security boat to respond quickly to any attempt by the COI to turn toward the HVA or employ weapons.

6.6.4.4 Tripwire Boats

Tripwire boats are normally ones with limited maneuverability, weapons, and training that obviously have little effectiveness in HVA protection. They should only be employed when no other options are available. They can also serve to determine a COI's hostile intent, but will be forced to clear the COI at best speed to permit security boats to engage the target with superior firepower and the greatest fields of fire.

6.6.4.5 Defensive Security Boat Patrols

Because multiple-boat operations offer flexibility of response, supporting fire, and ambush defense, it is normally desirable to avoid single-boat operations. Therefore, a commander generally assigns boats in elements of at least two to defend an HVA. When requirements exceed assets, it is better to adequately defend some HVAs than to assign single boats to all HVAs.

Other options for protecting HVAs with limited boat assets include:

1. Placing surveillance and PD teams on board ships, either at anchor or during transit, using a pilot boat
2. Using landward security forces for ships pierside
3. Getting a ship underway rather than remaining at anchorage.

6.6.4.5.1 Three or More Boats

The optimum defensive posture for HVA defense in a low-threat environment is a three-boat patrol, with two boats operating in the warning zone and one boat maintaining position in the threat zone. A fourth boat should be kept in standby at a nearby safe haven, ready to augment as necessary if the threat escalates, provide onsite relief, or complete other tasking so as not to utilize boats covering the warning zone. If conditions warrant, one or two additional boats may be deployed outside the warning zone for I&E to extend the range of interception and detection for potential threats, and to escort vessels entering and leaving port.

6.6.4.5.2 Two Boats

If only two boats are available, they should both be deployed near the outer edge of the warning zone. Each is assigned a sector to patrol. When one of the boats engages a potentially hostile COI, the second boat should drop back to a position where it can quickly assume the role of reaction boat. Two-boat patrols should, whenever possible, be supported by static weapons placements or COOPs.

Two-boat patrols are unable to react to multiple simultaneous COIs, and should generally be used in low-threat scenarios. In the case of simultaneous COIs, the two boats should split up to interdict each COI to prevent approach to the HVA. In this case, both boats are more vulnerable than when they can support each other, but this is outweighed by the primacy of HVA defense.

6.6.4.5.3 Single Boat

A single-boat patrol should only be undertaken as a last resort, and must always be supported by floating barriers, static weapons emplacements, HN boats, and/or COOPs. The single boat will take a position near the centerline of the warning zone. A single-boat operation is extremely vulnerable to multiaxis attack, diversions, and high-speed craft. The difference between a single boat and a tripwire-boat operation is that the NCW single boat is substantially more capable of target neutralization, self-defense, and evasion.

6.6.5 Anti-Swimmer Patrols and Methods

Random patrols by security boats in the OPAREA will often deter swimmers on or near the surface. Lookouts should be especially alert for telltale signs of swimmers (e.g., air bubbles, snorkels, or piles of floating debris that could be used to conceal swimmers). If there is an identified swimmer threat, boats should pay special attention to likely swimmer launch sites, bearing in mind that swimmers will be limited by endurance, or, in the case of divers, air supply. Swimmers may be inserted by boat or underwater swimmer propulsion devices, or launched from shore sites within swimming distance of the target.

Swimmers and divers armed with light automatic weapons or explosive devices represent a viable threat to ships, waterfront facilities, bridges, and other assets. Swimmers can be used to conduct a wide range of terrorist or sabotage actions without the use of complex hardware. Swimmers are inherently difficult to detect, either visually or electronically.

6.6.5.1 Swimmer Limitations

The nominal speed for a swimmer, depending on distance and equipment carried, is approximately 1 kt. Thus, swimmers are strongly affected by current, and even a relatively minor current will have a direct impact on their ability to reach the target. Swimmers will often take advantage of current and tide changes to reach their target, and boat coxswains should be especially alert for swimmer activity during these periods. For instance, swimmers may try to take advantage of a flood current to attack a target at slack water and make their escape on the ebb current. Swimmer prediction tables can be made based upon tide and current information, and local knowledge of the harbor current patterns.

6.6.5.2 Anti-Swimmer Grenades

Concussion grenades are a very effective countermeasure against swimmer/diver attacks. The kill range of a standard concussion grenade is about 5 ft. The stun range reaches out to 25 to 30 ft, while ear injuries can be effectively caused as much as 50 yds away. The random use of concussion grenades around the HVA will make swimmer/diver operations more difficult. Care must be taken to avoid any predictable patterns.

When the presence of swimmers or divers is detected or strongly suspected due to the sighting of a swimmer, snorkel, or exhaust bubbles, patrol boats should attack as quickly as possible and as appropriate under the current ROE. The area of attack is determined by the direction of the current at the location of the sighting, and is elongated in the direction. The size of the area is determined by the current speed and the length of time since the

sighting; the longer the time between sightings, the larger the area of attack must be in order to have reasonable probability of success. Grenades should be deployed in lines between the sighting and the HVA, and also dropped around the HVA. Assume that there may be multiple divers, and that they may have already completed their mission, necessitating hull or pier sweeps. EOD assets can also assist in the attack by employing larger explosive charges with timed fuses.

6.6.5.4 Turning Propellers

If the protected HVA is a ship, or if a large ship is positioned near the protected asset, it can turn its propellers, maintain sea suction, and shift its rudders in random patterns to deter swimmers.

6.6.5.5 Sonar Pings

If the HVA is a U.S. Navy ship with a sonar, periodic pings from the ship's active sonar can be an effective deterrent but can also interfere with the passive listening devices deployed by the MIUWU. Before using active high-powered sonar devices, ensure that no friendly divers are employed working around or adjacent to the HVA.

6.6.5.6 Draglines

If the threat is high and intelligence indicates the presence of highly trained combat divers, the boats assigned to swimmer defense may drag heavy lines with attached grapple hooks or fishing hooks. Another effective technique is to drag a length of concertina wire behind the boat underwater, with a small weight attached to the free end. Special care must be taken to construct a tow boom for the wire to ensure it does not get entangled in screws and/or rudders.

6.6.5.7 Barriers

Shark nets and other underwater obstacles may also be rigged around the HVA to prevent swimmer attacks. A very effective barrier can be constructed by hanging sections of wire fence beneath floats such as 55-gallon drums, logs, or telephone poles.

6.6.5.8 Underwater Lighting

Deploying lights underwater near piers and ship hulls can improve the ability of lookouts to detect swimmers or divers and to deter their approach.

6.6.6 High Value Asset Transit

Defensive tactics for a transiting HVA are similar to those employed for protection of a stationary HVA: defense in depth with layered defensive zones. The principal difference is that the warning zone moves with the vessel.

Before an HVA transit, the planned transit route should be cleared of all suspicious vessels and inspected for possible hazards. Close attention should be paid to bridges and large piers that may stick out close to where an HVA will transit. The adjacent shoreline and waterways may or may not be under friendly control. Security forces should actively patrol the route before and during the HVA transit. Close coordination with harbor authorities is essential in achieving maximum safety and security of the transiting HVA.

6.6.6.1 Multiboat Patrol

HVA transit should normally be conducted with a two-boat detachment. One boat screens ahead (offset to port or starboard avoiding the HVA's blind spot) at the edge of the warning zone. The second boat trails astern (offset towards the opposite side of the forward boat). If either boat encounters a threat, the boat closest should engage the threat directly without waiting for the other boat to get into a blocking, backup position. The blocking, backup position is between the threat and the HVA. However, when this occurs, the HVA is left exposed on one side.

6.6.6.2 Single-boat Patrol

A single-boat escort should only be undertaken when the HVA is in protected waters patrolled by other security craft, has embarked security forces, or is covered by static-weapons emplacements. HN boats may be able to assist in escort duties.

If a single-boat escort is absolutely necessary, the escorting boat should lead the HVA, weaving back and forth on each side of the bow to maintain visual coverage astern of the HVA. Care should be taken when crossing the bow to keep the boat in sight of the HVA pilothouse. The HVA's radar may be used to detect and classify contacts at a safe distance from the HVA. If security forces are embarked on the HVA, they may be used to detect, classify, and counter threats in areas not covered by the patrol boat.

6.6.6.3 Underway Escort Zones

Underway escort zones are elliptical and elongated toward the bow so that boats can warn off COIs before the HVA arrives. See Figure 6-6 for an escort zone.

The size and configuration of the warning zone around the HVA will depend on the threat and harbor environment. When feasible, the threat zone should be greater than or equal to the maximum effective range of the potential threat. Due to harbor width and shorelines, it may not be feasible to maintain the desired warning zone size, but as in static HVA defense, it may be divided into two or more sectors. HVA escort in narrow channels severely restricts available firing arcs due to the danger of collateral damage. Consequently, security boats must hail, warn off, block, and, as necessary, shoulder waterborne contacts at extended ranges ahead of the HVA.

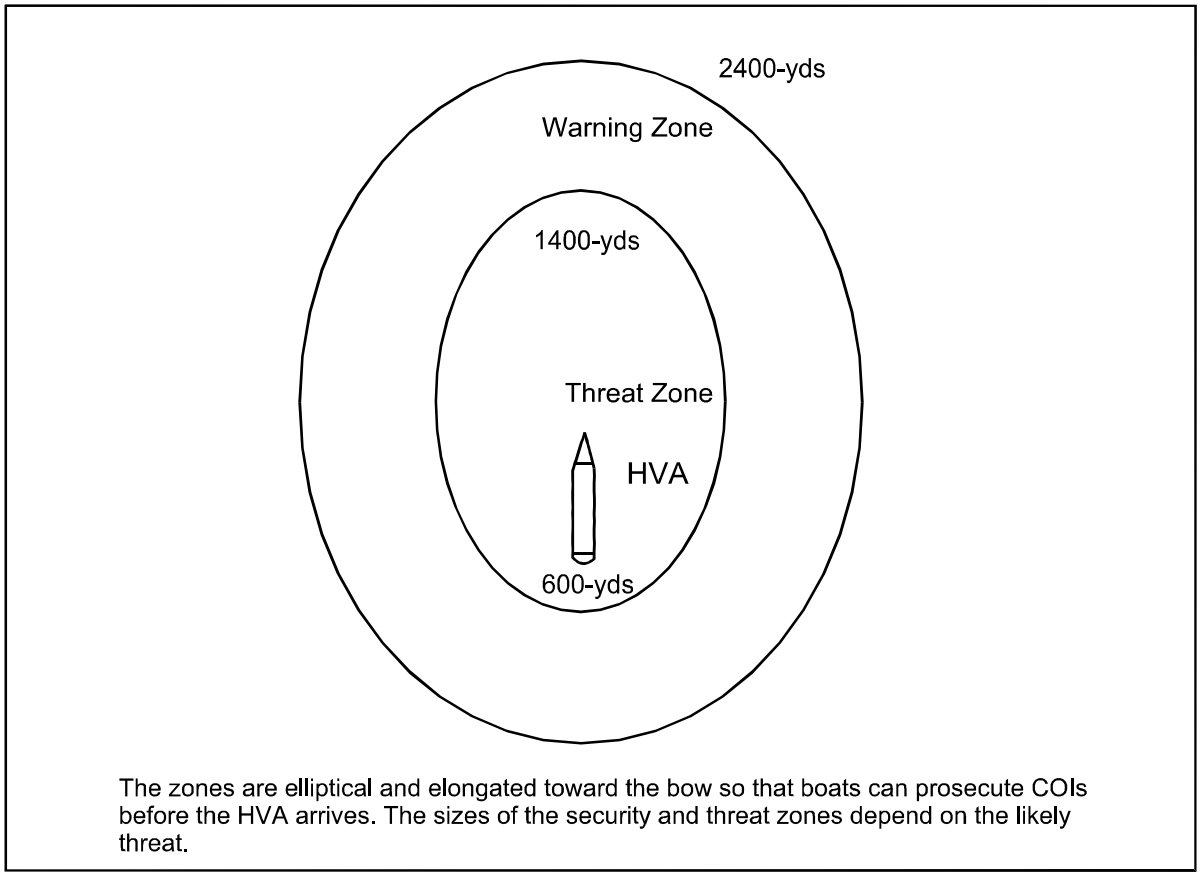

Figure 6-6. An Escort Zone

Boats operating in the warning zone patrol their assigned sectors. They should attempt to intercept COIs as close as possible to the outer perimeter of the warning zone, and ideally just beyond it. They should take a position between the COI and the HVA to prevent the contact from approaching the ship. Hailing and warning procedures are the same as those for static HVA defense, but necessarily have to be performed more quickly. The optimum defensive posture for HVA transit in unprotected waters is a four-boat detachment. Two of the boats perform screening patrols forward of the HVA, while the third and fourth boats screen to port and starboard in the warning zone, maintaining a rear-hemisphere watch for COIs attempting to overtake the HVA. Security boat reaction times to COIs are significantly reduced as the inbound speed of the COI increases. Security boats must engage these COIs as quickly as possible in the outer perimeter of the warning zone to initiate hailing and warning procedures and still allow adequate time for the use of lethal force at a safe distance if required (see Figure 6-7).

6.6.6.4 Electronic Surveillance

The security boats have the benefit of electronic sensors onboard the HVA (e.g., radar), and may have help from shore-side surveillance sites, such as vessel traffic service (VTS) radar, in detecting and classifying potentially hostile contacts.

6.6.6.5 Chokepoint Transit

For a chokepoint transit, the channel should be cleared of all suspicious craft and no suspicious vessels should be permitted to enter the channel until after the HVA has completed its transit. If a sufficient number of security boats are available, one should take up a static station — one in the opposite direction of the HVA's intended speed of advance (SOA), and the other at the exit of the channel the HVA is using — to provide early warning to COIs and the TACON authority on the HVA.

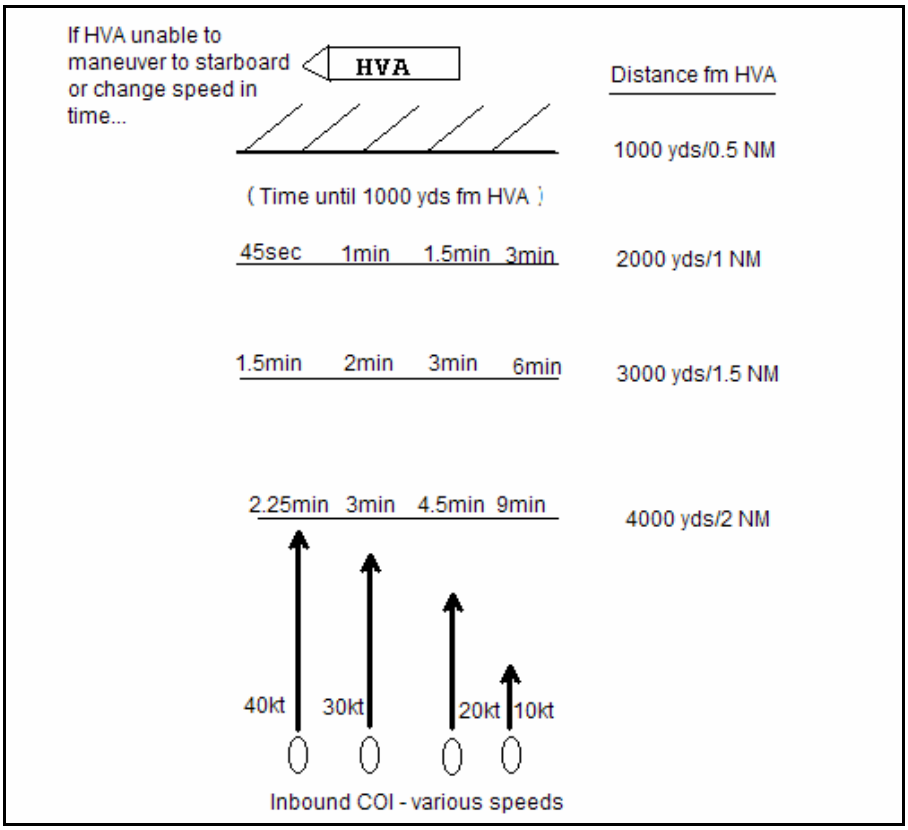

Figure 6-7. Security Boat Reaction Times

6.6.7 Aircraft/Flight-line Defense

Guarding an aircraft or a flight line is essentially establishing a perimeter defense at an airport. Appendix N provides a sample airfield survey. Based on the threat and the vulnerability assessment, the MSD is required to establish a defensible area with ingress and egress points. Posting guards in and outside the aircraft shall be conducted whenever possible, as well as the use of barriers and crew-served weapon emplacements to bolster security. The actual composition and size of the MSD force is a factor of area and number of air assets assigned requiring protection.

Because ROE and deadly force are different in each country for CODEL mission visits, a specific ROE/deadly force briefing will be given to the security detachment prior to their departure to include any special rules associated with all anticipated flight itinerary stops. The NCWGRU Staff Judge Advocate (SJA) is the primary source for these briefings.

6.6.7.1 Security Force Composition

The CODEL security force is organized into one flying team and up to two advanced echelon (ADVON) teams. The flying team remains with the aircraft for the entirety of its itinerary. The ADVON teams prestage at scheduled delay sites along the itinerary. Normally a team is comprised of members from a single MSD who have successfully completed CODEL training.

6.6.7.1.1 Flying Team

The flying team consists of four members with a designated team commander who is in charge of the entire mission as well as the flying team. The other members of the flying team may be as junior as a rover with CODEL status or as senior as a chief of the guard (COG) qualified sailor. Selection of personnel to round out the flying team depends on the situation and the specific mission.

The flying team is responsible for aircraft security at all service-fuel stops; accountability of all detachment equipment; coordination with the aircraft commander; and establishment of security at each delay site until integrated with the ADVON team.

6.6.7.1.2 Advanced Echelon Team

Each mission may have up to two ADVON teams that leapfrog to the delay sites along the itinerary. Each ADVON team will consist of three to six personnel, and the OIC of the ADVON is usually an E-6 or above with a CODEL team qualification.

Each ADVON team arrives at designated delay sites at least 24–48 hours ahead of the CODEL aircraft. The team is responsible for on-site coordination with the American Embassy (AMEMB) to ensure all support requirements are met. The team is also responsible for gathering current information about the local area, intelligence reports, and routes between the AMEMB, the hotel, and the airfield at which the CODEL aircraft will be located.

6.6.7.2 Operational Chain of Command

Once a mission to support a CODEL has been received, a date is established on which TACON of the CODEL team chops to the aircraft commander. Usually this is the date the flying team embarks on the aircraft. The ADVON teams are under the TACON of the MSS except when the CODEL aircraft is on the ground in their assigned delay site. While the CODEL aircraft and CODEL team are at an ADVON team's location, the ADVON team is integrated into the CODEL team. The following is the operational chain of command for the CODEL team:

1. Aircraft commander

2. CODEL team commander.

6.6.7.3 Security Procedures

Close-in physical security is established on the CODEL aircraft every time the aircraft stops. The flying team and ADVON team combine to provide security at the direction of the CODEL team commander. Stanchions and cord/rope are placed around the aircraft, when time permits, to mark the buffer zone for which the CODEL team is responsible.

6.6.7.3.1 Four-Point Security

The four-point security technique involves the posting of sentries at the nose, tail, and both wings of the aircraft. The sentry off the left wing will also act as the entry controller. When possible, this technique is used at every delay site upon arrival and departure of the aircraft while the CODEL party is on the plane or in the immediate area. Once the party has left the area, four-point security is not required and should go to two-point security.

6.6.7.3.2 Two-Point Security

The two-point security technique involves one close boundary sentry and one entry controller. The close boundary sentry will rove 360 degrees around the aircraft. The entry controller will post at the aircraft stairs or fuselage door to control access to the aircraft. If the fuselage door has been closed and the stairs have been removed, the entry controller becomes a second close boundary sentry.

6.6.7.3.3 Establishing Security at Divert Service/Fuel Stops

The flying team is responsible for establishing security at all divert stops. If the flying team consists of only two MSD personnel there may be a request to the aircraft commander to have some of the crewmembers assist if the flying team is occupied conducting vehicle and equipment searches. Since these stops are normally only a few hours or less in duration, the entire flying team provides security. Every effort will be made to maintain at least a two-point security posture with a close boundary sentry and an entry controller.

6.6.7.3.4 Establishing Security at Delay Sites

When the CODEL aircraft reaches a delay site, the ADVON team should already be present. The ADVON team has all the vehicles and equipment that will approach the aircraft searched and staged in one area. If the ADVON team has encountered problems and is not available, the flying team is responsible for accomplishing as much of the search as possible.

The CODEL team sets four-point security on the aircraft until the CODEL party has departed the area. Stanchions and cord/rope may be used to mark the buffer zone around the aircraft. A gap in the boundary off the left wing serves as the entry control point (ECP).

Once the CODEL party has departed the immediate area of the aircraft, the CODEL team sets two-point security. If present, HN security personnel should remain outside the buffer area and handle most situations that arise with HN citizens.

6.6.7.3.5 Entry Control

An ECP is established to screen all personnel, vehicles, and equipment desiring entry into the buffer zone. Appendix O outlines ECP procedures.

The entry controller performs entry control of personnel using the flight manifest and the CODEL team roster and access list. These documents cover all personnel allowed unescorted access to the inside of the aircraft. All visitors, maintenance, or service personnel shall be cleared by the aircraft commander and shall have an escort from one of the aircrew while inside the aircraft. There are to be no service personnel not on an access list in the aircraft or in the buffer zone when the CODEL party is to embark the aircraft.

All vehicles and equipment shall be searched prior to approaching the CODEL aircraft. The search should be performed as far away from the aircraft as possible. One of the close boundary sentries conducts the search while another sentry watches. If two-point security is set, the entry controller may assume the watch position provided he can still observe the aircraft stairs/fuselage door. There are to be no vehicles or flight-line equipment, other than the CODEL team vehicle at the ECP, in the buffer zone when the CODEL party is to embark the aircraft.

The CODEL team commander may order spot checks of the baggage. If the baggage does not arrive at the aircraft in one group under the supervision of a member of the crew, the team conducts another search of all baggage. Regardless of whether a complete search is required or not, a MWD is used as a final check of the baggage, if available.

6.6.7.3.6 Logbooks and Entries

A new logbook is started for each CODEL mission and maintained by the team. The first entry is made by the assigned CODEL team commander stating that he has all required equipment, a list of all serialized gear, and a list of the personnel on the team. Entries are required when any of the events below occur, but additional entries may be made whenever the commander/close boundary sentry deems it appropriate. For example, when the aircraft commander's orders contradict the guard's orders.

1. Each time the aircraft seals or opens its hatches
2. Each time the aircraft becomes airborne or lands, to include the time and location
3. Each time security is set or removed from the aircraft, to include what type of security
4. Each time the CODEL party is loaded or unloaded from the aircraft
5. Each time any nonguard vehicle or equipment enters the buffer zone, to include the names of the personnel using the equipment
6. Each time an ADVON team is integrated or removed from the CODEL team, to include their names
7. Each time the guard is changed, to include the HN watch
8. If and when any equipment breaks or is missing
9. Each time there is a visitor to the aircraft.

6.6.7.4 Administration and Logistics

The MSS administrative officer writes orders on the CODEL team once they have chopped to the aircraft commander. Higher authority or the aircraft commander/squadron is responsible for coordinating all funding/fiscal requirements for the CODEL team.

6.6.7.4.1 Meals Ready to Eat

The detachment takes a supply of meals, ready to eat (MREs) to cover meal requirements while on guard at the aircraft and in emergency situations. Meals away from the aircraft should be covered under individual orders and taken at a local restaurant, hotel, or a military galley.

6.6.7.4.2 Ammunition

The ammunition to support a CODEL mission is taken from the MSS ammunition allowance. The CODEL team commander and MSS weapons officer conduct a joint inventory. Positive accountability of ammunition is a priority, and each CODEL team member signs for receipt and relief of his ammunition when posted or relieved from his post.

6.6.7.4.3 Billeting

Billeting for CODEL missions should be covered on the orders and is the responsibility of the aircraft commander. The ADVON teams may not be covered under the aircraft commander's requirements prior to his arrival. If this is the case, the ADVON teams will arrange billeting on their own until the CODEL aircraft arrives and then integrate into the crew-billeting plan for the duration of the stay.

6.6.7.4.4 External Support and Coordination

The aircraft commander/parent squadron is responsible for coordinating all external support for the aircraft crew. Since the CODEL team is considered part of the crew the requirements listed below are to be considered for each CODEL mission. The list of requirements is usually consolidated with other support requirements in a message to the aircraft's parent squadron.

Orders include authorization for the ADVON OIC to rent vehicles to support the CODEL team. The CODEL team requires one vehicle with a driver to transport the team between assigned berthing and the aircraft for the entire length of stay. An additional vehicle (preferably diesel) is required to man the ECP at the aircraft for the entire length of stay. The vehicle should have an operable air conditioner/heater, as local weather conditions require, providing quality of life to nonacclimated sentries.

Other requirements are:

1. Ten gallons of bottled water per day
2. HN/contract security to stand tail watch outside roped boundary 24 hours a day for the length of stay
3. Stanchions and cord/rope (quantity to be determined) to completely encircle and isolate the aircraft
4. Four "Restricted Area" signs in the local language to be displayed along the roped barrier
5. Lighting with power hookup or generator to adequately illuminate all four sides of the aircraft at night
6. Interpreter support, especially when HN service personnel are in and around the aircraft
7. An MWD team to check baggage prior to reloading aircraft before departure
8. Aircraft power carts so the team can use aircraft facilities while it is shut down
9. Request coordination that the CODEL team be armed while on the ground, but only in the immediate vicinity of the aircraft.

6.7 OPERATIONAL CONSIDERATIONS FOR INTRUSION AND RESPONSE

Regional COCOMs establish ROE for all U.S. military forces within their respective AOs. NCW forces in an FP role are required to follow the applicable ROE pertaining to the AO in which they are operating. Where this may become problematic is when an NCW security detachment on an aircraft or ship transits from one AO to another. This movement requires that the OIC be aware of the ROE as well as threat information pertaining to the AO they are in or entering. In addition to ROE considerations, local legal or HN restrictions will also govern the UOF during the mission.

When a protected HVA enters a port or lands, the OIC must know who the local FPO at that SPOD or APOD is and must coordinate with that official. While in port or at the airport/airbase, the OIC and his NCW security detachment are part of the FP for that port and must know how they fit into the existing local FP plan. They must understand the layered defense posture already in place and when they can engage threats.

6.7.1 Planning

A key initial step in planning the physical security measures necessary to prevent terrorist attacks is the determination of which facilities/activities are critical to the mission, and which of them are or may be vulnerable.

The following considerations can assist in making these determinations:

1. How critical is a particular HVA?
2. How attractive is a particular HVA as a target?
3. How complete are existing physical security measures in effect around the HVA?

6.7.2 Hostile Intent

An adversary's objective to inflict damage or endanger lives is manifested by hostile intent. NCW forces face a significant challenge in determining when a COI exhibits hostile intent towards HVAs or security forces.

6.7.3 Continuum of Actions

Security boats have a continuum of actions they may employ to protect HVAs. However, all of these actions will not be taken in each situation or necessarily in the order presented. Such actions include, but are not limited to:

1. Showing a waterborne presence without taking action
2. Radio hail; warning to remain clear
3. Verbal hail; warning to remain clear
4. Visual warning; rapid waving of hands above head, placards, clear display/manning of mounted weapons, unambiguous warning device (UWD)
5. Maneuvering to position between the COI and HVA
6. Maneuvering aggressively between the COI and HVA to encourage the COI to change course
7. Blocking the COI to cause a course change in desired direction
8. Shining spotlights on the COI pilothouse
9. Shooting flares across the bow
10. Shouldering the COI to cause course change in desired direction.
11. Warning that the COI will be fired upon
12. Firing crew-served weapon warning shots to show own-force intent, preparatory to walking fire to disable/destroy
13. Ramming the COI to damage or destroy (when boat characteristics permit)
14. Firing on the COI.

6.8 VULNERABILITY ASSESSMENT

Vulnerability assessments address the consequences of enemy attacks in terms of the ability of units, installations, ships, or activities to accomplish their assignments successfully, even if the enemy has inflicted casualties or destroyed or damaged assets. Vulnerability assessments are an ongoing process and change regularly depending on the nature of the threat.

Vulnerability assessments include steps criminal, terrorist, or conventional enemy forces might take to gain access to protected DOD assets, and the resulting adverse consequences to the HVA in terms of diminished capability to carry out their assigned mission. The minimum purpose of vulnerability assessments is to aid commanders in identifying the following:

1. Weaknesses in physical security plans, programs, structures

2. Effectiveness of personnel practices, security procedures, incident control, incident response, and incident resolution

3. Operational enhancements to FP

4. Resource requirements necessary to meet other security requirements.

6.8.1 Physical Security Check Sheet

Appendix P provides a checklist and is intended as a quick reference for vulnerability assessments.

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CHAPTER 7

Joint Operations

7.1 PURPOSE

This chapter explains the important defensive role NCW forces have supporting operations in a joint operations area (JOA). These operations are amphibious operations, MPF offload, and JLOTS.

7.2 OVERVIEW

In support of joint operations, NCW forces execute many of the same missions discussed in earlier chapters, but with a joint command structure inserted into the chain of command. NCW forces normally conduct coastal sea control, PSHD, and HAD in the joint rear area (JRA). Specific NCW operations include but are not limited to:

1. Intelligence collection
2. Reconnaissance and surveillance
3. Armed interdiction
4. Security of HVAs, LOCs, and MSRs
5. SAR
6. Naval special warfare support
7. MCM and EOD support
8. Supporting operations as assigned by the JFC.

These operations may be done independently or in support of other operations. The NCWC plans and conducts NCW operations within a defined geographic area, normally designated as the NCW area. The NCW area can include offshore waters, harbor approaches, ports, waterfront facilities, and those internal waters and rivers that provide access to port facilities.

The following factors should be considered when planning the defense of a JRA near a shoreline.

1. Type and nature of the threat
2. Protection for sea approach chokepoints
3. Tides and currents
4. Water clarity and depth
5. Pier clearance and lighting
6. Use of patrol boats

7. Communications in a joint command structure
8. Rail and highway entrance security
9. Air and missile defense measures
10. Security for HVAs.

7.3 MISSION

NCW forces plan and conduct operations to ensure strategic mobility and provide a safe haven for US joint forces and multinational forces in NCW areas, during time of war and other contingency situations, in support of the JFC's CONOPS.

7.4 COMMAND STRUCTURE

The geographic COCOM has overall responsibility for security in his respective JOA, including the contiguous territorial seas. The JRAC is responsible for landward security in the JOA. The waterside security responsibility is normally delegated to the NCC, who will in turn task an NCWC to conduct NCW operations within a designated NCW area. Additionally, the NCC assigns supporting forces to the NCWC as required. (See Chapter 2, Figure 2-2 for an example of a notional joint command structure.)

The NCWC and the JRAC coordinate all relevant aspects of their missions and responsibilities for their respective AOs as well as provide mutual support to ensure the security in the JRA and the NCW area. The common boundary between the NCWC's AO and the JRA will normally be the high-water mark.

7.5 NAVAL COASTAL WARFARE SUPPORT FOR JOINT OPERATIONS

The employment of NCW forces is governed by specific NCW tasks in an OPLAN or by CAP. A NCWRON will normally be responsible for harbor control while an MIUWU is responsible for surveillance, detection, and naval communications. The PSUs, IBUs, and MSDs conduct harbor area operations including patrolling harbors and anchorages, maritime interdiction, surveillance, FP of HVAs, and the enforcement of exclusionary zones.

7.5.1 Port Security and Harbor Defense

The NCWC may form PSHD units to support JRA defense efforts. The NCWRON acting as the harbor defense commander sets the boundaries for HD. Defense of the harbor is the responsibility of the harbor defense commander, and inland defense is the responsibility of the JRAC. The NCWC may assign subarea operational commanders as needed for coastal sea control and HD in order to conduct operations.

On a larger scale, under the direction of the NCWC, the NCWRON may have OPCON of forces providing PSHD in more than one port and/or harbor. This may be particularly true along a coastline that has multiple ports in close proximity to each other. In this situation, the multiple ports may be designated a base cluster. This designation represents a collection of bases geographically grouped for mutual protection and ease of C2. The NCWRON, through the NCWC, coordinates security operations with the appropriate area or functional commander.

7.5.2 Joint Base Security on a Shoreline

The establishment of a base on a shoreline in the JRA presents special advantages and challenges to NCW forces responsible for its defense. The advantages include the availability of the assets of more than one Service component for use by the NCWC in fulfilling their responsibilities. The special challenges may include the fact that facilities like ports and harbors are usually located in heavily populated areas. Command arrangements may be complicated by diverse purposes when multiple Service components use the same facilities. For example, the following installations may be in physical proximity:

1. Army common-user water terminal
2. Support base for a Marine air-ground task force (MAGTF)
3. Naval advanced logistic support site (ALSS), and naval forward logistic site (FLS)
4. Air Force base operating an APOD.

The JFC designates the base commander, usually from the Service component with the largest or preponderant force on the installation. The JFC must designate the chain of command for security and defense, which may differ from the mission chain of command. In the case of multiservice operations, each Service component facility may be designated a separate base as part of a base cluster commanded by the designated Service commander.

The base or base cluster may be directly subordinate to the joint HQ, to a component commander, or to an area or functional commander. In the case of a large joint operation, the Army Materiel Command may have extensive ongoing contractor support operations (to open the port and remain throughout the operation as required). Command relationships must account for their presence and make allowance for any special protective measures.

NCW security and surveillance forces, backed up by capable mobile reserve forces, must be designated to cover every possible avenue of approach to the base.

7.5.3 Force Protection in Amphibious Objective Area

NCW forces support amphibious operations by protecting offload forces, AFOE, MPF in-stream and pierside, and JLOTS. Assets that NCW will defend in this context include anchored and underway amphibious ships, MPF and cargo ships, boat lanes, lighterage, landing craft, piers and causeways, and water/fuel lines.

7.5.3.1 Operational Environment

While NCW forces are ideally suited to a level I threat environment and can function effectively in a level II environment, adequate planning must be conducted for any threat environment to ensure the survivability of the unit's assets and personnel. NCW patrol boats are lightly armed small craft designed for close-in waterborne defense, and are not equipped to engage hostile forces in an amphibious assault on a hostile shore. It is assumed that they will not be involved in offensive amphibious assault operations under wartime conditions.

When the amphibious task force (ATF) establishes an AO greater than 15 miles from shore, naval combatants such as cruisers, destroyers, and frigates will provide the best protection for the AO. The NCW craft will be capable of providing defense for the ATF with an established AO of 15 miles or less from shore.

7.5.3.2 NCW Forces' Amphibious Roles

Depending on the complexity of the environment, the number and types of core and noncore NCW forces assigned, an NCWRON may be needed to exercise C4I functions. For example, NCWRONs are capable of coordinating waterborne traffic management with the landward traffic management functions of beachmaster units and/or TTBs. In some operations, the NCWRON may actually be expected to fill the role of JRAC, extending its coordination requirements to include a multitude of joint and/or allied forces, HN entities, and nongovernmental organizations (NGOs).

The MIUWUs and/or MSP detachments may be assigned to provide additional surveillance capabilities beyond those organic to amphibious ships and cargo vessels. These surveillance capabilities are explained in detail in Chapter 5 and include sonar processing and thermal and visual imaging, in addition to radar and ES. Additionally, MIUWUs can use GCCS-variants to integrate contact information from their units and sensors and can provide a COP of NCW operations to the commander, amphibious task force (CATF). MIUWUs normally operate from ashore on or near a pier, but may also operate from an anchored or underway ship in the AO, or, as in recent

conflicts, from a gas or oil platform. During amphibious operations, an MIUWU could, for example, operate from the deck of a ship during the initial stages of offload. Later, when landing forces have secured the beachhead, CATF can relocate the MIUWU ashore to continue surveillance operations during the general offload, and through the sustainment and backload phases.

The other NCW forces that could participate in amphibious operations include MSDs, IBUs and/or PSU patrol boats to provide defense against small boats, swimmers, and divers — especially for anchored ships during a general offload or AFOE operations.

7.5.3.3 General Rules and Policies

The patrol orders must specify the whole range of zones and lanes that are part of an amphibious operation. NCW boats operate under the weather and sea conditions established in SOPs. When operating in open-ocean, or when HVAs are anchored more than 2,000 meters apart, it is normally necessary to conduct two-boat operations for mutual defense and defense of each HVA. When amphibious operations take place in unprotected waters, IBU boats, with their greater sea-keeping capability, are generally preferred over the lighter PSU boats with their open-boat design. Otherwise, IBU, MSD, and PSU boats are equally effective for amphibious operations.

The boats may need to monitor multiple communications nets including command, small boat operations, debark control, beach master, aircraft operations, and UHF aircraft guard channel. Boat crews must be aware of flare signals, semaphore, flag, and pennant signals that are used both afloat and ashore during amphibious operations. Patrol orders must contain specific reference to visual communications.

7.5.3.4 Integration with Amphibious Task Force

Where an airfield is unavailable, NCW forces will most likely be brought into the theater on and deployed from amphibious ships. Load planning should take into account the need to launch and operate NCW patrol boats early in the operation so that they can perform their FP functions during the offload. This means that the NCW boats must be embarked as an integral part of the ATF.

It is absolutely essential that strong coordination exists between CATF and the NCW forces. When an MIUWU is assigned to support amphibious operations, it should normally exercise TACON over NCW and non-NCW patrol boats assigned to FP. In the absence of an MIUWU, an amphibious ship can effectively exercise TACON of these boats. Embarking the IBU/PSU aboard the ship facilitates this process by enabling the boat unit watch officer to work in combat information centers CIC with the tactical action officer (TAO) and shipping officer.

7.5.3.5 Defense in Depth

The fundamental concept in HVA defense is multiple defense zones as described in Chapter 6. The NCW boats establish a 360-degree defensive perimeter around the HVAs in the AO with security zones. As NCW boats have limited electronic sensor capabilities they are dependent on the electronic sensors of the ATF to extend their range to detect and classify potential threats.

The security zone is typically divided into patrol sectors. The size and configuration of the patrol sectors depends on the direction and capabilities of the expected threat and the number of boats available. To conserve assets, the size and configuration of the security zone should be the minimum necessary to ensure the safety of the protected asset from projected threats.

7.5.3.5.1 Amphibious Task Force at Anchor

A 360-degree security zone and reaction zone is established around the HVAs. Assuming that the worst threat is from high-speed craft with RPGs, the reaction zone is 1,000 meters in radius and the security zone extends an additional 1,000 meters from the HVA. If the HVAs are spaced more than 2,000 meters apart, multiple reaction and security zones are needed. Boats protecting the different HVAs must take special care to avoid interfering in fields of fire.

The optimum defensive posture for 360-degree protection of a single HVA in a level I or II threat environment is a four-boat patrol, with three boats operating in the security zone and one boat maintaining position in the reaction zone. A fifth boat should be kept on standby at the ATF command ship, ready to augment as necessary if the threat escalates. If conditions warrant, one or two additional boats may be deployed outside the security zone for contact and escort.

7.5.3.5.2 Amphibious Task Force Underway

If the ATF is underway, the security zone and reaction zone move with the HVAs. The boat coxswains must be aware of the formation, course, and speed of the ATF ships. See Chapter 6 for guidance on establishing a moving security zone.

7.5.3.5.3 Lanes to Beach

NCW boats may be required to provide a screen to protect the flanks of lanes to and from the beach. The number of boats required for this operation depends on the distance from the ships to the beach. At least two boats are needed on each flank. When the lanes are being actively used to move high-value cargo and personnel to and from the beach, a reaction zone and security zone should be established on each flank.

7.5.3.5.4 Evacuation of Noncombatants

NCW boats may be required to provide a screen to protect the flanks of evacuation routes to and from the shore to the ATF. This involves protection for the evacuation site, protection for landing craft underway to and from the ATF ships, and protection for the ATF ships themselves.

7.6 POTENTIAL THREATS

In the JRA, NCW forces are the primary defense against waterborne threats and should actively patrol the adjacent waters. Even in a relatively secure rear area, small enemy units may seek to interfere with joint operations from the seaward approaches. NCW forces can effectively detect and counter many threats, including unconventional warfare boats, small military boats, swimmers, divers, and minisubs, and can effectively detect submarines and small relatively slow low-flying aircraft. Additionally, hostile forces on land may threaten joint forces, and can be engaged from seaward by NCW patrol boats. Any of these threat vehicles may use small arms, explosives, RPGs, or mines to damage or destroy ships or craft, disrupt offload operations, or deny the use of water areas to U.S. and allied forces.

When supporting amphibious operations, NCW forces must coordinate their capabilities with organic capabilities of amphibious or other types of ships to effectively defend against these and other threats. For example, an amphibious ship's guns may provide an outer layer of defense against attacking small boats, while patrol boats provide the inner layer of defense. A ship's close-in weapons system (CIWS) most effectively defends against high-speed air attacks, while M2 machine guns aboard ship or on boats may be used against low-speed air attack.

Threats to operations in the JRA include all levels of threat as discussed in Chapter 1, and are further explained in the following paragraphs.

7.6.1 Amphibious Raids

The enemy may attempt amphibious raids using watercraft and/or aircraft. Likely beaches, landing zones (LZs), and insertion areas should be monitored and, if necessary, obstacles should be emplaced.

7.6.2 Sea Mining

Enemy mining of the seaward approaches to the base can be conducted from surface vessels, by air, or clandestinely by submarines. Detection of such activity should be a priority for NCW surveillance systems and patrol boats guarding the seaward approaches to the base.

7.6.3 Maritime Special Operations Forces

Determined, specially trained, organized, and equipped individuals or units can infiltrate ports, harbors, and bases near shore by swimming, scuba diving, and using high-speed surface craft, indigenous small boats, or miniature submersibles. These forces are capable of causing severe damage to vessels, port facilities, and base resources.

7.7 LIAISON WITH OTHER COMMANDS AND AUTHORITIES

The NCWC will ensure any supporting forces are properly integrated into the NCW defense plan which in turn is integrated into the overall JRA defense plan. By definition, joint operations are conducted by more than one military service; therefore, consideration must be given to the additional communications requirements that may be encountered.

7.7.1 Forces Ashore

NCWCs should establish corresponding relationships with Service component forces ashore to coordinate security operations. For especially critical facilities, dedicated defense forces such as Marine Corps security forces, Air Force security police, and Army military police may be in the JRA.

7.7.2 Host Nation

Close liaison between the NCWC and appropriate HN agencies is necessary in order to operate within that country's territorial waters and to coordinate support from local, civil, and military authorities. During many types of NCW operations, HN cooperation forms an important component of logistics, intelligence, and FP planning. However, in many amphibious warfare (AMW) scenarios, there may be no HN cooperation available. In these cases, the NCWC or NCW units and supported commanders must employ other methods to meet these requirements. This may involve additional logistics support, increased liaison with theater intelligence assets, and assigning additional waterborne and landward FP units.

CHAPTER 8

Military Operations Other Than War

8.1 PURPOSE

This chapter addresses NCW missions conducted in support of MOOTW. Since MOOTW defy strict categorization due to their wide scope and the lack of any specific mission, NCW forces are challenged when trying to define the possible operating environments associated with them. However, by understanding the Navy's NCW capabilities and associated constraints, planners can modify and adapt these precepts to nearly any MOOTW situation encountered.

8.2 OVERVIEW

Broadly defined, MOOTW encompass all military operations short of major theater war. MOOTW focus on deterring war, resolving conflict, promoting peace, and supporting civil authorities in response to domestic crises. Deterrence places military objectives within the larger goal of preventing conflict or controlling the spectrum of conflict. In this context, military operations and capabilities can compel an opponent to stop or reverse some action, deter a potential adversary from hostilities, or reassure an ally.

Joint publication JP 3-07, Joint Doctrine for Military Operations Other Than War, ties national strategy to MOOTW doctrine and clarifies how the Armed Forces carry out the provisions of the National Military Strategy (NMS) in operations other than war. In its discussion of MOOTW's strategic aspect, JP 3-07 identifies the military's support to those components in terms of deterrence, forward presence, and crisis-response capabilities as discussed below. HA is thoroughly addressed in JP 3-07.6, JTTP for Foreign HA. NWP 3-07, Naval Doctrine for Military Operations Other Than War, further defines the Navy's contribution to MOOTW.

The primary purpose of forward-deployed naval forces is to project American power from the sea to influence events ashore in the littoral regions of the world during peace, crises, and war. Forward-deployed naval forces are in position to quickly support MOOTW around the world. Naval forces initially contribute more to these operations than any other Service. Forward presence enhances credible deterrence, supports regional stability, and facilitates multinational interoperability. Forward presence allows U.S. forces to rapidly transition to these operations when required. The expeditionary nature and the qualities of naval forces — forward presence, readiness, flexibility, self-sustainability, and mobility — keep them at the forefront of MOOTW time and again.

8.3 NAVAL COASTAL WARFARE MISSIONS

While not a specific mission or core competency, NCWCs must understand the nature of MOOTW and be prepared to deploy forces in a manner often different from established NCW doctrine. NWP 3-07 addresses the roles and attributes of the U.S. maritime forces participating in these critical mission areas. It supports JP 3-07 by providing general Service guidance and identifying significant issues for naval forces. NCWCs must be familiar with the objectives of the mission(s) and the roles of other responsible agencies to ensure NCW support complements the other efforts to achieve the stated goals and mission success.

NCW units may be directly involved in MOOTW or tasked as supporting units in various mission roles. In some of these operations, NCW involvement is primarily limited to the assignment of individual personnel or units as part of a joint or interagency effort. While joint doctrine identifies sixteen general types of operations as MOOTW, there are only two types that NCW forces may be tasked to conduct: HA operations and NEO. These are explained in the following paragraphs.

8.3.1 Humanitarian Assistance Operations

The United States Government (USG) conducts HA, which encompasses disaster relief operations to assist in the recovery of stricken areas and populations following disasters. These disasters may be natural (e.g., flood, drought, hurricane, or fire) or man-made (e.g., civil violence, chemical leaks, or nuclear accidents). HA can be conducted concurrently across the realm of military operations (peace, conflict, or war). Additionally, the United States may conduct HA:

1. Coordinated by the UN
2. In concert with other multinational forces
3. Unilaterally.

Naval forces have organic capabilities that directly enhance the probability of HA success. They are forward-deployed and often able to quickly respond to crises. They are able to move large amounts of supplies with minimal footprint ashore and the least impact on the HN. They have existing C2 structures upon which the HA efforts can be readily supported; and they have well-trained security forces. Large-scale HA operations will typically be executed by a JTF.

NCW forces coupled with other naval forces can establish the initial support and provide the ideal base for follow-on Army and Air Force operations in complex or multiple HA missions. NCW tasks could include security, transporting supplies, repairing or constructing public facilities and shelters, assisting displaced persons, and providing food, water, and medical care.

8.3.1.1 Security

NCW forces can provide security for ports and airfields, relief organizations, U.S.G agencies, HA recipients, and HA supplies and distribution centers. These forces also provide armed escorts for convoys and personnel delivering emergency aid.

8.3.1.2 Transporting Supplies

Naval logisticians are well trained in establishing a distribution system for supplies and providing transportation services, including convoys. NCW forces are capable of moving supplies within the theater via sealift, then transporting it to distribution points such as warehouses. Distribution of relief supplies to the populace is traditionally the domain of the relief organizations because of their charters, expertise, and experience.

8.3.1.3 Repair and Construction

NCW forces may conduct projects to improve the infrastructure needed to complete military portions of the HA mission. Technical assistance may be provided to restore communications, assist EOD in demining efforts, rebuild roads and public utilities, or construct shelters.

8.3.1.4 Assisting Displaced Persons

Refugee programs are designed to support the resettlement of refugees or displaced persons. NCW forces may provide C2 in construction and administration of camps, movement or relocation of refugees, provision of care (food, water, supplies, medical care, and security), and other assistance as requested by local authorities.

8.3.1.5 Providing Food, Water, and Medical Care

In general, naval assets support naval personnel, while HN facilities and relief organizations support themselves and the civilian population. However, if the situation deteriorates to the point that relief organizations are unable

to keep up with medical, food, water, and supply distribution demands, NCW forces may be tasked with providing this assistance directly to the populace.

8.3.2 Noncombant Evacuation Operations

NEOs usually involve swift insertions of a force, temporary occupation of an objective area, and a planned withdrawal upon completion of the mission — the very essence of amphibious operations for which the Navy and Marine Corps train. Evacuation operations are characterized by uncertainty and may be directed without warning. Conversely, the order to execute a NEO may be delayed for extended periods of time as political options are played out, and naval forces may be tasked to prepare for a NEO long before it actually occurs.

NEOs are conducted to evacuate U.S. citizens and other designated personnel (e.g., third-country nationals, relief workers, and local citizens) whose lives are in danger because of political upheaval, military instability, or natural disasters. The Department of State (DOS), acting on the advice of the ambassador, determines when a NEO is required. Naval forces plan and execute the NEO as directed by the geographic unified commander, again acting on the recommendation of the ambassador.

NCW forces are capable of conducting a NEO because of their versatility in adapting to various security environments, and ability to station nearby for extensive periods of time without impacting other nations. NCW forces provide an early response to a developing situation, and a capability to quickly expand should the operational environment become hostile. They can also form the nucleus of a larger tailored force to be deployed if the size and scope of the NEO requires an expanded effort. NCW force commanders should anticipate extensive involvement with the AMEMB. The U.S. ambassador is responsible for the NEO, although he does not have command over military forces.

8.3.2.1 United States Embassy

The ambassador is the highest-ranking representative of the USG in a foreign country. The ambassador is appointed by the President, speaks with Presidential authority, and serves as the President's direct, on-site representative. During times of crisis, embassy personnel who are part of the "country team" advise the ambassador.

The country team consists of key members of the AMEMB who work directly with the HN government. It meets regularly to advise the ambassador on matters of interest to the United States and reviews current developments in the country. Figure 8-1 provides a generic list of country team members. Individual teams may differ slightly.

Figure 8-1. Notional Country Team

8.3.2.2 Evacuees

NEOs have humanitarian, military, and political implications. If a situation has deteriorated to the point that U.S. citizens are being evacuated, it is very likely that others will want to leave as well. There are several categories of personnel eligible for evacuation assistance. JP 3-07.5 lists those who can be ordered to depart; those who are entitled to evacuation assistance but cannot be ordered to depart; and non-Americans who seek assistance. This last group can be the largest and most difficult to control, particularly in an uncertain or hostile environment. The ambassador must establish the policy identifying who will be evacuated. Third-country nationals, relief workers, and local citizens who recognize the gravity of the situation may show up at the evacuation site demanding to be extracted. The ambassador must establish clear guidance on who is eligible to be evacuated by U.S. forces.

NCW forces, as directed by the geographic unified commander, would assist in the transportation of evacuees to designated safe havens or onward processing centers. This would likely entail embarking, identifying, and processing evacuees as well as providing messing and berthing facilities.

8.3.2.3 Safe Haven

A temporary safe haven, designated by the USG and coordinated by the DOS, is a location in an area or country to which evacuees may be moved quickly and easily. Although the temporary safe haven operates with the approval of the host government, it may not have the goodwill of the local population. It may become a prime target for terrorism and riots and NCW forces could be tasked with its security. A USN ship may serve as a temporary safe haven; however, evacuees should be moved to a land-based safe haven as quickly as possible.

8.4 EMPLOYMENT CONSIDERATIONS

MOOTW are often of limited duration and scope, and may involve elements of combat and noncombat operations (NCO). Commanders must plan for a wide range of mission requirements and employment considerations. The naval forces must be prepared to protect personnel, both military and evacuees, from a variety of threats. The force commander must ensure the ROE are flexible enough to ensure security and successfully accomplish the mission. ROE must be as precise as practical and must never deny the use of appropriate self-defense measures. Security measures must reflect the NEO conditions and alternative plans must be developed in case conditions worsen. Commanders must be prepared for the possibility that such operations may lead to extended combat operations. Figure 8-2 depicts the MOOTW planning process.

8.4.1 Planning Considerations

During MOOTW, NCW forces will undoubtedly receive numerous requests to perform additional tasks, either to achieve the initial objective or to include new ones. This is particularly likely when key agencies have differing views of the desired end state. A definitive mission statement early in the operation ensures that all organizations and agencies involved understand the limits of the NCW's charter in a given operation. The following are a list of planning considerations:

1. Anticipate heightened political sensitivities and associated publicity concerns.

2. The military may not be the primary player.

3. Only elements of different NCW units may be deployed rather than the entire unit.

4. More restrictive ROE.

5. May involve operating with unfamiliar specialized Reserve forces like civil affairs (CA) or psychological operations (PSYOP) specialists (OSs).

6. Usually involves interagency coordination.

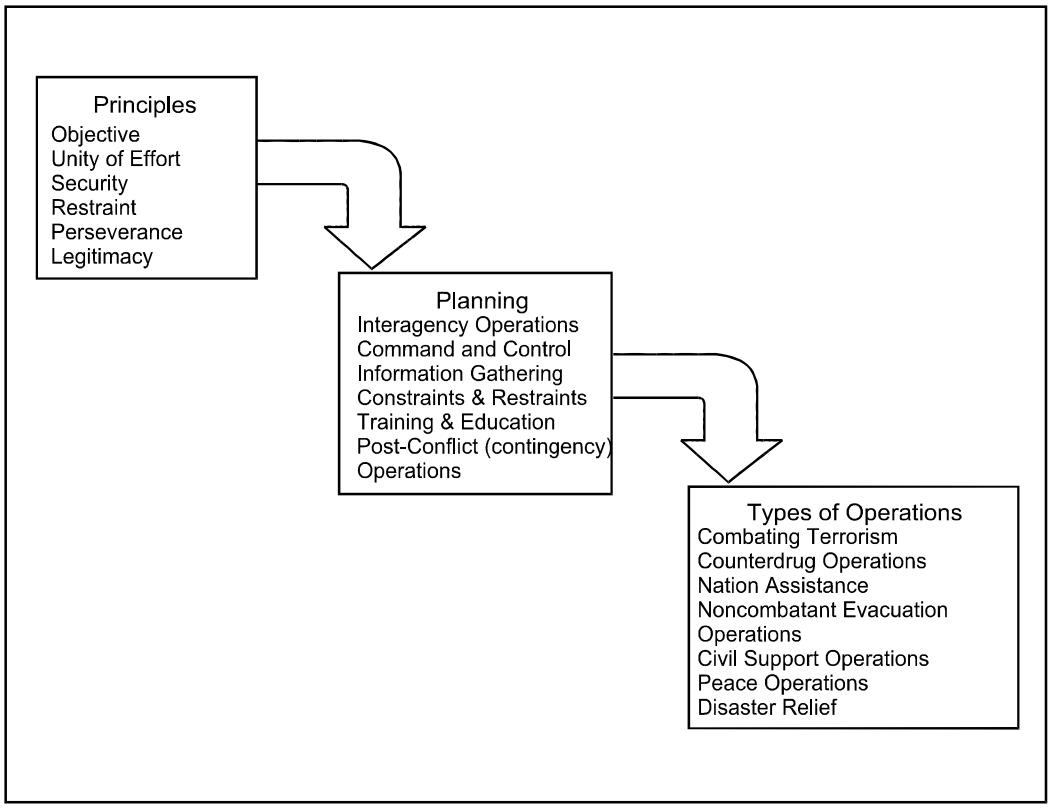

Figure 8-2. Planning for MOOTW

7. NGOs and/or private voluntary organizations may be involved.

8. Generally conducted OCONUS.

8.5 MISSION-BASED LEGAL CONSIDERATIONS

Every military task performed during NCW operations requires legal authority for the action taken. The authority for action is often found in a HN agreement or international law. HN laws apply to official activities of the NCW forces in the HN to the extent provided by international agreement. NCW forces conducting MOOTW are normally subject to the laws and policies of the HN, and as outlined in agreements between the United States and the HN government, and UN resolutions. The Geneva and Hague Conventions as well as the law of armed conflict (LOAC), law of war (LOW), law of the sea, and the CJCS SROE also should be familiar and carefully considered.

HN laws have implications on the conduct of all functions involved in MOOTW. It is the responsibility of the on-scene NCWCs to fully understand and implement the requirements of those agreements as they pertain to the mission.

8.6 SECURITY CONSIDERATIONS

Security requirements will vary greatly and are dependent on the area where MOOTW are being conducted. General considerations include FP, communication and operational security, and HN security planning factors.

8.6.1 Force Protection

When deployed as an integrated force package (NCWGRU, NCWRON, MIUWU, IBU, MSD, and PSU) the NCWCs have all the basic resources required to implement an effective FP program for HA and NEO. As an

NCW force, the NCWCs have intelligence capabilities, communications, surveillance assets, and protection and interdiction resources. Combining these units with other supporting units and HN assets enhances the capability to identify, classify, and thwart any hostile intent directed at NCW units and the assets it is tasked to protect.

8.6.2 Communications Security

During any operation, personnel are required to maintain communications security (COMSEC) standards at all times. Foreign intelligence agencies, terrorist groups, media sources, etc., have the means to eavesdrop on hand-held radios, marine band radios, personnel on liberty, faxes, laptop computers with Internet access, cell phones, and landline phones.

8.6.3 Operational Security

Operations security (OPSEC) should always be exercised. MOOTW provides an excellent opportunity for adversaries to collect intelligence against NCW units and personnel. Any information that reveals specifics or the scope of NCW forces has the potential to compromise its effectiveness. Prior to commencement of MOOTW, liaison should be effected with in-place intelligence and LE assets to determine specific threats to OPSEC.

8.6.4 Host-Nation Security

If the MOOTW is in support of an allied nation and valid agreements for support and security exist, the HN may provide overall security for the AO or segments of the AO. NCW forces will retain responsibility for their local security and will coordinate their local security measures with HN commands as appropriate.

If HNS is not viable, the NCW force is in a hostile country, or HN agreements do not exist, the NCW force must ensure that adequate measures for local security are taken and that forces are identified to ensure security as required. If the risk is too great, the NCWCs may position forces offshore or outside the AOR until security is ensured.

8.7 INTELLIGENCE SUPPORT FOR MILITARY OPERATIONS OTHER THAN WAR

Intelligence support is scalable. It allows the appropriate level of support based on the extent of the operation and the location of the support. Intelligence support during any operation is twofold: It provides the intelligence required to effectively protect assets organic to NCW, and it provides the information required for the unit to conduct its mission.

Information required for an MOOTW operation may not be readily available through traditional intelligence channels, so planners must identify essential elements (e.g., maps of embassy compounds, disaster estimates) and possible sources (DOS, relief organizations, HN sources). National and theater collection systems can also be tasked to provide current imagery of the crisis area. NCW forces should be willing to share this information with other agencies and organizations to the extent possible without compromising security and be prepared to deal with attendant issues involving release of classified and sensitive information.

8.8 ENEMY PRISONER OF WAR HANDLING/TRANSFER

Comply with Geneva Convention and be aware of the 5Ss and T: Search Silence, Segregate, Safeguard, Speed, Tag.

8.9 ASYLUM CONSIDERATIONS

The potential for asylum requests and procedures for handling should be considered early on — sometimes the potential is high. If units are unprepared to handle this issue, the resulting burden on units and missions can be considerable. Procedures for handling such claims and requests for temporary refuge are contained in SECNAVINST 5710.22 (series). Theater and or mission-specific guidance may provide additional information.

CHAPTER 9

Naval Coastal Warfare Defensive Boat Tactics

9.1 PURPOSE

NCW boat operations provide waterborne protection of facilities, military assets, and friendly waterborne commerce in the United States and OCONUS ports, harbors, and forward staging areas. NCW boat operations are overt and defensive in nature, conducted primarily in military rear areas to defend critical logistics assets. This chapter provides general guidance for NCW planners, unit commanders, watch officers, boat crews, and commands exercising TACON of boats. The tactics discussed can be adapted to boats with similar characteristics or applicable sections may be utilized for less capable craft.

9.2 TASKS

NCW boats are patrol craft capable of operating in AOs that range from level I to level II threats. The patrol craft can be tasked with defensive boat patrols and nonsecurity tasks.

9.2.1 Defensive Boat Patrols

NCW defensive boat patrols are designed to protect friendly LOCs by establishing control of waterways in the AO. In addition, by conducting interdiction and security patrols they also deny hostile forces the use of these waterways. Boat patrols can also conduct surveillance, area surveys, and intelligence-gathering missions

9.2.2 Nonsecurity Tasks

While NCW boats are functionally able to conduct nonsecurity tasks, these types of operations will detract from their primary responsibility of providing security to HVAs. Boat resources to support nonsecurity requirements should not be drawn from on-station boats. Boat unit commanders should support these requirements whenever possible using assets such as HN boats, COOP, other units' boats (e.g., LCM), standby boats, helicopters, etc. Nonsecurity missions that should not disrupt patrol operations include:

1. Sonobuoy emplacement
2. LASS deployment (IBU Generation I craft can be configured to deploy LASS)
3. Distinguished visitor (DV) transport and passenger transfer
4. Medical evacuation (MEDEVAC)
5. SAR/combat SAR (CSAR)
6. Patrols outside the security zones
7. Diver support
8. Coast watcher placement, relief, and resupply.

9.3 COORDINATED WATERBORNE MOVEMENT

Waterborne movement is the use of craft to provide tactical mobility. It may simply be a means of transportation within the AO or may be the method of patrolling or area control on the waterway.

Waterborne movement is at the heart of patrolling operations. It is similar in nature to vehicular movement with speed of movement and security of the formation as essential planning elements. It is also similar to small unit patrol tactics in that the awareness of each individual craft is the key element of overall formation security. Establishing and rehearsing SOPs, such as immediate action drills for enemy contact, are critical to effective and safe movement.

9.3.1 General Rules and Guidelines

NCW patrol boats shall operate at a minimum in a two-boat detachment. Single-boat operations are only to be undertaken in a safe haven under no-threat conditions. Single-boat patrols shall never be undertaken on the open ocean.

9.3.2 Standard Distance

The standard distance between boats for operating in formation is 25 yds. This distance may be modified based on operating restrictions, crew proficiency, sea state, weather, visibility, and prudent seamanship.

9.3.3 Clear Firing Arcs

Boat coxswains, patrol leaders, boat unit watch officers, and the TACON authority must have a clear understanding of the boat's field of fire to avoid blue-on-blue situations and danger of collateral damage to friendly shoreline. Situational awareness, frequent navigation plots, and constant alertness are crucial to avoid these adverse situations.

9.3.4 Depth Restrictions

The following depth restrictions apply to waterborne movement. These restrictions do not apply to launch and recovery or beach landings. Constant monitoring of the fathometer and awareness of tidal changes are necessary to protect the engine outdrives from underwater hazards.

1. Planning Depth: Do not plan any evolution in an AO with a water depth less than 6 ft.

2. Operating Depth: Maintain a minimum of 2 ft of water beneath the screws for all normal evolutions. Exercise due speed restrictions whenever bottom conditions are suspect or unclear.

When running a shallow inlet boats should avoid entering on ebb current if possible and wait for a flood current.

9.3.5 Riverine Operations

When operating in a riverine environment (including estuaries and lakes), every effort shall be made to obtain larger scale charts, including those from non-DOD sources (e.g., USCG or local government). Consultation with local boatmen is strongly advised to obtain current knowledge of bottom conditions, sandbars, silting, local fishing net/trap areas, and dump sites.

9.3.6 Radio Communications

Boat crews shall ensure that positive radio communications are established prior to getting underway and are maintained at all times with the TACON authority while underway, unless otherwise directed by appropriate emission control (EMCON) imposed by the TACON authority.

9.3.7 Patrol Orders

Patrol orders will be given following the standard five-part SMEAC format prior to all underway operations. The patrol leader or boat coxswain should give the patrol order. See Appendix K for patrol order format.

9.3.8 Types of Patrol Boat Formations

The patrol leader will deploy boat formations according to the threat, sea conditions, and other factors. Secure movement in the AO is an overriding operational principle. Actual patrol craft formations will vary depending on the tactical objectives of the mission, the type of craft, the size of the force, and the tactical environment. The following paragraphs describe the types of patrol formations that may be employed.

9.3.8.1 Column

A column is a formation in which all craft are in a line astern of the lead craft. A staggered column may be used on wider waterways with multiple craft. In a staggered column, each craft trails the lead craft, alternately offset to the right or left. Figure 9-1 is a depiction of a column formation.

Columns provide maximum broadside firepower. The column is warranted when there is a suspicion that an area has been mined. The column formation should be used when operating in unfamiliar waters.

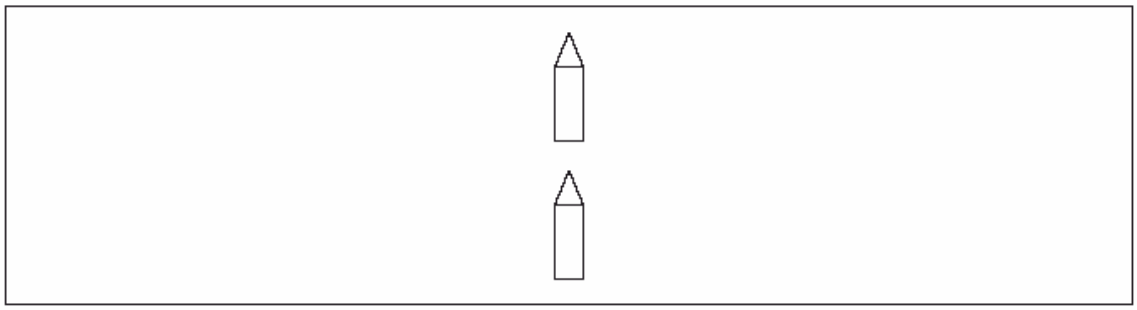

Figure 9-1. Column Formation

9.3.8.2 Line Abreast

In this formation, craft are in a line to the left or right of the guide. This formation requires a wide waterway with good depth. It may be necessary to modify the formation to circumnavigate obstacles or hazards. It provides maximum firepower forward and aft of the formation, and may be useful to search an area for small contacts. This is not a good formation for transiting suspected mined areas as each craft follows a different path. It is very vulnerable to ambush from concealed positions along the shore. Figure 9-2 illustrates the line abreast formation.

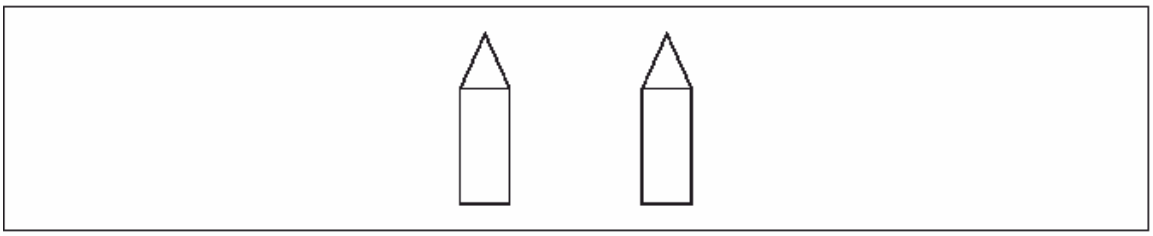

Figure 9-2. Line Abreast

9.3.8.3 Echelon (Left/Right)

In this formation, craft are deployed in a diagonal line aft and left or right of the lead craft. It is generally used in a wider waterway when the patrol expects enemy activity from the formation's strong side, since it provides a good field of fire forward and to the strong flank of the patrol. Figure 9-3 depicts the echelon left formation.

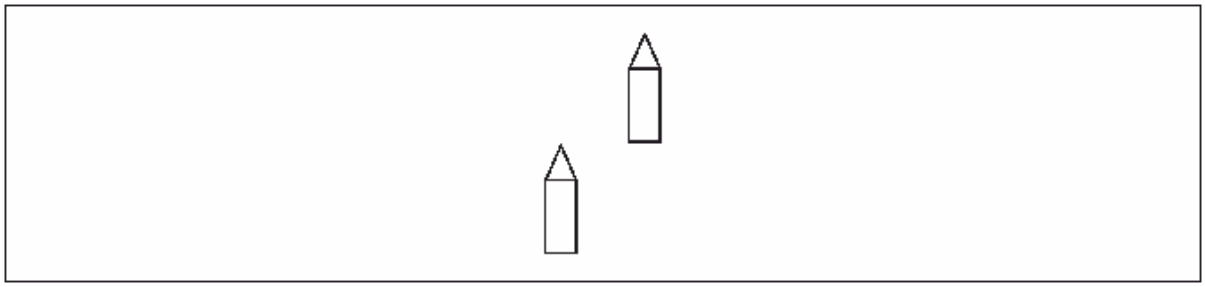

Figure 9-3. Echelon Left

9.3.8.4 Wedge/Vee

In this formation, the craft are positioned in the form of a V or inverted V. This formation is normally used in a medium- to high-threat environment as it allows immediate application of firepower to all sides. The patrol leader is generally positioned in the center craft to afford the best vantage point for C2. Figure 9-4 depicts the Wedge/Vee formation.

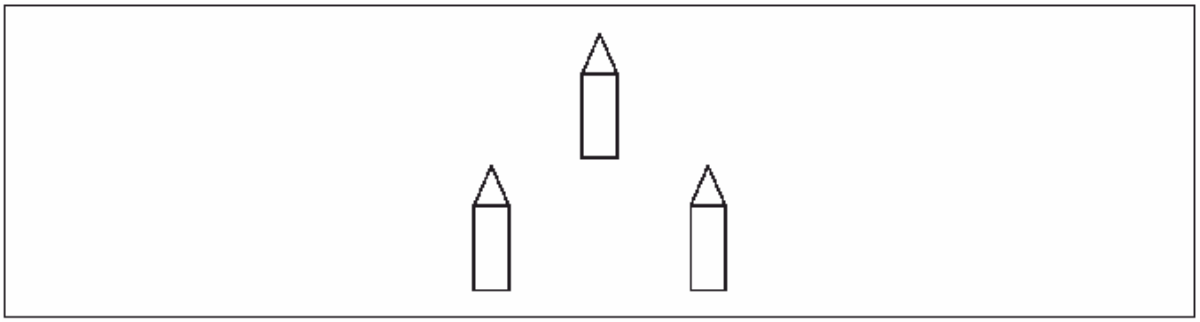

Figure 9-4. Wedge/Vee

9.3.8.5 Diamond

A diamond is a four-boat formation that provides firepower in all directions. Figure 9-5 depicts this formation.

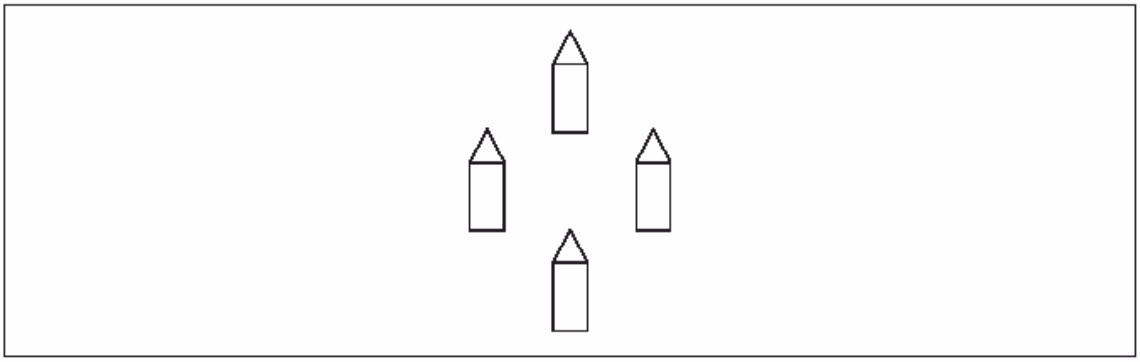

Figure 9-5. Diamond

9.3.8.6 Clock Face

Boat formations are sometimes more easily established and changed using positioning instructions based on the face of a clock. This is especially true as the tactical situation develops, requiring a shift in the formation. In these instances, the lead boat is used as the reference. For example, echelon left would be called "Station 7" or "Seven O-Clock." Likewise, a column formation would be "Six O-Clock," and a line abreast to the right would be "Three O-Clock." This system has the advantages of brevity and simplicity. Figure 9-6 depicts the clock-face methodology.

9.3.8.7 Changing Formations

The following guidelines will be used when shifting from one patrol formation to another while underway. The patrol leader will use hand signals and/or radio calls to order formation changes.

1. Boats are numbered for ease of control. In a column, boats are numbered from front to back. In a line abreast or wedge, boats are numbered so that even numbers are to the right and odd numbers are to the left of the guide.

2. Whenever possible, the formation should maintain its course and speed when changing formations. It is desirable to place the formation into a column before attempting turns and wheeling maneuvers.

3. Column-to-Wedge: Even-numbered craft pull into position on the starboard side and odd-numbered craft pull into position on the port side of the lead boat (number 1). This will require the lead boat to slow its speed or the other boats to increase speed.

4. Column-to-Line Abreast: This is similar to a column-to-wedge maneuver. Even-numbered boats go right, odd-numbered boats go left.

5. Wedge-to-Column: The craft will fall in numerical order behind the lead boat. The lead boat will maintain speed, and the other boats will slow as necessary to fall in astern.

6. Wedge-to-Line Abreast: All the boats increase speed until they are on line with the lead boat.

7. Column-to-Echelon Right/Left: The boats pull out to form an echelon formation.

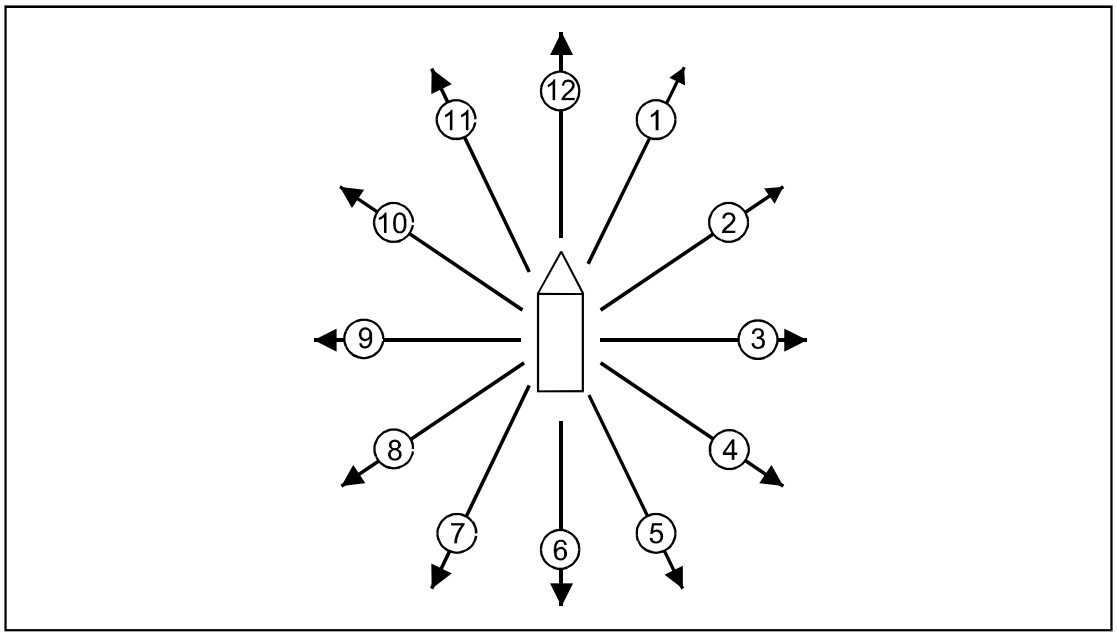

Figure 9-6. Clock Face

9.4 INTEGRATION WITH OTHER FORCES

NCW patrol boat operations should be integrated with other forces in the area, including surveillance assets, pier security, static weapons emplacements, and HN land and waterborne forces to maximize waterborne FP. HN LNOs are often embarked to improve communications and authority with local boat traffic, and provide greater knowledge of the OPAREA.

9.5 CHARACTERISTICS OF BOAT ASSETS

Appendix L summarizes NCW boats characteristics.

9.6 ORGANIZATIONAL MANNING

IBUs are manned with sufficient personnel to operate their four boats with three-section rotating crews, plus a shore detachment for support and maintenance.

PSUs are manned to provide continuous, 24/7 waterside coverage. In required operational capability (ROC) Condition III, this is typically accomplished with a four-boat watch rotation, which includes two boats continuously on station, one boat in a shuttle or ready boat status (termed the "B-0" boat), and one boat in a 24-hour maintenance availability. A 1-in-3 watch rotation for crews with 6-hour watches is intended to provide a minimum of 8 hours continuous rest per person per day. Although a fully manned PSU is expected to conduct such operations for up to 60 days on a continuous basis, depending on the weather and sea conditions, transit times from berthing to boat staging areas and boat staging areas to operational areas, berthing conditions and operational conditions (such as frequency of Condition I alerts, enemy contact, additional missions, etc.), crew endurance may deteriorate, increasing operational risk and reducing mission readiness. For long missions, commanders should consult Report No. CG-D-13-01, U.S. Coast Guard Guide for the Management of Crew Endurance Risk Factors for possible methods of increasing crew endurance. The maximum expected continuous unit endurance for ROC Condition II (1-in-2 or "port and starboard") is 10 days with a minimum of 4 to 6 hours continuous rest per person per day. The maximum expected continuous unit endurance for ROC Condition I is 24 hours. Figure 9-7 lists the PSU watch organization.

	Condition I (all hands)	**Condition II (1-in-2)**	**Condition III (1-in-3 or greater)**
Boat Operations	6 - on station	2 - on station, 3 - ready status*	3 on station, 1 - shuttle/ready (B-0) 1 - 24-hr maintenance
Maximum Endurance	24 hours	10 days	60 days
Crew size	4	4	3
Min. rest per day per person	0 hrs	4 – 6 hours	8 hours
*Depending on the situation and berthing arrangements, availability should be as short as possible while still allowing off-duty crews to sleep.			

Figure 9-7. PSU Watch Organization

9.6.1 Watch Positions

All units operate a shore watch organization to facilitate effective employment of the boats as discussed in the following sections.

9.6.1.1 Boat Unit Watch Officer

The boat unit watch officer functions as a liaison with the MIUWU RSSC watch officer, or may function as TACON authority, particularly in the case of the PSU. Watch officers are information resources for the tactical watch officer, providing ready information and guidance on:

1. Craft capabilities and limitations
2. Afloat operations, tactics, and SOPs
3. Boat systems (sensors, communications, weapons, and propulsion) capabilities and limitations
4. Crew qualifications, capabilities, and limitations
5. Employing ROE
6. Reduced operational capability due to weather, sea state, or equipment casualties
7. Mobility and redeployment factors
8. Status of all boats, whether employed, in standby, or down for maintenance.

9.6.1.2 Patrol Leader

The patrol leader is normally the senior coxswain in a boat element composed of two or more patrol boats. The patrol leader can be a senior watch stander separate from the boat coxswains if warranted by the mission. The patrol leader directs boats in the task element to accomplish the mission IAW tactical doctrine and SOPs. He is responsible for the safety of the crew(s) and for complying with ROE. If the patrol leader determines that a boat or the boat element is unable to operate safely in current conditions, he will inform the TACON authority. If there are multiple boat elements, each has its own patrol leader.

9.6.1.3 Coxswain

The coxswain is responsible for the safety of his boat and crew, and for employing his boat and its weapons IAW direction from the patrol leader. He also informs the patrol leader of the fuel, weapons, and equipment status of his assigned craft as it affects the ability of the patrol to perform tasking.

9.7 ON-STATION RELIEF

During patrols it is imperative that boats maintain a continuous security presence in the harbor and minimize any vulnerability that arises due to watch reliefs, maintenance, and refueling. To ensure that no stations are left unprotected, additional time must be allotted to permit crew turnover. This increases the time required for crews to be “on watch” well beyond the boat’s “on station” time. The patrol process flow outlined in Figure 9-8 illustrates the pre- and post-requirements for “on watch” personnel to meet “on-station” requirements.

To limit vulnerability and predictability, crew reliefs should be staggered, and an additional boat should be used to keep the required number of boats on station.

9.8 WEATHER CONSIDERATIONS

NCW patrol boats can operate in a wide range of weather conditions and water depths; however, weather extremes affect boat capabilities and crew endurance. Weather conditions that impact operational capabilities may require commanders to alter security zones, hours of coverage, or the number of boats and crews assigned to waterborne FP.

9.8.1 Weather

Normal on-station time will be 4 to 6 hours, but this may be reduced by weather extremes. If crew endurance on-station is determined to be 3 hours or less, continuous operations will be curtailed due to insufficient rest periods, unless crew augments are available. Options for crew augmentation include use of HN military assets, adding personnel to form a four-section watch bill, and placing boats in more protected waters to extend endurance. Some weather considerations that reduce crew endurance include:

1. Wave heights over two ft
2. Extreme temperatures (below 25°F/above 100°F)
3. Heavy rain, dust, and snow.

NCW patrol boats cannot be operated in ice or slushy conditions due to hull stress and the design of the outboard motors. Figure 9-9 lists PSU boat speeds limitations in routine operations.

9.9 PERSONAL PROTECTIVE EQUIPMENT

Boats will always operate with proper safety equipment, including body armor, helmets, and chemical, biological, and radiological (CBR) equipment. The crew will wear personal flotation devices (PFDs) when underway. Because flak vests and personal armor decrease buoyancy and restrict movement when worn with PFDs, the safest option is a combined tactical flotation vest with armor inserts. The issues of decreased buoyancy and restricted movement may be further complicated by extreme cold weather clothing.

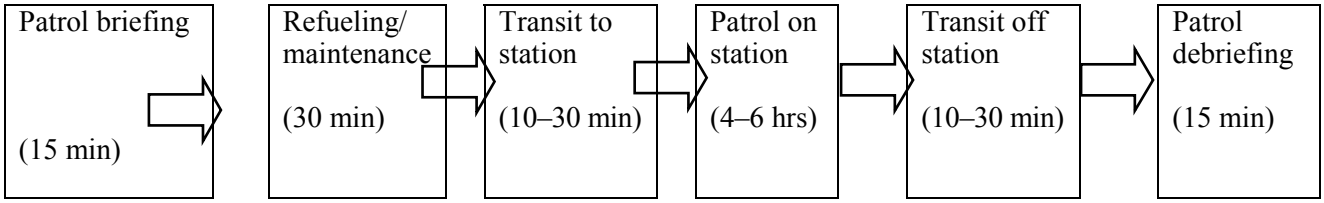

Figure 9-8. Patrol Process Flow

Seas (ft)	Engine RPMs	Speed in Kts
0–2	4000–5700	30–46
2–4	2500–4000	20–30
4–6	1000–2500	05–20

Figure 9-9. PSU Boat Speed Limitations

9.10 WATERBORNE FORCE PROTECTION IN A COASTAL AREA

In addition to the defensive boat operations described in Chapters 4, 5, and 6, NCW patrol boats may be assigned to escort COIs, recover personnel from vessels aground, and conduct barrier boat patrols.

9.10.1 Escorting a Contact of Interest

Unlike the case of an HVA escort described in Chapter 6, the purpose of escorting a COI through the warning zone is to maintain control over a suspicious contact. Escorting the COI enables security boats to prevent it from posing a threat to the HVA until it is safely past. When taking the COI under escort, the boat coxswain will instruct the COI to proceed at a slow speed. The escorting boat will take up a position on the quarter of the COI between the COI and the HVA, whether it is static or underway. Being positioned on the quarter permits rapid blocking and herding actions should the COI attempt to move toward the HVA. Additionally, by doing this the patrol boat will avoid the COI's forward field of fire and at the same time be able to direct fire into the COI's vulnerable stern.

9.10.1.1 Escort Handoff Procedures

The COI escort duty will be handed off at the sector boundary in the warning zone by employing either the insertion or loitering method, or by the boats switching patrol sectors. By whichever means the handoff is achieved, it is important to note that the turnover of the COI is a formal process, initiated only when both boats are ready for the handoff. If the second boat is not prepared, control over the COI may be lost if the first boat leaves station prematurely. Further, the handoff procedure requires practice, careful seamanship and positive communication by radio and/or hand signals between the two escort boats to ensure success.

9.10.1.2 Insertion Method

Boat 1 is escorting the COI as they approach the sector boundary. Boat 1 signals to Boat 2, "handoff." Boat 2 acknowledges with "roger out" and maneuvers to approach the COI and escort boat from astern. Boat 1 moves slightly away from the COI, and Boat 2 inserts itself between Boat 1 and the COI. Once Boat 2 is on station and has positive control over the escort, the coxswain signals to Boat 1, "Handoff." Boat 1 signals, "Handoff," breaks away and returns to its patrol sector. Net brevity is especially critical at this point as there may be multiple contacts. Figure 9-10 depicts the insertion handoff method.

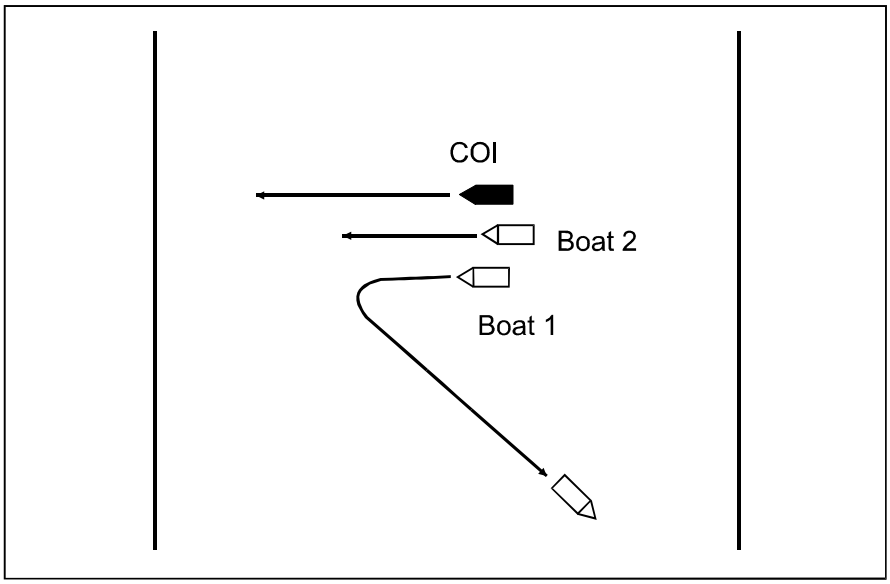

Figure 9-10. Insertion Method

9.10.1.3 Loitering Method

An alternative method of handoff is for Boat 2 to loiter at the sector boundary. As the COI and escort boat approach, Boat 2 gradually increases speed to parallel their course. Boat 1 breaks away to the outside, leaving Boat 2 with the escort. Figure 9-11 depicts the loitering handoff method.

9.10.1.4 Switching Sectors

If it is not practical to achieve a handoff at the sector boundary (e.g., if the vessels are moving too fast), the two boats will switch sectors. Boat 1 will stay with the escort, while Boat 2 moves to patrol the sector vacated by Boat 1. This is accomplished when Boat 1 signals to Boat 2, "Swap." Boat 2 acknowledges and takes the other sector.

9.10.2 Search and Rescue/Personnel Recovery

NCW patrol boats are capable of SAR and personnel recovery missions within the boats' operating limits. Such missions, however, should not normally take precedence over NCW operational missions. Planning considerations and procedures are set forth in the International Aeronautical and Maritime Search and Rescue manual (IAMSAR); the USCG addendum to the U.S. National Search and Rescue Supplement (NSS) to the IAMSAR, COMDTINST M16130.2 (series); the boat crew and seamanship manual, COMDTINST M16114.5 (series); and the USCG boat operations and training (boat) manual, Volume I, COMDTINST M16114.32.

9.10.3 Barrier Boat Patrols

A barrier is typically established for one of two main purposes: to gain contact on a suspect vessel expected to transit through a given area, or to defend a particular asset — either stationary or mobile.

To establish a barrier patrol, a barrier axis must be established. This axis is usually a search line normal to (at a 90 degree angle to) the threat axis. In the case of a moving barrier to protect a mobile friendly unit, the barrier may be normal to that unit's path or normal to the threat axis. Once the barrier axis has been established patrol boats are assigned stations/positions along the barrier axis to patrol.

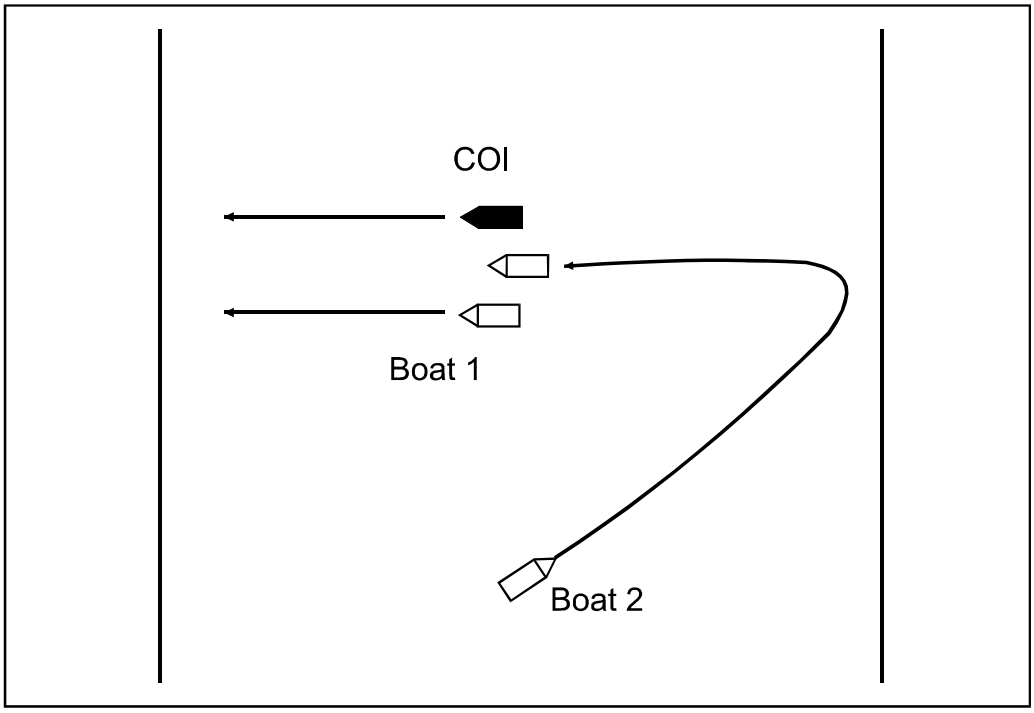

Figure 9-11. Loitering Method

In a barrier patrol, the patrol boats search along the established barrier axis to assure detection of targets approaching the axis. The length of the barrier axis and possible target speed (TS) are critical to establishing a search plan that does not allow a target to go undetected as the patrol boats transit from one end of the axis to the other. In order to achieve the highest probability of target detection, the plan must rely on the following quantitative parameters: DR, TS, and patrol cycle time.

9.10.3.1 Detection Range

First, the range at which there is a fairly high probability of detecting the target is determined. This DR depends on a variety of factors — size of target, type of radar equipment (or sonar range), visibility, etc. When determining the DR planners must be careful to use realistic figures and not completely rely on range information provided by equipment manufacturers. Planners must remember that the factors that affect DR may change during the course of the patrol and adjust the plan accordingly.

9.10.3.2 Target Speed

Planners must determine the maximum speed (Ts) at which the target can travel and the most likely speed at which it would travel. A craft capable of speeds in excess of the regional traffic would be unwise to draw attention to itself by doing so. This is where intelligence data becomes very important.

9.10.3.3 Calculating Patrol Cycle Time

The patrol boats travel back and forth from one end of the barrier to the other. In order to guarantee that the target cannot slip by while the patrol boats are at another part of the barrier, planners must look at the worst-case scenario. Assume that the patrol boats are at one end of the barrier and at that precise moment, the target in question is inbound, just outside of DR. In order to detect the target, the patrol boats must arrive back at the starting point prior to the target arriving at a point just outside of their DR on the outbound side.

In other words, in order for the target to remain undetected, it must travel twice the distance of the patrol boat's DR before they arrive back at the starting point. By dividing the distance that the target must travel (2DR) by the target's speed (Ts) the planners can calculate the maximum time that NCW patrol may take to arrive back and still detect the target. This time is called the patrol cycle time (PCT), and can be expressed mathematically as:

$$PCT = 2DR/Ts$$

From the PCT, one can derive the speed at which the patrol boat must travel in order to accomplish its mission. Of course, if the calculated patrol speed is determined to be excessive, then the NCW planner would have to adjust the barrier length or bring in more patrol units.

9.10.4 Shadowing

It is always best to identify and deter any vessel before it becomes a danger. Shadowing a vessel is a very good means of deterrence as it communicates to the operator of the vessel that security forces are aware of their presence. Vessel shadowing operations may be used during all types of NCW operations. The shadowing evolution is different than an escort evolution. The fundamental difference between a vessel escort and a vessel shadow is that a vessel under escort, whether a COI or a HVA, is under the control of, and subject to the orders of NCW forces whereas a shadowed vessel is exercising freedom of navigation and will not be taken under control (or be the subject of any other involuntary measure) unless it exhibits hostile intent. Vessel shadowing may be used where an NCW AO includes an international strait or other area where U.S. policy has determined to allow freedom of navigation. It is also a procedure that may be appropriate in a harbor or port area if, for example, HN constraints prevent U.S. escort of certain vessels, such as neutral shipping.

For shadowing, NCW vessels will assume a passive posture and observe the vessel from a distance astern, being alert for unusual activity or anything that may be dropped or deployed from the vessel. NCW vessels should be in

a position to take a more aggressive posture should the vessel deviate from its intended course, attempt an assault or harassment of any protected assets, or demonstrate an intent to jeopardize the safety and security of the area that it is transiting.

Vessel shadowing operations are conducted using an appropriate number of NCW vessel assets depending on the location and size of the vessel being shadowed, intelligence information, and other operational or political considerations. Shadowing vessels should maintain a distance from the shadowed vessel that is close enough to allow visibility of the sides of the vessel, but far enough away so as not to be construed as offensive or invasive in nature. NCW vessel personnel should not man weapons, take any other outwardly offensive or provocative posture, nor give the shadowed vessel orders. They shall determine the exact location (with GPS or radar) of any unusual activity or where any object was thrown into the water, but should not attempt to retrieve anything until it has been determined by TACON whether EOD or another asset should instead attempt recovery of the object.

9.11 WATERSIDE SECURITY PERIMETER INSPECTION

NCW forces may conduct inspections of vessels delivering goods or services to an HVA in a warning zone or transiting inside the perimeter of the FP area. Appendix Q provides a vessel inspection checklist. Whenever this is necessary, the vessel to be inspected should be directed to an area that is not in weapons range of any HVAs. The inspection should include but not be limited to cargo, supporting documents, and person-sized spaces that could be used to hide weapons, contraband, or other dangerous material. During an inspection, the team members will operate in pairs for safety.

An inspection is a special evolution that is very distinct from many other NCW security operations. Inspections are conducted outside the warning zone by either the intercept boat or the ready/reaction boat. The boat delivering the inspection team remains on scene to provide backup/cover. The warning zone remains covered by whichever boat is not engaged in the inspection operation.

9.11.1 Basic Qualification/Training

Inspection teams verify cargo and readily accessible spaces and attempt to detect capabilities and/or intent to attack protected assets. These individuals must have basic skills and abilities to ensure that assigned duties are properly carried out in a safe manner. The following basic qualification and training requirements must be attained before deploying personnel for inspection team duties.

9.11.1.1 Weapon Qualification Currency

All inspection personnel are expected to carry less than lethal deterrents/equipment as well as weapons and must be proficient in using both. Weapons proficiency and currency must include basic shooting, tactical training, and extensive UOF training.

9.11.1.2 Personal Defense Training

Team members must be able to defend themselves against hostile actions using the minimum force required for the situation to ensure compliance and remain in consonance with the established rules for the RUF/ROE. A variety of self-defense techniques can be used by individuals for self-protection without causing unnecessary harm to the aggressor (e.g., official presence, verbal assertion to establish authority, chemicals, etc.).

An understanding of and proficiency in different techniques along the use of force continuum are necessary to bring personal defense and weapons training together. Individuals should practice less lethal personal defense techniques in a variety of scenarios to improve their ability to protect themselves when pistols, rifles, or shotguns are not required. This should be complemented by “shoot/don’t shoot” judgment exercises to improve the individual’s ability to recognize when weapon employment is appropriate.

9.11.2 Inspection Procedures

The team employs specific techniques and procedures during an inspection ranging from initial sweeps for safety to searches for contraband. All inspection team members must understand the systematic and proven techniques to conduct sweeps, inspections, and searches. These techniques are discussed in the following paragraphs.

9.11.2.1 Approach and Readiness and Weapon Status in the Patrol Craft

Inspection teams should approach and position the boat on the vessel's quarter such that clear vision of the vessel can be maintained throughout the duration of the inspection. Team members should study topside configuration, activity, and any other indications of the vessel's activity/business. Situational awareness helps identify dangers and the best point to embark the vessel. Escort the vessel from the warning zone using either the intercept boat or the ready/reaction boat prior to boarding.

Uncertainty and a need to verify status and cargo often leads to a decision to inspect a vessel. Suspicion about the intentions of a crew or its ability to inflict damage/harm should never be discounted. Patrol craft must increase surveillance of the vessel during approach and throughout the inspection. Similarly, all weapons and equipment must be readied for immediate emergency action. Mounted weapons should be manned and armed, and personnel briefed per the ROE.

9.11.2.2 The Inspection Team

The inspection team should identify the number and location of crew aboard the vessel and determine the existence and location of contraband. Crew not on watch should be directed to assemble on the bow away from the inspection team embarkation area to reduce risk to team personnel.

9.11.2.3 Inspection Team Delivery and Situation Control

The inspection team will embark the vessel and take control of the situation. The vessel's master remains in control of the vessel for its safe navigation. The patrol craft will provide cover when the inspection team members are embarking the vessel. Once inspection personnel are deployed, the patrol craft should back away and keep mounted weapons manned throughout the duration of the inspection. The patrol craft will monitor progress of the inspection and make any required reports up the chain of command.

9.11.2.4 Initial Sweep

The inspection team will conduct an initial safety inspection (ISI) and account for the crew. This initial sweep will include but is not limited to all hull penetrations, (e.g., shaft seals). Once an ISI is complete a habitability sweep will be conducted of all person-sized or larger compartments to ensure that no additional individuals are aboard and to develop a general understanding of the vessel configuration.

9.11.2.5 Inspect for Contraband

This inspection may be done in conjunction with the safety sweep on small vessels. Team members should inspect for modifications that could conceal dangerous materials/explosives. Recent changes or modifications to the vessel could indicate an attempt to conceal contraband, explosives, or other dangerous materials.

9.11.2.6 Examine the Manifest

The manifest outlines the voyage itinerary and cargo carried. The inspection team should examine the manifest closely to understand the situation as well as to identify anomalies that could indicate contraband and/or malfeasance. Smaller commercial vessels, fishing boats, or pleasure boats may not have a manifest.

The inspection team should probe the cargo aboard freighters to verify the information contained in the manifest as well as to identify deviation. The manifest should be checked against other documents to verify its accuracy. Anomalies should be reported to the inspection team leader for correlation and/or further investigation/action.

9.11.2.7 Detained Vessels

Tensions are likely to increase significantly as soon as an inspection reveals possible security concerns. Prize crews may be required when an inspection reveals contraband or indicates other reasons why the crew and vessel should be detained. The close proximity to support resources ashore suggests that the inspection personnel will serve as prize crews for transit to a holding area and final disposition. The NCWC must be cognizant of inspection team developments and increase readiness when appropriate.

9.11.2.8 Follow-Up and Resolution

To determine whether to detain, clear, and/or determine if any other action is warranted, the OIC makes recommendations to the NCWC based on the irregularities found during the inspection. The inspection team should meet after completing the inspection to describe irregularities and determine if any further action/investigation is warranted. If appropriate, the individuals, manifest, cargo, or other evidence should be examined further to clarify and confirm agreement. The team leaves the vessel with the same care and diligence as when it boarded.

If the inspected vessel has legitimate business with the HVA, the patrol craft escorts the vessel from the holding area ensuring a clear vision of the platform throughout the transit to the HVA. As in the initial escort to the holding area, the patrol craft normally maintains a position to the rear or off the port/starboard quarter of the inspected vessel.

9.11.3 Legal Authority

Individuals in positions of leadership must understand when international or domestic law provides the authority for inspection operations. Specific guidance is issued by the chain of command for all OPAREAs and scenarios to further define requirements and guide inspection enforcement actions. UN sanctions, military requirements, or HN ordinances will often guide the chain of command in providing direction regarding specific action to be taken or specific conduct of the inspections and threat considerations. All team members must understand enforcement action requirements so that the inspection is focused on the correct security threat.

9.11.3.1 Authority

All actions undertaken by the United States must be IAW legal guidance provided by the chain of command. The following information summarizes some points regarding the legal authority under which NCW boarding operations will often be taken.

1. Boarding operations can be legally authorized by the chain of command as an enforcement measure in support of UN or other international laws or resolutions, or as a self-defense measure for the U.S. forces operating in the area.

2. Within the territorial waters of another country, that nation has primacy legal responsibility. There are specific laws, ordinances, or statutes to guide the conduct of the inspection. Planning should take these laws into account.

3. Where the United States is operating with the permission of the HN, the SOFA or a similar agreement will often outline specific authorities, responsibilities, and expectations for conduct of vessel inspections within a nation's territory.

4. HN officials or LNOs may be embarked on patrol craft and serve as members of inspection teams when the United States is operating in a nation's territorial or internal waters. When embarked and deployed, the U.S. team supports the enforcement action of the HN official.

5. Vessels that exhibit suspicious behavior are flagged as contacts/vessels of interest, or whose movement unexpectedly causes them to operate in the vicinity of the HVA should be considered for inspection. These vessels should be inspected when encountered in harbors or approaches with the inspection focused on the areas of concern that led to the vessel being red-flagged. This inspection should include verification of status and the purpose of the voyage and to ensure that no contraband is on board.

6. Immediately following the inspection, all information should be consolidated, inspection team debriefed, and a final comprehensive report forwarded to the NCWC or NCWRON.

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CHAPTER 10

Weapons Procedures and Tactics

10.1 PURPOSE

This chapter provides general guidance on weapons employment and tactics. NCWCs should exercise flexibility and innovation in interpreting and employing these tactics in the field. NCW operations will occur under a wide range of conditions, ranging from peacetime to wartime. Weapons engagement may occur suddenly and without warning in this operational environment and is often characterized by short and very violent firefights.

10.2 WEAPONS SAFETY

Improper weapons handling procedures continue to be the leading cause of negligent weapon discharges and provide an unnecessary risk to personnel. In order to address this situation, standardized weapons procedures have been promulgated via Navy Tactical Reference Publication (NTRP) 3-07.2.2, Force Protection Weapons Handling Standard Procedures and Guidelines. This NTRP provides clear and concise safety information, authorized procedures and proper control guidance for small arms including grenade launchers, crew-served weapons, and nonlethal weapons. It establishes definitive weapons handling procedures for all NCW personnel under arms. All NCW units are directed to adopt guard mount (watch turnover) and clear barrel procedures as described in the NTRP.

10.2.1 Weapons Safety and Clearing Procedures

All weapons will be treated as if they are loaded and will never be pointed at individuals or objects unless they are the intended targets. Weapons safeties should remain on and fingers off the trigger until ready to fire.

All weapons, except crew-served weapons, will be loaded and cleared in a clearing barrel under proper supervision. For crew-served weapons loading and clearing, the barrel of the weapon will be oriented toward the ground or water surface facing away from personnel and property.

10.2.2 Weapons Condition Codes

A weapon's readiness to fire and its corresponding safety status are described using one of four numbered condition codes. These codes are defined in Figure 10-1.

10.3 INDIVIDUAL WEAPONS

NCW forces are equipped with light individual weapons that are capable of either automatic or semiautomatic fire. These weapons are described in the following paragraphs.

10.3.1 M9 9 MM Pistol

The M9 pistol is the standard sidearm for the U.S. Navy. It is a magazine-fed, recoil-operated, semiautomatic, hand-held weapon. It is chambered for the 9 mm ball, NATO M882 round, and can be fired in both double- and single-action modes. It has a thumb safety mounted on the slide that acts as the decocking lever. The magazine has a 15-round capacity. The M9 is a defensive weapon that is typically used at ranges of less than 50 yds.

CONDITION	ACTION
1	Ammunition is in a position to be fired Safety is on
2	Not applicable to weapons in this reference
3	Ammunition is in position to be chambered Chamber is empty Action is closed Safety is on
4	All ammunition is removed Chamber is empty Action is closed Safety is on

Figure 10-1. Weapons Condition Codes

10.3.2 M16A3 5.56 MM Rifle

The M16A3 rifle is a lightweight, air-cooled, gas-operated, magazine-fed, shoulder-fired weapon designed for either automatic or semiautomatic fire through the use of a selector lever. It has two available magazine capacities of 20 or 30 rounds and a cyclic rate of fire of 700 to 900 rounds per minute.

10.3.3 M14 7.62 MM Rifle

The M14 rifle is a lightweight, air-cooled, gas-operated, magazine-fed, shoulder-fired weapon designed primarily for semiautomatic fire. It has a magazine capacity of 20 rounds. It has a maximum range of 3,725 meters and a maximum effective range of between 460 and 700 meters (depending on use of bipod and rate of fire in automatic or semiautomatic mode). It has an automatic rate of fire of 100 to 150 rounds per minute and a semiautomatic rate of fire of 40 rounds per minute.

10.3.4 12-Gauge Shotgun

The standard shotguns for navy forces are the M500 Mossberg and the M870 Remington shotguns. They are 12-gauge, manually operated, pump-action, repeating, tubular magazine–fed, shoulder-fired weapons. Both are classified as offensive and defensive weapons and typically used at ranges of up to 50 yds (46 m) with a shot load, and up to 100 yds (91 m) with a slug load.

10.3.4.1 M500 Mossberg Shotgun

The M500 has a 5-round magazine capacity and can be fitted with a magazine extension. It has a thumb-slide safety mounted on the top rear of the receiver.

10.3.4.2 870 Remington Shotgun

The M870 has a 4-round magazine capacity and can be fitted with a magazine extension increasing the magazine capacity to seven. The safety is located on the rear of the trigger guard.

10.3.5 M203 40 MM Grenade Launcher

The M203 grenade launcher is a single-shot weapon that fires a 40 mm grenade and is designed for use with the M16A3 rifle. It is a lightweight, compact, breech-loading, pump-action, single-shot launcher. The launcher consists of a hand guard and sight assembly with an adjustable metallic folding blade sight assembly, a plastic hand guard, and a receiver assembly housing the barrel latch, barrel stop, and firing mechanism.

10.4 CREW-SERVED WEAPONS

Crew-served weapons provide high volumes of accurate fire at ranges beyond those of small arms. The lethality of their ammunition makes them ideal for engaging personnel, lightly armored boats, and other small craft. For instance, when firing an armor-piercing round, the .50 caliber machine gun is effective against small, lightly armored targets to its maximum effective range of 2,000 yds. Specific crew-served weapons are described in the following sections.

10.4.1 M2 .50 Caliber Machine Gun

The M2 .50 caliber heavy barrel, flexible machine gun is an automatic, recoil-operated, disintegrating metallic link belt–fed, air-cooled, crew-served weapon with adjustable headspace. It fires from a closed bolt position and is capable of right- or left-hand feed. The M2 is used to provide automatic weapon suppression fire for offensive and defensive purposes. This weapon can be used effectively against personnel, light-armored vehicles, and with limited effectiveness against low, slow-flying aircraft. This weapon is used as a ground gun on the M3 tripod mount. The gun is capable of single-shot as well as automatic fire and can fire 450 to 600 rounds per minute.

10.4.2 M60 7.62 MM Machine Gun

The M60 (series) machine gun is an automatic, air-cooled, link belt–fed, gas-operated weapon with fixed headspace. It is capable of being fired from hand-held positions or from several types of mounts. The M60 and M60E3 are primarily used for ground operations. The Navy configuration of the M60E3 has both long and short barrels and a V-notch rear sight. The M60D is primarily used for support of ground operations and is an aircraft door–mounted or vehicle-mounted machine gun. The M60 (series) machine gun fires from an open-bolt position. This weapon is being phased out of the NCW forces inventory in favor of the M240.

10.4.3 M240 7.62 MM Machine Gun

The M240 (series) medium machine gun is an automatic, air-cooled, link belt–fed, gas-operated weapon that fires from an open bolt position. The M240 (series) can be fired from hand-held positions or from several types of mounts. The M240B/M240G models are designed as tripod-mounted or bipod-supported machine guns for use by ground forces. The M240N model is designed with front and rear sights and is configured for mounting on NCW patrol boats or an M122 tripod for land operations.

10.4.4 M19 40 MM Grenade Launcher

The M19 grenade launcher is an air-cooled, disintegrating metallic link belt–fed, blowback operated, fully automatic weapon that can be vehicle- or boat-mounted and is crew transportable. It fires 40 mm grenades with antipersonnel fragmentation and light antiarmor capability from the open-bolt position and is left-hand feed only. It fires 40 mm grenades at the rate of 325 to 375 rounds per minute.

10.5 HAND GRENADES

The hand grenade is effective against enemy personnel located in bunkers, buildings, fortified areas, and underwater. It is designed to produce causalities during close combat while minimizing danger to friendly personnel.

NCW personnel use the Mk 3A2 hand grenade. It is referred to as a concussion grenade and is a frontline weapon system designed to counter and repel enemy underwater threats. Shock waves (overpressure) produced by this grenade when used in enclosed areas are greater than those produced by a fragmentation grenade. It produces a large shock wave when detonated on the ground and an even greater shock wave is produced underwater. This shock wave travels through open-air voids (ear drum, lungs, stomach, etc.) in a diver causing internal damage and bleeding.

10.6 USE OF FORCE

The use of force consists of graduated steps NCW forces may employ when confronting possible aggressors. Guidelines on the use of force are provided either through the promulgation of ROE for military engagements OCONUS or RUF applicable within the United States, or for LE or security missions.

Whether guided by ROE or RUF, basic principles remain the same — control of the threat through the use of only that force which is necessary. If the UOF may becomes necessary the following steps should be considered:

1. Physical presence — Forces or personnel arrive on the scene and become physically visible to the threat.

2. Warning — Tell the potential threat (vessel or personnel) to stay away, disperse, or halt. Use verbal and visible means (flares or warning shots) to communicate.

3. Physical contact/confrontation — Use vessel to shoulder, or strike the individual with guard items (batons), if appropriate.

4. Chemical agents — Employ agents to incapacitate the threat. These often require special authority, especially for use overseas.

5. Fire weapon/employ deadly force — Shoot with the intent of rendering the person(s) at whom the weapon is being discharged incapable of continuing the activity or course of behavior. Fire with due regard for the safety of innocent bystanders.

10.6.1 Rules of Engagement

ROE are applicable during all military operations, contingencies, and terrorist attacks occurring outside the territorial jurisdiction of the United States. ROE are promulgated through the chain of command and apply to all subordinate commands.

A principal tenet of the ROE is the commander's inherent authority and obligation to use all necessary means available and to take all appropriate action in self-defense of the commander's unit and other U.S. forces in the vicinity.

When an operational mission is assigned, commanders at every level of command should review applicable ROE and request additional ROE as necessary to ensure mission success. Mission commanders must ensure their subordinate units are aware of the ROE and their role in the assigned mission. The TACON authority, patrol leaders, boat coxswains, and boat crewmembers must know and understand the ROE in force at all times. Any questions must be resolved before getting underway.

Patrol leaders may be required by the tactical situation to use the full range of actions permitted to them under the ROE, without requesting additional authority to engage from the chain of command. In order to provide

maximum flexibility for FP against a rapidly evolving threat, the range of actions permitted under the ROE should be granted to the patrol leader. The TACON authority may give specific tactical direction where needed (e.g., engage or disengage).

10.6.1.1 Hostile Act and Hostile Intent

The ROE provide unit commanders with the authority and obligation to use all necessary means available and take all appropriate action to defend against a hostile act or demonstrated hostile intent. A hostile act is defined as an attack or UOF by any civilian, paramilitary, or military force or terrorist(s) against the United States, U.S. forces, and in certain circumstances, U.S. nationals, their property, U.S. commercial assets, or other designated non-U.S. forces, foreign nationals, and their property. Hostile intent is the threat of the imminent UOF against any of the categories just mentioned.

An adversary's objective to inflict damage or endanger lives will most often be manifested by hostile intent. Evidence necessary to determine hostile intent will vary depending on the circumstances. All NCW personnel face a significant challenge in determining hostile intent with respect to normal security missions. A guard on post must make a quick assessment of what he believes a potential threat's intentions are. Indicators that could lead him to believe that an individual is demonstrating hostile intent toward himself or those whom he has been tasked with protecting may include but are not limited to any or all of the following:

1. Presentation of a weapon
2. Raising a weapon to the firing position
3. Disregarding verbal commands to halt or turn away (keep in mind this may be due to a language barrier)
4. Taking a threatening posture
5. Making a high speed run toward a post or protected asset
6. Penetrating the barrier plan.

For NCW patrol boats some indicators which, when taken alone or in combination, may lead to a reasonable belief that hostile intent exists include:

1. Intelligence reports
2. Appearance or profile of the COI
3. COIs are operating in an area where they have no apparent reason to be
4. Running with navigation lights extinguished at night
5. Failing to respond or react to hails and warnings
6. Maneuvering in a threatening manner
7. Attempting to evade NCW security boats to enter warning zones
8. Engaging in radical or aggressive vessel handling or attempting to ram NCW security boats
9. Running at high speed directly toward an HVA
10. Displaying weapons.

10.6.2 Rules on Use of Force

RUF, including the use of deadly force, are similar to ROE and apply many of the some concepts. RUF apply to all DOD military and civilian personnel performing LE and security duties. Under DOD policy, force, including the use of deadly force, may be used when it reasonably appears that such UOF is necessary for self-defense or the defense of others to effect an arrest or apprehension, to protect public health or safety, or to protect certain assets designated as vital to national security or which are inherently dangerous.

DOD policy is that personnel engaged in LE or security duties shall avoid UOF where they can carry out their duties without resorting to its use. In such cases where the UOF is warranted, DOD personnel shall use the minimum amount of force necessary to accomplish the objective.

Accordingly, NCW forces can and should seek to employ a force continuum of actions to protect HVAs from a hostile threat. All of these actions will not necessarily be taken in each situation. The employment of the UOF continuum is explained in the following paragraphs.

10.6.2.1 Nonlethal Techniques

Nonlethal techniques are those which have been explicitly designed and employed to discourage and incapacitate personnel while minimizing the chance for fatalities and undesired damage to property and the environment. Non-lethal weapons add flexibility to combat operations and enhance FP, consistent with the ROE in effect, by allowing friendly troops to engage threatening targets with limited risk of noncombatant casualties and collateral damage.

While avoiding fatal injuries to personnel, or permanent damage to property are goals, there are no guarantees. Any technique can, if used improperly or as a result of unknown or unexpected circumstances, lead to serious injury or death. Proper training and employment are essential.

10.6.2.1.1 Chemical Agents

Chemical agents such as oleoresin capsicum (OC) (pepper spray) and orthochlorbenzalmalononitrile (CS) (tear gas) are carried by sentries on post and are part of the escalation of force. A sentry needs to understand the principles behind how the OC/CS spray works, how to employ it, and first aid in treating it. The use of an OC or CS agent is intended solely as a control device to minimize injuries to resistive persons. Chemical weapons are NOT, under any circumstances, to be used as punishment or as a coercive tool once an individual is in custody and/or under control. Because of international laws regarding chemical agents, use outside the U.S. territory requires specific authority.

1. Oleoresin Capsicum — OC spray works by affecting an individual's mucus membranes. It is effective when particles of the pepper are inhaled through the nose, or mouth, or deposited in the eyes. The spray works by effectively forcing the individual's eyes shut and causing uncontrolled coughing and discomfort. The spray is sometimes ineffective on a small percentage of people. Additionally, the spray may not be effective when an individual holds his breath and forces his eyes shut. Be liberal in application.

2. Orthochlorbenzalmalononitrile — CS can be classified as an irritant. Portions of the reactions caused by this agent are the same as those caused by exposure to OC. Again, this agent will affect the lachrymal glands of the human eyes, which causes a tearing action. Also, sinus drainage is present. CS, however, does show the following differences: The eyes will involuntarily shut, but with effort, can be made to remain open. If the exposure is of sufficient strength, this chemical agent can cause a perceived sensation of shortness of breath. Nausea and headaches have also been reported.

   CS causes a very distinct burning sensation to exposed tissue areas, and there are instances when the warm moist areas of the body experience this same affect. In some instances, subjects have been known to build a tolerance against CS. There are also cases where highly agitated subjects and subjects under the influence of alcohol or drugs have shown no effects of the exposure. The effects of CS appear stronger than those of

OC. The need for chemical sprays has been identified as a mission requirement for a variety of NCW missions.

3. Application Considerations — Wind and weather will affect the spray stream. Obviously in stronger winds the effective range is reduced. Optimum employment distance is approximately 4–6 ft from the target individual. Maximum distance is 10 to 12 ft. After spraying the subject take evasive action to avoid contact with the individual. DO NOT STAND STILL. Continue verbal commands and direct the individual to the ground. Individuals may have difficulty due to the intensity of the pain.

4. First Aid — Once an OC or CS spray has been employed, NCW personnel should follow post-application procedures with the affected person(s). Treatment for OC/CS spray consists of fresh air and time. Water will sometimes relieve and sometimes intensify the pain. Face the individual upwind and allow fresh air to take effect. Recovery time is from 10–45 minutes, with the vast majority of people experiencing no distress after 20 minutes. Recommend to the affected person(s) to avoid the temptation to rub the affected areas. This will induce greater pain. At no time should salves, creams, or other oily materials be applied to the affected areas. These substances will impede the sublimation process and trap the irritant on the skin, causing prolonged discomfort.

10.6.2.1.2 Expandable Baton

The expandable baton is a defensive impact weapon designed to be inconspicuous, yet highly effective in an operational setting. The expandable baton has two telescoping shafts, which lock into place with a full extension of the arm. This opening of the baton also presents a clear statement to a potential assailant. It is a final warning prior to the application of nonlethal force.

Most frequently the arms and legs are the selected target areas for the physiological vulnerability combined with their lower lethal potential as a baton target. Strikes to these areas effectively disable a subject's "delivery system." Strikes to the primary "center mass" target areas have a high potential for control and a low potential for fatal injury. These targets are also "forgiving" targets. If the subject moves or a strike misses its target, surrounding targets also have a high potential for control and a lesser potential for damage. Do not target strikes to the head, neck, spine, sternum, or groin. Strikes to these areas may produce injuries that can be fatal while not effectively terminating a subject's resistance. A subject struck with a baton shall be seen by a corpsman as soon as possible to determine if further medical attention is required. Photographs will be taken of the subject that show the area that was struck with the baton, whether or not an injury is actually visible. The COG will be notified of the incident as soon as is practical.

The expandable baton has two modes of operation:

1. Closed: The baton is fully closed within the handle of the weapon, and strikes are delivered to target areas with the cap or fist.

2. Open: The baton is fully extended and locked into place; strikes are delivered to target areas with the last three inches of the shaft or tip.

10.6.2.1.3 Unambiguous Warning Device

The UWD provides a clear, unambiguous, nonlethal means to warn approaching vessels and alert them of their imminent entry into a protected/restricted waterside area. The UWD is fired from the 12-gauge shotgun and produces an audible, concussive, and visual effect. The UWD is intended to assist patrol craft crews in ascertaining if hostile intent exists on the part of any vessel intruding into warning zones or approaching naval units. The UWD is intended for warning purposes and is not intended to be used as an antipersonnel munition.

10.6.2.2 Warning Shots

Warning shots have been and continue to be authorized overseas and outside U.S. waters. Pursuant to SecDef authorization, warning shots are now allowed within U.S. territorial seas and internal waters to defend against small boat attacks and under specific conditions to protect naval assets. Weapon types authorized for warning shots are specifically designated in Appendix E of NTRP 3-07.2.1, Antiterrorism and Force Protection, for specific employment procedures.

Within the United States, warning shots can only be used over water when a clear line of fire exists and under the tactical direction of a competent authority. They should only be used when there are no other means reasonably available to determine the intent of the approaching vessel/boats. Warning shots are a signal to an approaching vessel to stop and do not constitute a UOF. Prior to employing warning shots, NCW forces shall refer to Appendix E of NTRP 3-07.2.1, Antiterrorism and Force Protection, for specific employment procedures.

10.6.2.3 Deadly Force

Deadly force is that force which a person uses for the purpose of causing death or serious bodily harm, or which would create a substantial risk of causing death or serious bodily harm. The ROE will govern the use of deadly force by NCW forces in all cases. Deadly force is justified only under conditions of extreme necessity and when all three of the following circumstances are present:

1. Lesser means have been exhausted, are unavailable, or cannot be reasonable employed.

2. The risk of death or serious bodily harm to innocent persons is not significantly increased by its use.

3. The purpose of its use is one or more of the following:

   a. Self-defense or defense of others

   b. Defense of assets designated as vital to national security

   c. Defense of assets not designated as vital to national security but which are inherently dangerous to others

   d. Prevention of serious offenses against persons

   e. Protection of public health or safety

   f. To effect an arrest or apprehension or to prevent escape.

Additional considerations for the use of deadly force are:

1. Warning shots may be authorized in certain circumstances but are not required.

2. When a firearm is discharged, it will be fired with the intent of rendering the person(s) at whom it is discharged incapable of continuing the activity or course of behavior, prompting the guard/sentry to shoot.

3. Shots shall only be fired with due regard for the safety of innocent bystanders.

4. In the case of holstered weapons, a weapon should not be removed from the holster unless there is a reasonable expectation that the use of the weapon may be necessary.

5. The chain of command may establish additional considerations in implementing procedures for the use of firearms or use of deadly force.

10.7 ENGAGEMENT WITH CREW-SERVED WEAPONS

The following are general guidelines for the use of crew-served weapons.

10.7.1 Targeting Considerations During Engagement

When a burst is fired, the vibrations of the gun and mount, variations in ammunition, and conditions of the atmosphere will make each bullet have a slightly different trajectory. The resulting group of trajectories is known as the cone of fire. The dispersion cone can be excessive if the weapon is not properly supported and controlled by the gunner. To minimize the dispersion cone, the gunner should seize the grips firmly with both hands and brace the gun with his body. For changes in elevation, the gunner should stand erect and make changes in elevation by moving the hands and arms up and down. For changes in azimuth, the gunner should shift his feet and move around the mount.

Targeting will be a dynamic event. Based on target location and motion during the engagement, the aim point for the weapon will change. In general, for targets that are closing, the gunner should choose the lower edge of the target for the aim point. As the range decreases, the aim point should move toward the center of mass of the target. As a target crosses the field of fire, proper application of a lead angle should assist the gunner in successfully completing the engagement

If there is doubt as to the tracers' impact, adjustment of fire must be bold, aggressive, and continuous. It is important that the gunner initially opens fire with an adequate lead angle and once established, the tracking should not be reversed. If the initial lead angle is too great, the tracking rate should be slowed and the target allowed to catch up with the tracers. For closing and opening targets, the tracers may intersect the gunner's line of vision to the target. The gunner first sees the tracers passing the target in a tail-to-nose direction. Lead information, based upon a sensing of a tracer that appears to pass the target in this direction, is invalid. The target actually crosses the tracer path only once, entering the path nose first and leaving tail last. Because of the illusion of curvature, the gunner should see this passage when the tracer appears to float by the target in a nose-to-tail direction and should lead when the tracer passes the target nose-to-tail.

10.7.2 Lead Information

If the tracer intersects the gunner's line of vision beyond the target (i.e., if a portion of the tracer's path is hidden by the target) then the round is ahead and the lead angle is too great. If the tracer passes between the gunner's line of vision and the target, the round is astern and the lead angle is too small. If the tracer path terminates in the target resulting in a hit, the lead angle is correct.

10.7.3 Marksmanship Fundamentals

To become proficient in crew-served weapon marksmanship, a gunner should be thoroughly trained in the following fundamentals:

1. Accurate delivery of initial round (burst) of fire on stationary or moving targets
2. Mechanical skill in manipulating the gun and rapid shifting fire to new targets
3. Adjustment of fire by observing projectile strike
4. Adjustment of fire by observing tracer flight
5. Frequent relaying of the gun during firing
6. Speed in combining these fundamentals when delivering fire.

10.7.4 Manipulation and Observation Exercises

Manipulation is the process of shifting the direction of the gun from one definite point to another. After the gunner understands the principles of sighting and aiming, and can assume a satisfactory firing position, he is given instructions on manipulating the gun to obtain an accurate initial lay, then to shift the direction of the gun to successive points with proficiency.

The purpose of observation and adjustment practice is to teach the adjustment of fire by observing the strike of the bullets and flight of tracers or by frequent relaying on the target using the sights.

Using the "mil" relation, one click of the traversing or elevating hand wheel moves the strike of the bullet 1/2 inch on the target at a range of 10 yds. A one mil click on the traversing hand wheel will move the strike 1/2 yd at 500 yds, or 1 yd at 1,000 yds. For example, if the gunner fires on a target at 500 yds, observes the round strike 10 yds to the right of the target and 50 yds short, he would:

1. Traverse the gun to the left 20 clicks (mils).
2. Add one or more clicks (mils) depending on the slope of the ground.
3. Lay on that aiming point and fire.

10.7.5 Range Determination

Range determination is estimating the distance between two points.

10.7.5.1 Factors Affecting Range

While visual estimation is the easiest and most rapid method to determine range, it also is the least accurate. If that is the only method available, understanding why inaccuracies exist can help minimize the error. For instance, a target in contrast to the background appears closer while a target that blends with the background appears farther away. Over smooth, calm seas, the eye tends to underestimate the range; in contrast, over heavy seas, it tends to overestimate the range. A target viewed in full sunlight appears closer than one observed through haze or fog. When the sun is behind the target, the target appears more distant. When the sun is behind the gunner, the target appears closer. Specific factors are found in the following paragraphs.

10.7.5.1.1 Factors Making Objects Seem Closer

1. The object is larger than its surroundings—a vehicle or a boat perhaps.
2. There is dead ground between the object and the observer.
3. The object is higher than the observer who has to look up at it.
4. Light shines on the near side of the object, making the detail clearer.

10.7.5.1.2 Factors Making Objects Seem Farther Away

1. The object is smaller than its surroundings.
2. The sunlight is bright or dazzles the observer (imagine glare off the water surface).
3. The observer is looking down, for example from an OP or on an HVA.
4. The observer is lying down.

10.7.5.2 Estimating Range

There are two main methods of estimating range without the aid of electronics or specialized optics. These are:

1. The appearance method
2. The unit of measure.

10.7.5.2.1 Appearance Method

This method of range estimation depends upon the memory's ability to retain an image and can be practiced by placing an individual at 100 meters (110 yds) wearing all of his individual equipment (helmet, weapons, etc.). Personnel being trained should familiarize themselves with the amount of detail that is visible at the 100-meter range and make notes regarding what they can distinguish at that range. For instance, is skin tone visible, facial hair, what about the pattern of his uniform or civilian clothes, are arms and legs easily discernable? Once this is accomplished and personnel have enough knowledge of the individual's details at this range, move him back to 200 meters (220 yds), then 300 meters (330 yds) and so on out to 500 meters (550 yds) or more in 100-meter increments. At the close of the training period and if personnel are available it would be beneficial to place personnel at each range simultaneously to show differences in appearance. Some rules of thumb are:

1. 200 meters — clear in all detail, color, skin tone, equipment
2. 300 meters — clear body outline, face color good, face detail blurred
3. 400 meters — clear body outline, all other detail blurred
4. 500 meters — body begins to taper with heads less distinctive
5. 600 meters — body appears wedge-shaped, no head apparent.

10.7.5.2.2 Unit of Measure Method

The unit of measure method relies on the observer imagining a known distance and comparing it to the distance between him and the target. Imagine a 100-yd football field, for example, and try to determine how many football fields away the target is. However, there are two limitations to this method: it only works effectively up to about 440 yds (400 meters) and it is not effective over dead ground.

10.7.5.3 Methods to Improve Range Estimation

1. Key ranges — A NCW AO is normally full of known distances. Measure as many of these as possible from the map/chart and place the ranges and bearings on the range card/defensive fire plan sketch. Ports, harbors, and near-shore areas have no shortage of land and key infrastructure to use.
2. Gun/boat crew average — Take the average estimation of distance of the gun crew or boat crew. With practice this should provide a fairly accurate average distance.
3. Halving — Estimate the midway point to a target and then double it. Shorter distances are usually easier to estimate than longer distances. The only drawback is that if the initial measurement is way off, the error in range estimate will be doubled.
4. Bracketing — Make two estimates, one the longest the distance can be and the other the shortest, and then determine the midpoint. If the original estimate is 1,200 meters and the second is 800 meters then the range estimate would be 1,000 meters.

5. Five degree — Select a start point and shoot a compass azimuth to the target. From the start point walk perpendicular to the compass azimuth, stopping to shoot additional azimuths to the target. When the azimuth is five degrees from the original azimuth turn and walk back to the start point. Using a one-meter pace, count the number of paces back to the start point. Multiply the number of paces by eleven. The resulting number will be the range in meters to the target.

10.7.6 Tracking and Leading Exercises

Targets may be moving or stationary and the techniques for engaging each type of target differ. For a moving target, the gun must be aimed ahead of the target at a sufficient distance to cause the bullet and target to arrive at the same point simultaneously. This distance is typically measured in target lengths. One target length, as seen by the gunner, is one lead. Leads are measured from the center of mass. The lead necessary depends upon range, speed, and direction of movement of the target. To hit the target, the gunner must:

1. Aim at a point ahead of the target equal to the estimated number of leads.

2. Maintain this lead by tracking the target (manipulating the gun at the same angular speed as that of the target).

3. Fire. Adjust fire by observation of strike and/or tracer.

10.7.7 Range Cards

Crew-served weapons not employed aboard security boats will employ range cards, U.S. Army DA Form 5517-R. Figure 10-2 is an example of a range card. Two laminated copies of the range card will be prepared for each weapon. One card will be left with the weapon; the other will be submitted through the chain of command to be incorporated into the defensive fireplan. The cards contain the following information:

1. Terrain sketch/infrastructure

2. Ranges to pertinent areas and reference structures

3. Train and elevation data for each potential target or critical area

4. Date/unit/post number

5. Name of person who prepared card.

10.7.8 Rates of Fire

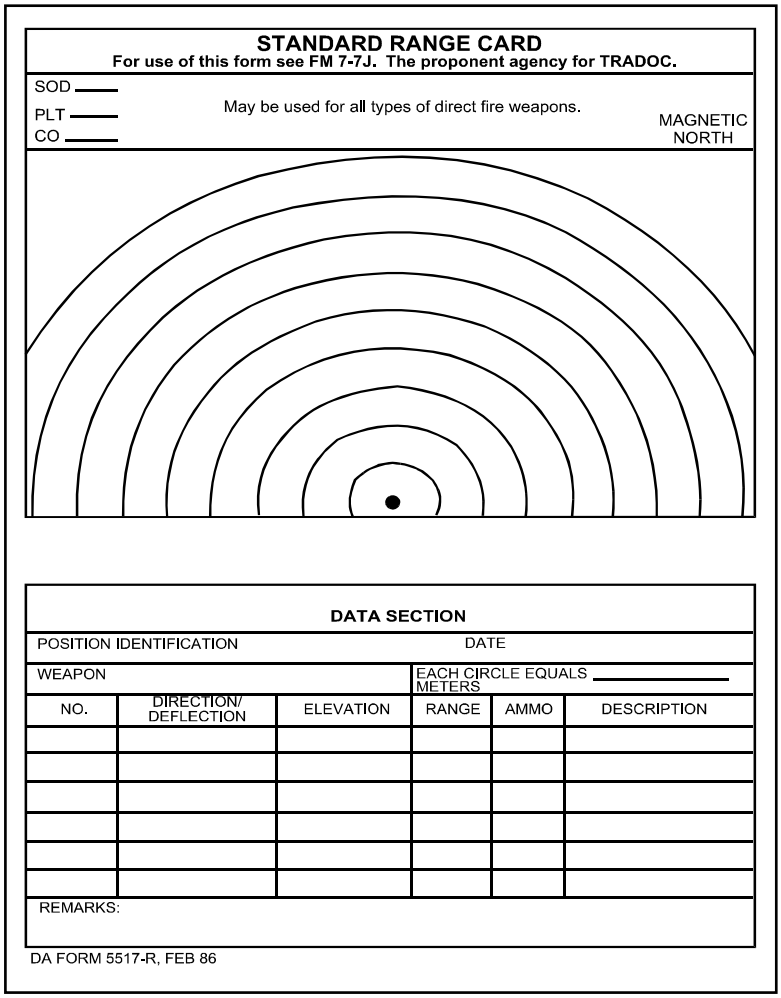
Crew-served weapons can be fired using one of four different rates of fire that are:

1. Single Shot — This method is used to engage a target with well-aimed shots.

2. Slow Fire — In automatic mode, slow fire is less than 40 rounds per minute fired in bursts of 6 to 9 rounds per weapon in use, at 10- to 15-second intervals.

3. Rapid Fire — In automatic mode, rapid fire is greater than 40 rounds per minute fired in bursts of 6 to 9 rounds per weapon in use, at 5- to 10-second intervals.

4. Cyclic Fire — This represents that maximum amount of ammunition that can be expended by the weapon without a break in firing.



STANDARD RANGE CARD
For use of this form see FM 7-7J. The proponent agency for TRADOC.

SOD ____
PLT ____
CO ____

May be used for all types of direct fire weapons.

MAGNETIC NORTH

DATA SECTION

POSITION IDENTIFICATION | DATE

WEAPON | EACH CIRCLE EQUALS ____ METERS

NO.	DIRECTION/ DEFLECTION	ELEVATION	RANGE	AMMO	DESCRIPTION

REMARKS:

DA FORM 5517-R, FEB 86

Figure 10.2. Range Card

The preferred method of employment for these weapons should be a combination of firing rates to optimize ammunition expenditure while maximizing target kill probability. The recommended employment is to fire the weapon using short bursts of approximately 3 to 5 rounds until consistent hits are registered on the target. Once the target is being consistently hit, increase the rate of fire to 7 to 10 rounds per burst until the target is destroyed.

10.7.9 Land-Based Weapons Placement

To maximize land-based crew-served weapons effectiveness the following procedures should be followed:

1. Ensure machine guns are positioned to deliver flanking, grazing, and interlocking fires from mutually supporting positions.

2. Ensure individual posts are assigned defensive positions and sectors of fire. Automatic riflemen are assigned a principle direction of fire within their sector of fire.

3. Ensure crew-served weapons squads prepare range cards to permit accurate all-weather, low-visibility engagements of targets.

4. Ensure indirect fire weapons are displaced to the rear to ensure continuous support should penetration occur.

10.7.10 Naval Coastal Warfare Patrol Boat Engagements

If a COI's hostile intent is immediately identified, (e.g., maneuvering, shouldered weapons, or gunfire), then force may be appropriate as authorized by RUF/ROE. However, hailing, blocking, shouldering, or ramming tactics may be preferred. Following blocking and shouldering tactics and prior to weapons engagement, the COI should be hailed again by radio and/or loudspeaker. If conditions permit, this message should be repeated twice. If the COI still does not respond or stop, as the situation allows and as a final option short of deadly force, crew-served weapons may fire warning shots or fire into the boat's machinery or propulsion system to stop the COI. If these actions are not successful in getting the contact to stop, or if they cannot reasonably be employed, then deadly force may be used.

10.7.10.1 Engagement Limitations

Patrol boats are constrained in their ability to engage hostile targets by a number of factors, including:

1. Lack of mobility in narrow waterways and effects of tides and currents
2. Stability of patrol boats
3. Distance to the target
4. Danger of collateral damage to friendly forces
5. Fields of fire of installed crew-served weapons.

10.7.10.1.1 Fields of Fire from Inshore Boat Unit Generation I Boats

The IBU generation I patrol boat, as described in Chapter 9, is armed with one M2HB .50 caliber machine gun and one M60 7.62 mm light machine gun. These weapons can be mounted on either of the two universal mounts on the port and starboard beam abaft the pilothouse. The mount can also be used for the MK-19 40 mm grenade launcher. Weapons placement allows the IBU patrol boat to have an effective field of fire from 005 degrees relative to 355 degrees relative. There is a potential weapons cutout zone of approximately 10 degrees at the bow but this zone can be eliminated by mounting an M60. A gunner standing in the open hatch on the forecastle at the bow with a bipod mount can cover this area, but this may require the removal of lifelines. Figure 10-3 depicts the firing arcs.

1. Strong/Weak Side — Because each IBU boat will normally be equipped with one heavy weapon and one light weapon, there will be a strong side and a weak side. This will make it necessary for the coxswain to maneuver to present the strong side to the enemy. The coxswain must recognize that the long range of the M2 may make its use inappropriate due to potential collateral damage. The shorter range of the MK-19 may make it a more appropriate weapon.
2. Head-On Engagement — A fundamental tenet of surface engagement is to present the smallest target to the enemy while bringing maximum firepower onto the target. When engaging a target head-on, the coxswain should offset the bow slightly to provide the optimum forward firing position from the strong side.
3. Engagement Astern — The IBU boat can bring both weapons mounts to bear simultaneously astern. The overlapping firing arcs astern are 135 relative to 225 relative, giving a 90-degree firing arc.

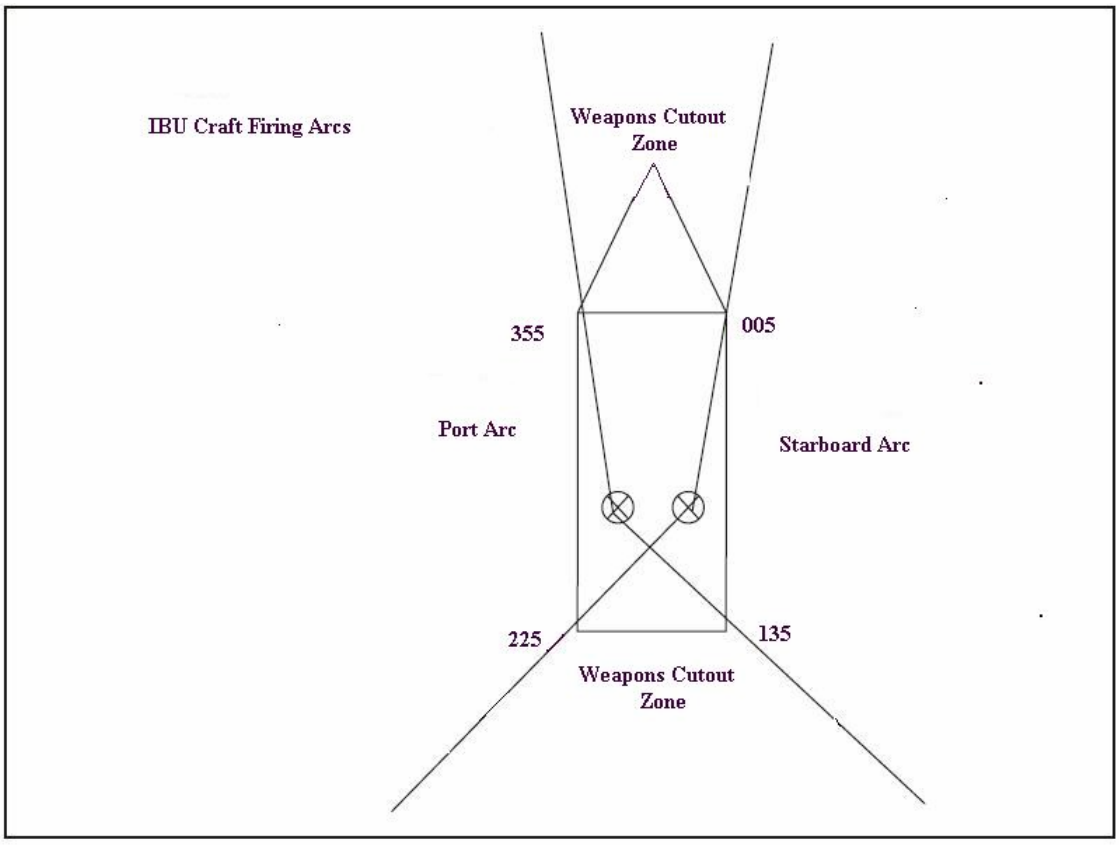


Figure 10-3. IBU Craft Firing Arcs

10.7.10.1.2 Fields of Fire from Port Security Unit Boats

The current TPSB, deployed in 1998, is armed with one M2HB forward and an M60 on the port and starboard sides aft of the control station. There is a blind spot approximately 20 degrees on either side of the stern, giving an effective field of fire from 200 to 160 degrees relative. Figure 10-4 depicts the firing arcs.

PSU boats are generally capable of bringing the M2HB and one M60 to bear forward of the beam, and one M60 in the aft arc except for the dead zone directly aft.

1. Head-On Engagement — The PSU boat should present the smallest target to the enemy while bringing maximum firepower onto the target. When engaging a target forward, the coxswain should approach by offsetting the bow slightly to one side or the other, to provide firepower from two of the three weapons.

2. Engagement Astern — The PSU boat can bring one M60 to bear in the aft arcs, except for directly astern. This means that a screen boat clearing the field of fire for a reaction boat will normally turn slightly to unmask a battery to engage the hostile COI astern.

10.7.10.1.3 Control of Weapons

The coxswain has the ultimate responsibility for control over the weapons on the boat. No weapons will be mounted or loaded without knowledge of the RUF/ROE in effect. The coxswain will use the following standard commands to control weapons employment:

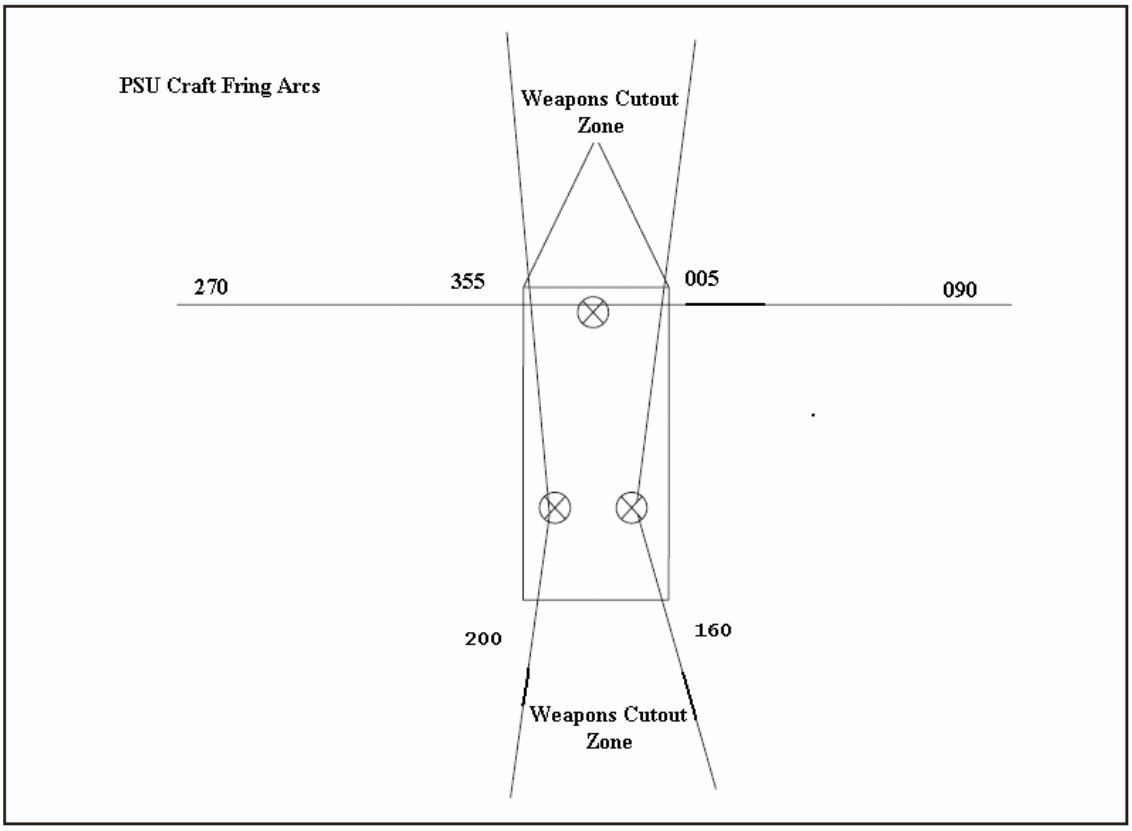


Figure 10-4. PSU Firing Arcs

1. Weapons Tight — Gunners train weapons in a safe direction in a nonthreatening manner. Gunners will make certain that their gun chambers are clear.

2. Weapons Free — This is authorized only by the TACON authority. After the order is given, the coxswain is free to have his gunners open fire at their discretion.

3. Weapons Stowed — Weapons are placed on safe and locked in the "ready-air" position, with the universal gun mount locking pins in place. The weapons are not loaded and the chambers are clear.

4. Weapons Ready — Gunners have positive control of the weapons. Universal gun mount locking pins are removed. Weapons may be loaded at the discretion of the coxswain, but rounds are not chambered. Weapons are placed on safe.

Note

The M2HB does not have a safety. The gunners will train weapons in a safe direction in a nonthreatening manner. Pointing a weapon at a contact is a hostile act.

5. Surface or Air Action, Port or Starboard — Gunners are free to train their weapons on the contact. Rounds are chambered. Safety may be engaged at the discretion of the gunner.

6. Open Fire — This command is given by the coxswain to the gunners. Gunners lock weapons on target and are cleared to open fire to engage the target, assuming a clear field of fire exists. The coxswain may provide specific "open fire" commands as follows: "Port gunner, open fire on target bearing TWO SEVEN ZERO relative, range EIGHT HUNDRED yds."

7. Cease Fire — This command is given by the boat coxswain and all gunners cease-fire immediately. The gunners maintain positive control of their weapons, keeping them at the ready.

8. Check Fire — This command is given by the boat coxswain and all gunners cease-fire immediately to check effect of fired rounds. Gunners are prepared to resume firing on command.

9. Response to Commands — Gunners respond to all firing commands from the coxswain by repeating the order given: "Port gunner, open fire, aye."

10.7.10.1.4 Situational Awareness of Fields of Fire

IAW the defensive fireplan, the gunners coordinate their fire with each other and other boats' fields of fire to maximize the firepower directed at the enemy. All gunners must be aware of their assigned field of fire at all times. Field-of-fire assignments must be briefed during the patrol order. A major consideration when choosing a location from which to fire is avoiding collateral damage downrange, which includes friendly vessels, pier facilities, shore batteries, and populated shorelines. Coxswains should plan firing positions in advance with consideration given for likely avenues of approach. See Figure 10-5.

The static weapon gunner is responsible for making sure that the field of fire downrange of the target is clear of other friendly forces, neutral ship and boat traffic, and populated shorelines. However, there may be cases, due to the restrictive nature of the harbor, importance of the HVA, and maneuverability of the COI that may require the immediate destruction of the COI. If fired upon by the COI, the boat should immediately maneuver at the highest possible speed to clear a field of fire for the static weapons emplacements, then notify the tactical supervisor (TACSUP) by radio. The boat should proceed on a course perpendicular to the firing line between the weapon emplacement and the COI.

If the COI disengages and retreats out of the warning zone, the boat should not pursue beyond its sector boundary. The COI may be attempting to draw the boat off station into a prepared ambush or to open a lane of attack on the HVA by another attack boat, swimmers, or divers. In all cases, immediate reports to the TACSUP are required.

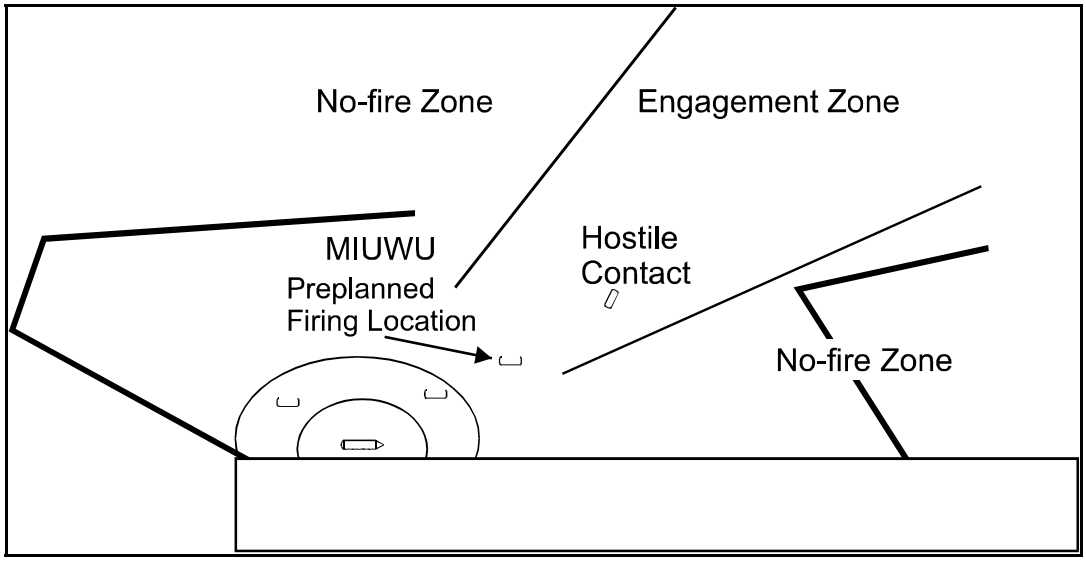


Figure 10-5. Use of Preplanned Positions to Avoid No-Fire Zones

10.7.10.1.5 Engaging Enemy Boats

A small boat is an inherently unsteady platform from which to fire an automatic weapon or a shoulder-fired RPG. The enemy boat may slow or stop as it prepares to open fire on the HVA or defending patrol boat. This is a critical response point for the NCW patrol boat and/or static weapons emplacements, and they should direct a high volume of accurate firepower on such a boat if permitted by the RUF/ROE. If in formation, the patrol leader should make sure that patrol boats maintain a simple and tight formation when engaging enemy boats to avoid fratricide. The patrol must not engage in a melee.

The coxswain maneuvers the boat so as to present a minimum target while bringing maximum firepower to bear on the enemy. As a patrol boat is also an inherently unstable firing platform, the coxswains must determine their most stable course and speed for employing weapons. In very calm seas, proceeding at slow speed (5 kts) may be the most stable, while waves may require a moderate speed (20 – 25 kts) to obtain a stable platform. When the boat is on plane, the bow tends to ride high. This will affect the gunner's aim when firing forward. Automatic weapons should be fired in short bursts (less than 10 rounds) so at least two tracers are observed during a burst to permit aiming corrections. When dead in the water (DIW) the gunners should train their weapons on the target and use the natural roll of the boat to control elevation in vectoring rounds into the target. Machine gun rounds tend to ricochet upward when they hit the water, due to weapons being employed so close to the surface of the water. This can be dangerous to any friendly aircraft in the area, as well as populated areas downrange.

When engaging a known hostile craft, the patrol boat should open fire as soon as the enemy comes within the effective range of the heavy machine gun, given the restrictions based on weather, sea state, size, and maneuverability of the target and fields of fire. Unless the patrol boat is receiving accurate fire from the enemy, it is prudent to avoid engagements outside a range of 300 yds. Patrol boats should not engage the target at long range or empty the ammo tray without a reasonable probability of hitting the target. Closing the target will improve hit probability. The patrol leader must report immediately to the TACON authority whenever engaging with weapons.

10.7.10.1.6 Night Engagement

The keys to a successful night engagement are early detection, proper illumination, and delivery of a high volume of sustained fire against the enemy. The patrol leader should provide C2, ensuring that attack runs are conducted to maintain the patrol boats in a position between the enemy and the HVA. The boats should approach the enemy from a bow-on aspect in an echelon formation. At an appropriate distance from the enemy, the lead boat will alter course 30 or more degrees, fire an illumination round aimed to backlight the target, and deliver fire from the strong side against the enemy craft. The other boats of the formation follow the actions of the lead boat, firing additional illumination rounds as required. Ideally, the last boat in formation fires the final illumination round as it passes abeam of the enemy craft. The patrol must maintain a high volume of sustained fire until the illumination expires or the enemy is out of weapon range. The patrol then reloads, conducts battle damage assessment (BDA) and prepares for another run.

10.7.10.1.7 Effect of Muzzle Flash

Night vision devices are less effective during close quarters engagements due to muzzle flash and the lack of peripheral vision afforded by the equipment. Patrol crews need extensive training to use night vision devices effectively during a firefight. Gunners should return fire at the enemy's muzzle flash only within effective weapon range. This prevents early disclosure of the patrol's location and saves ammunition. Gunners lose visual contact with the target due to the reduced night vision caused by muzzle flash. The patrol must close the target, provide illumination and/or wait for the enemy's muzzle flash to regain visual contact. The enemy craft will likely increase speed to maneuver and evade, so gunners should watch for wakes and fire forward of them. Targeting priorities include the enemy's pilothouse/bridge and engine compartment. Night engagements are characterized by brief, high volumes of fire. Historically, only a small fraction of fired rounds effectively hit the target.

10.7.10.1.8 Night Gunnery Limitations

High-speed maneuvering, disorientation due to muzzle flash, reduced night vision, and a poor tactical picture make small-boat gunnery at night very difficult. A small volume of accurate fire is more effective than a large volume of uncontrolled fire. The fire plan should specify simple fire commands, include a review of effective weapon ranges, and require short bursts during the engagement.

10.7.10.2 Multiunit Response to Inbound Contacts

When a contact or contacts are rapidly closing an HVA and multiple friendly units are in range to engage (boats and/or land-based, crew-served weapons), NCWC must quickly and collectively use the patrol leader and subordinate boats, land-based gun crew, and the HVA (if it is able to maneuver) to determine hostile intent — and then use fires effectively to stop the threat before it reaches the objective area. NCWC must remember that the faster the inbound target(s), the less time available to react. And, the bigger the inbound target, the greater the fires necessary to stop it. Crew-served machine guns will likely prove insufficient against inbound freighters and tankers attempting to ram or launch rockets, and these ships will be very hard to stop in time unless adequate fires are preassigned and standing by. Figure 10-6 shows the time to react for various speeds and distances if the HVA cannot maneuver and 1,000 yards is assumed the range at which the HVA will be destroyed by the COI. If the HVA can, it should attempt to turn away, thereby opening ranges and providing more time for NCWC's boats to get between the HVA and the inbound contact(s). This will also help in determining hostile intent and security force responses described in Paragraph 6.7 if the inbound COI maneuvers to regain an intercept course.

Unless NSWC has a clear tactical picture and the patrol leader is not on scene, authority for conducting the engagement should be delegated to the patrol leader. The patrol leader will coordinate own fires, other boat fires, and land-based gun crew to ensure weapons deconfliction and prevent friendly shoreline from fouling firing bearings.

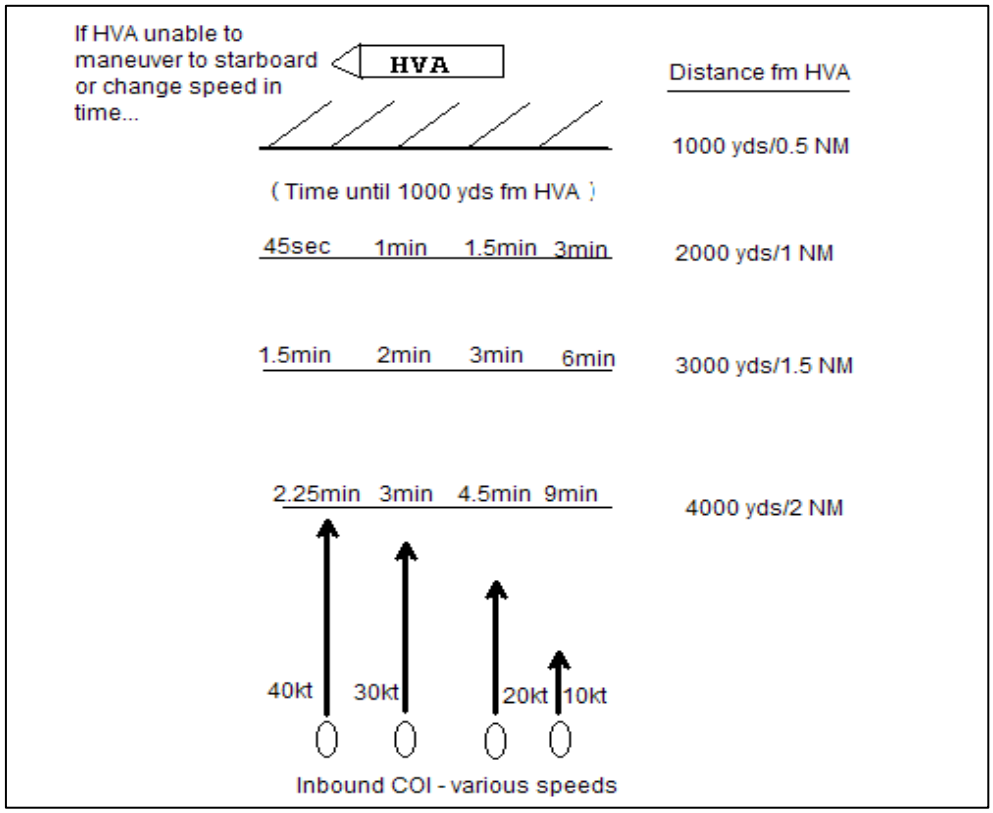


Figure 10-6. Security Boat Reaction Times

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APPENDIX A

Naval Coastal Warfare Group Organizations

A.1 OVERVIEW

This appendix provides the organization charts for NCWGRUs. For specific information on NCWGRU support requirements, and miscellaneous operational data refer to NWP 3-10.

Because of the overuse of reserve NCW resources in recent operations due to world events, the Navy has recognized the need for an active NCW component capability. In conjunction with subsequent SecDef tasking to rebalance the active/reserve mix, Officer of the Chief of Naval Operations (OPNAV) directed the standup of an active NCWRON in NCWGRU ONE and TWO effective 1 Oct 2004.

A.2 NAVAL COASTAL WARFARE GROUP ONE ORGANIZATION

As a result of OPNAV direction, NCWRON FIVE and its subordinate units transitioned from the Naval Reserve to the active duty Navy. Figure A-1 depicts present NCWGRU ONE's components.

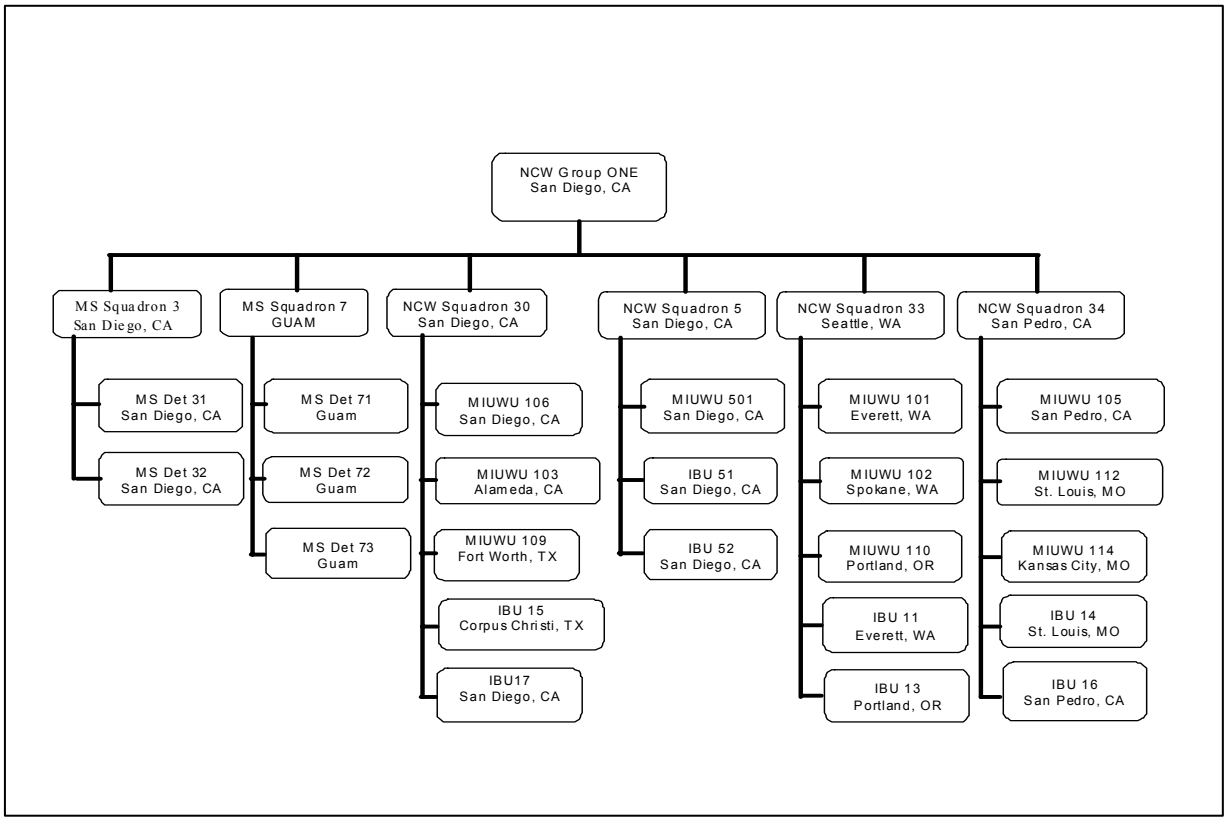

Figure A-1. NCWGRU ONE's Active and Reserve Components

A.3 NAVAL COASTAL WARFARE GROUP TWO ORGANIZATION

As a result of OPNAV direction, NCWRON FOUR and its subordinate units transitioned from the Naval Reserve to the active duty Navy. Figure A-2 depicts present NCWGRU TWO's components.

A.4 PORT SECURITY UNIT ORGANIZATION

Figure A-3 depicts the USCG's PSU components.

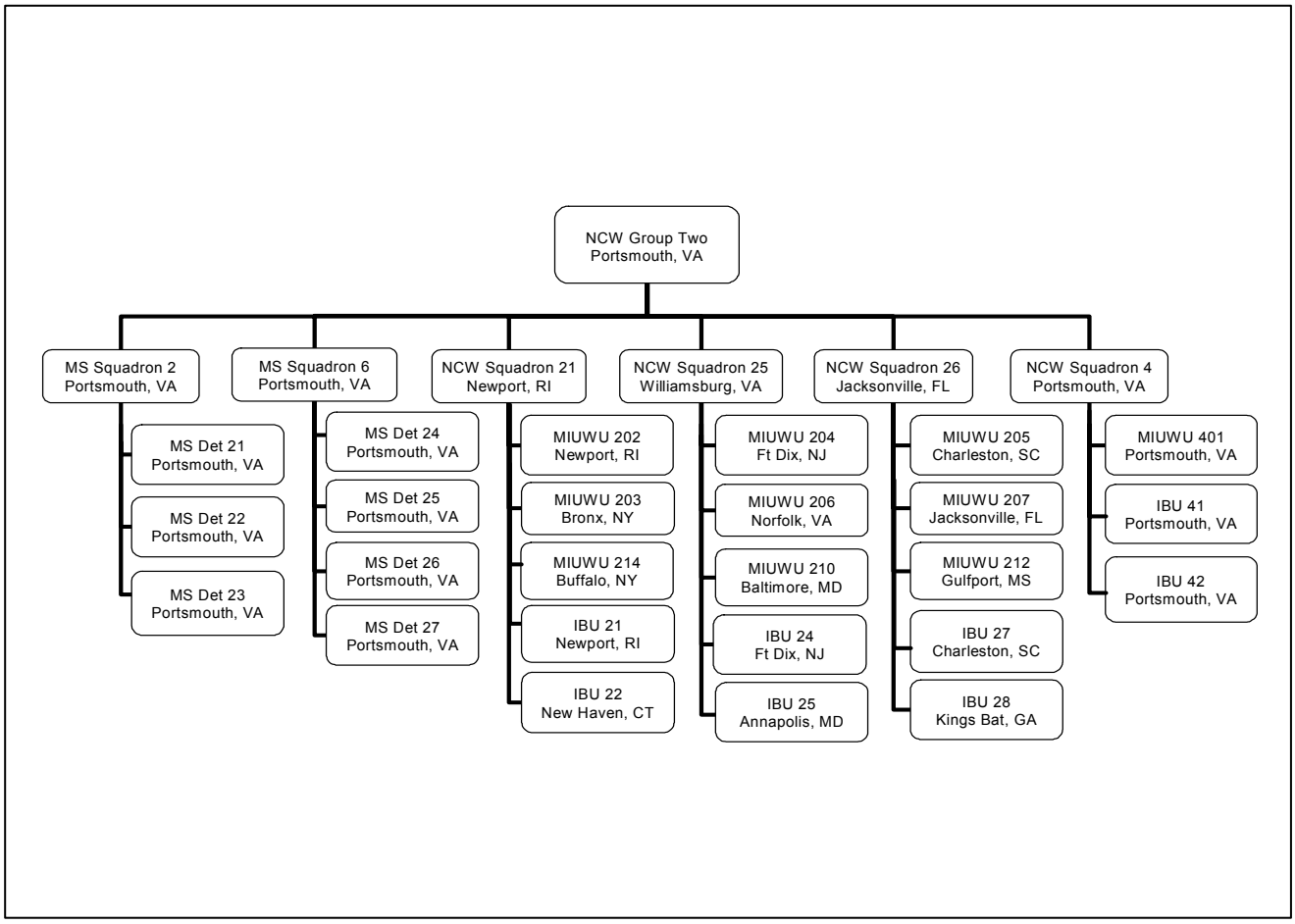

Figure A-2. NCWGRU TWO's Active and Reserve Components

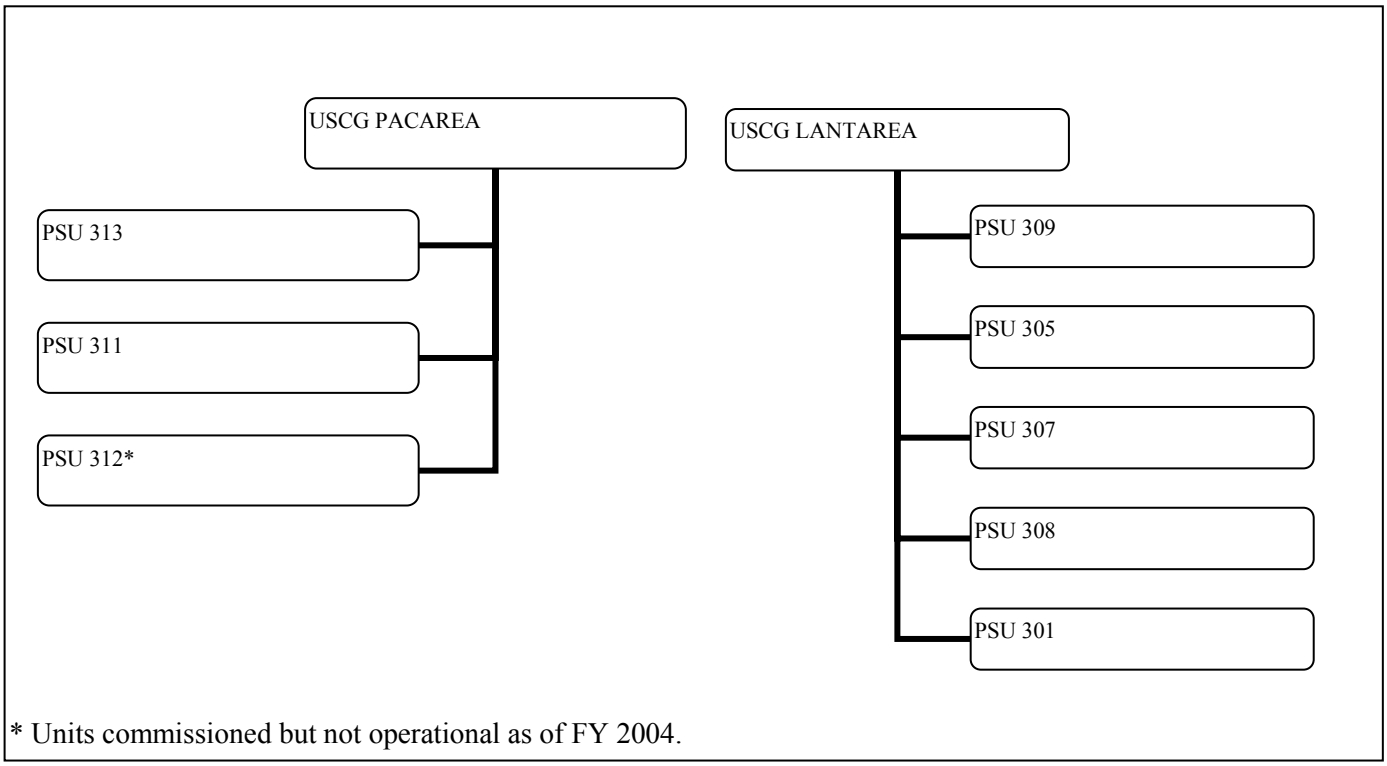

Figure A-3. PSU's Components

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APPENDIX B

Liaison Officers and Checklist

B.1 OVERVIEW

The NCWC should identify the requirement for LNOs and provide them or request them at the earliest opportunity. LNOs enhance interoperability and contribute significantly to mission success. They should be established between the NCWC HQ and higher commands, between adjacent units, and between supporting forces and the NCWC HQ.

B.2 LIAISON OFFICER DUTIES

LNOs are representatives of their commanders and will maintain close contact with the command's operations center (OPCEN). They will monitor, coordinate, advise, brief, and participate in operational planning.

B.3 LIAISON OFFICER BRIEFING

Before departure for the gaining HQ, liaison personnel LNO should be thoroughly briefed on:

1. Their commander's intent, including details of the CONOPS (e.g., unit locations and combat readiness factors such as personnel strength and logistics considerations)
2. The current status and missions of the unit to which they are being sent
3. OPSEC applicable to the mission
4. Specific information and/or liaison requirements required from each staff section
5. Their mission and responsibilities
6. Arrangements for communications, computer systems, and transportation**.**

B.4 LIAISON OFFICER CAPABILITIES AND LIMITATIONS

LNOs must be thoroughly familiar with the capabilities and limitations of their unit. They should be of equal rank to the JTF primary staff officer they are supporting to influence the decision-making process. LNOs should be authorized to answer certain routine queries on behalf of their commands. They should not be used to formally task their parent command. Formal tasking should be accomplished through normal communication channels.

B.5 LIAISON OFFICER CHECKLIST AND ACTIONS

The following checklist will assist LNOs in performing their duties.

LNO Checklist and Actions

___ Obtain necessary credentials for identification and appropriate security clearances.

___ If conducting liaison with a multinational unit, check language and interpreter requirements.

___ Become familiar with the potential issues, capabilities, employment doctrine, and operational procedures of their unit and, to the extent possible, those of the unit to which they are being sent.

___ Become familiar with command relationships among all major commands participating in the operation.

On arrival:

1. Report to the supported commander or their representative (e.g., deputy commander, joint task force (CJTF), chief of staff, or Operations Directorate of a Joint Staff (J-3)), state their mission and exhibit their directive or credentials (if in writing), offer assistance, and be prepared to brief on their unit's situation and capabilities.

2. Visit each staff section, provide information as required, and obtain information required to be transmitted to their unit for an answer.

3. Establish communication with their unit and exchange information as required.

The LNO should:

1. Keep informed of the situation of their parent unit and make that information available.

2. Determine how their command will be employed (e.g., mission, unit location, future locations, future operations, commander's intent).

3. Accomplish their mission without interfering with the operations of the HQ to which they are sent.

4. Report promptly to their command if they are unable to accomplish their liaison mission.

APPENDIX C

Site Survey

C.1 OVERVIEW

Site selection is of great consequence to NCW units in mission performance. Selecting a campsite with good long-term habitability and surveillance sites with maximum tracking ability are key to this goal. The selection of these sites will impact all other operations and functions that follow. Several sites should be considered and rated in terms of benefits and detractors in carrying out the NCW tasking.

C.2 PLANNING

The site survey team should deploy to the AO as soon as possible after receipt of the deployment order. The greater the lead-time of the site survey, the greater the ability to fully deploy into place and operate smoothly. Close cooperation with U.S. military and/or HN LNOs shall be established and maintained during the site survey process. These POCs will be invaluable prior to unit deployment.

C.3 SITE SURVEY TEAM

Representatives from the deck, operations, maintenance, and supply departments comprise the site survey team. This team will utilize the checklist in this section as a guide for site selection. Photographs, sketches, local maps, POC, other military services, and hydrographic publications pertinent to the local area contribute to a thorough site survey. In the site survey process, there can never be "too much detail."

The unit's operations department should conduct a thorough site survey to ensure that all communications equipment will operate properly in the area. This should include marine traffic and terrain (for LOS operations), as well as any type of potential interference from local bases, FCC, or FAA communication or surveillance in the area.

NCW SITE SURVEY	
NCW unit performing site survey:	
Date:	
Site Location: Country: City:	
General: Latitude: Longitude:	
Elevation:	
Topography description:	
Narrative description:	
Detailed: Access to site: Distance from site to nearest harbor: Distance from site to nearest airstrip: Distance from site to nearest primary road/highway:	
Average travel time from local arrival site to operating site:	
Driver licensing restrictions:	
Terrain: Mud/sand/rock: Vegetation: Wild animals: Snakes/insects:	
Local roads: Surface: Condition:	
Traffic restrictions: Bridges: Tunnels: Tolls: Maps:	
Logistic support: Fuels and lubricants:	

Service utilities: Location/identification of underground utility lines (gas, water, electrical, sewer, telephone, etc.): Location/identification of buried facilities (gas/fuel tanks, manholes, tunnels, etc.):	
Environmental concerns: HAZMAT (new storage, preexisting residue): Availability and capacity of prime movers: Containers/material handling equipment (forklifts, cranes, etc.):	

TYPES	SOURCE	QUANTITY AVAILABLE	DELIVERY SCHEDULE	QUALITY	COST	METHODS OF PAYMENT	PRIOR ARRANGEMENTS REQUIRED	NEAREST DEFENSE FUEL SUPPLY POINT

Hazardous material disposal site: Distance from site: Operated by: Who provided generator number: Disposal restrictions: Freon:	
Electrical power (shore power): Voltage: Phases: KVA: Reliable: Military/public control:	

Telephone service: Commercial: Long distance: Distance from site: Credit/calling card accepted: Modular telephone connector system for use with computer modem or fax: Telephone available at van: Telephone available at camp: Point of contact for telephone service: Billing procedures: Red Cross/emergency point of contact: Dedicated lines (STU III): Facsimile (FAX):	
Potable water: Source: Availability: Quantity restrictions: Quality: Samples obtained: Health considerations: Distance from campsite:	
Sanitary facilities: Toilet: Type: Number: Washing: Shower: Laundry:	
Messing: Commercial sources: Military galley: Organic messing: Refrigerated storage: Portable: Local sources: Ice boxes: Location of ice availability:	

Food supply: Procedure for acquiring: Availability of following: Fresh: Canned: Frozen: Meat: Quality certified: MRE/TRAPAK:	
Berthing: Military (USN, USMC, USA, USAF): Usable buildings available in berthing area: Campsite: Distance from van: Terrain in berthing area: Vegetation in berthing area: Potable water in berthing area: Lighthouse/fog horns in vicinity: Separation from civilian community: Access to campsite: Environmental impact statement required: Submitted to: Pest/insect control requirements: Camp sanitation requirements: Heating/cooling:	
Perimeter/site security: Other security support available (i.e., USMC, USA):	
Local military installations: Distance: Are the following activities available: Naval supply center: CMIO: Armed Forces Courier Service (ARFCOS): Aircraft intermediate maintenance department (AIMD):	

Points of contact for the following: Supply: Billeting: Personnel support detachment (PSD): Galley: Armory: Vehicle repair facilities: Engine repairs: Transmission repairs: Split rim wheel repairs: Repair parts availability: Vehicle wash:	
Boat support: Facilities for launching IBU or PSU craft: Boat maintenance facilities in area: Boat fuel/refuel facilities availability: Local craft of opportunity: Local USCG auxiliary, USCG, USN asset: Crew assembly/briefing/rest area: Safe havens: Points of contact:	
Staging of equipment: Location for arrival: Location for departure: Space restrictions: Points of contact:	
Medical (emergency/trauma) support: Location: Method to contact: Approximate response time:	
Local country/area information: Language: Impending local holidays: Local customs:	
Remarks/comments/observations (comments as detailed as desired):	
Primary points of contact:	
Message PLAD:	

APPENDIX D

Campsite Management and Logistics Support

D.1 PURPOSE

This appendix provides information on campsite management and logistic support requirements. These factors are dependent on the size of the deployment force as well as the nature of the operation being conducted. Normally, an MIUWU deployment with an IBU will be tasked to provide for its own requirements. However, for a larger operation, such as an MPF offload, NCW units will be folded into a larger campsite and logistics organization.

D.2 GOVERNING DIRECTIVES

Individual NCW and support units normally have their own campsite management and logistics plans and bills, and when deployed independently should use them. However, when the situation requires joining other NCW units in a camp, it will require the development of a combined directive to minimize and eliminate duplication, prevent potential conflicts, and to take advantage of synergies. Individual plans and bills should be consolidated and include the following items as a minimum:

1. Berthing plan
2. Physical security plan
3. Heavy weather plan
4. Medical/MEDEVAC procedures
5. Fire bill
6. Watch quarter and station bill
7. Camp rules and regulations.

D.3 CAMP SERVICES

Coordinating camp services is part of any logistics plan. The nature of the operation will determine if these services must be provided by utilizing participating unit's organic equipment or, if the situation permits, outsourcing the services to the HN. A campsite diagram should be prepared to ensure the best lay down of all necessary facilities. The following need to be addressed:

1. Berthing
2. Messing
3. Sanitary facilities
4. Potable water, including purification, testing, and certification

5. Laundry
6. Barber
7. Power production and lighting distribution
8. Medical
9. Transportation
10. Trash disposal
11. Fuel (storage and distribution)
12. HAZMAT storage and hazardous waste disposal
13. Recreational activities.

D.4 CAMP ADMINISTRATION AND ORGANIZATION

Regardless of the size of the campsite there are various administrative functions that are integral and which need to be allocated to campsite participants.

1. Camp Commandant — The OIC of and responsible for camp administration.
2. Maintenance — Personnel tasked with facilities maintenance including power production and distribution; water production, quality, and distribution; and sanitation.
3. Security Personnel — Campsite security needs to be fully integrated into the overall FP and physical security plans.
4. Supply — Personnel assignments are made for messing and laundry duties.
5. Motor Pool and Dispatcher Functions — This may require pooling assets from among the participants, as well as coordination with HN support.

D.5 SUPPLY SUSTAINMENT AND CONTRACTING CAPABILITY

Planning for unforeseen LOGREQs will require utilizing all available sources. Parent unit direct support should be pursued if urgency allows. Other options include support from US military forces operating in the area or HN commercial and military organizations. An organization with a formally designated contracting officer is needed.

D.6 CASUALTY HANDLING

A campsite must have procedures in place to expedite processing of casualties to the designated medical treatment facility. This process will be discussed within the campsite's medical/MEDEVAC bill. This process shall also apply to enemy and detainee wounded, injured, or sick as required by the 1949 Geneva Conventions. Casualty handling will require a coordinated effort by the following functional groups within the campsite: medical, security, motor pool, and camp administration. Camp berthing facilities may be utilized while casualties are processed.

APPENDIX E

Host-Nation Support and Checklist

E.1 OVERVIEW

HNS is normally based on agreements that commit the HN to provide specific support in prescribed conditions. Agreements are made at various levels including national, theater, subordinate joint force command, Service component command, and unit. In general, HNS is highly situational and heavily dependent on both the operational capabilities of the HN and its support for U.S. policies.

Examples of HNS to NCW operations are included in the following paragraphs.

E.1.1 Civilian Movements

HNS is invaluable in controlling and assisting in the evacuation of all civilians located in or moving through the AO, including U.S. NEO activities, movement of third-country nationals, and planned or unplanned movement of HN civilians.

E.1.2 Reception and Onward Movement

Unit reception and movement will occur simultaneously with local civilian and cargo movement in the theater. All this movement will require considerable HNS, especially in port and airport operations, traffic control, and security.

E.1.3 Medical Care/Health Service Support

After the initial onset of hostilities, HN medical and health service support (HSS) may be critically needed until US medical and HSS capabilities are established in the area. After these capabilities are established, significant HNS may be necessary, particularly in base operating and infrastructure support.

E.1.4 Host-Nation Security Support

Many HNs provide extensive support for security-related activities. Specific types of HN security support are described below.

E.1.4.1 Civilian Guard and Labor Service Units

These units are usually in place during peacetime or developed after the commencement of hostilities. During peacetime, civilian guards are frequently employed with varying retainability after hostilities commence.

E.1.4.2 Special Military Units

These units perform specific wartime missions, such as guarding enemy prisoners of war (EPWs) and securing valuable facilities, materiel, or ammunition. Included in this group are HN military police that provide support but are not necessarily assigned or totally dedicated to U.S. forces.

E.1.4.3 Individual Military Personnel Units

These personnel may be used as fillers for selected HN units.

E.1.4.4 Paramilitary Units

Some nations' police are paramilitary in nature and function in both civilian and military roles. They have significantly more utility for HNS in a hostile environment than normal civilian police.

E.1.4.5 Light Infantry and Security Units

Most HN countries use these types of units as their primary security forces. They are frequently given both area and point security missions.

E.1.4.6 Civilian Police

These organizations frequently assist U.S. military police and security police forces during peacetime, but have significantly less capability during wartime. Under the Geneva Conventions, civilian police are classified as noncombatants and as such are not required to provide any support to friendly military units.

E.1.5 Intelligence Units and Agencies

Intelligence organizations located in the AO may be employed to satisfy the requirement for rear-area essential elements of information. HN organizations can provide tactical intelligence on enemy ground, naval, and air forces; CI on foreign intelligence and security service threats; terrorist intentions and collection capabilities; and interrogation and debriefing reports from EPWs, refugees, returnees, and enemy sympathizers.

E.2 PLANNING FACTORS

The NCWC must determine functional types and levels of HNS that can be accepted with a high assurance that the HN will be able to fulfill its commitments.

E.3 CHECKLIST

The following checklist offers the NCWC a planning tool for deployed operations.

Checklist For Host-Nation Support

1. _____ Has the mission been analyzed for clear and attainable objectives?
2. _____ How does the mission statement accomplish the desired end state?
3. _____ How do the objectives help to ensure the desired end state?
4. _____ Have these objectives been translated into missions for subordinate commanders?
5. _____ Has the source of mission tasking been identified?
6. _____ Has a risk assessment been accomplished as appropriate?
7. _____ What process should one follow to consider and approve changes to the original mission statement?
8. _____ Have all NCW forces received the proper HNS predeployment training?
9. _____ Have standards regarding operational and/or logistic capabilities been established to certify units to participate in the operation? Have HN deficiencies indicated means of resolution?
10. _____ Have the implications of national and regional culture on contemplated NCW operations been assessed?
11. _____ Have appropriate orientation briefings from the State Department and NGOs and/or private volunteer organization (PVOs) been requested?
12. ——— Has ROE been established?
13. _____ Do the ROE negotiated with the HN force permit the same degree of individual self-defense and unit self-defense as U.S. ROE?
14. _____ Have the personnel for the HN staff been chosen to reflect the required functional skills, training level, language skill, and avoidance of historic animosities?
15. _____ Are sufficient interpreters available for mission planning and mission execution?
16. _____ Are HN legal representatives available to provide counsel on their national law and/or legal agreements?
17. _____ What are the alternative COAs to be followed by the NCW force when a HN military element withdraws from the force?
18. _____ Do transition plans exist to move from peacetime to MOOTW and/or to war, or from war to MOOTW?
19. _____ Do the resources allocated to the FP component of the mission balance with the potential political ramifications of failure to protect the force?
20. _____ Have the TPFDDs been completed and validated?
21. _____ Have non-U.S. forces relying on U.S. strategic mobility for employment and/or redeployment been included in the TPFDD?

22. _____ Has the deployment plan deconflicted NGO and/or PVOs as well as contractor transportation requirements in order to avoid competition for limited transportation infrastructure?

23. _____ Has a SOFA been completed?

24. _____ Are forces, C4I capabilities, and logistic support robust enough to respond to increased levels of operational intensity?

25. _____ Are cultural, social, political, and economic dynamics of the operational area included in the studies of the geographic and military considerations in order to develop an intelligence estimate that identifies the threat centers of gravity, the high value and high payoff targets? Does the plan consider these issues in a way that facilitates operations and the desired end state?

26. _____ Have determined efforts been made to pool information with applicable HN, NGOs, and PVOs, to increase efficiency of operations through coordination and the elimination of operational redundancy?

27. _____ Are chemical weapon threats known and are NCW personnel prepared to cope with their possible use?

28. _____ Are medical facilities identified?

29. _____ Review plan for duplication of effort in supporting the operation.

30. _____ Is there an initiating directive that clearly articulates the command arrangements?

31. _____ Has the NCWC done a mission analysis to determine the most appropriate HN command authority to ensure that the directed mission can be accomplished? Should the necessary command authorities not be forthcoming, the NCWC should explore the following:

32. _____ Feasibility of achieving coherent federated operations, wherein HN and national forces remain under national OPCON and TACON?

33. _____ Have command channels for the execution of military operations and national channels for reporting status and requesting support been established?

34. _____ Have command relationships regarding control of forces been defined?

35. _____ Have liaison arrangements associated with C2 of the forces been assessed?

36. _____ Do liaison elements on the NCWRON staff possess requisite authorities and have a full understanding of both national interest and HN objectives?

37. _____ Have deficiencies with HN or coalition commanders been negotiated for resolution?

38. _____ Do liaison elements have appropriate linguistic, communications, logistic, and office support capabilities in place?

39. _____ Has the NCW/HN command structure been designed to minimize layers to a more horizontal organization?

40. _____ Have U.S. as well as HN legal constraints been considered in planning for C2?

41. _____ Is there a means and a plan to provide all forces with a CTP?

42. _____ Have the HN partner with a lesser C2 capability been provided appropriate liaison personnel and interpreters (if necessary), operators, and maintainers to enable interaction with the NCWC?

43. _____ Have arrangements been made for intrastaff and interstaff communication among same nation staff members?

44. _____ Has coordination been accomplished with HN regarding communication equipment capability?

45. _____ Has coordination been accomplished regarding frequency assignment?

46. _____ Has the terrain and environment been considered while planning for the C4I network?

47. _____ Have common databases been provided for?

48. _____ Has the nation most capable of providing an integrated, interoperable C4I network been selected to serve as network manager for the US/HN C4I infrastructure?

49. _____ Have agreements on cryptographic, communications, and/or automated data processing (ADP) security issues and other planning factors been reached with the HN? Are compatible materials available?

50. _____ Have arrangements been made and/or established to allow contract HN employees to work on U.S. staffs without exposure to ADP and classified information used in daily operations?

51. _____ Has the HN agreed to work on a standard datum and produce all products to that datum?

52. _____ Have special, adequate, and supportable intelligence sharing and foreign disclosure procedures been established?

53. _____ Have the intelligence requirements been clearly stated to focus the collection effort?

54. _____ Has theater foreign disclosure authority been identified?

55. _____ Has the C4I system been established with the capability to rapidly disseminate to the HN participants, time-sensitive information and/or intelligence for use in targeting or rapid reaction?

56. _____ Have efforts been made to place sufficient intelligence collection resources under the control of (or at least immediately responsive to) the NCWC?

57. _____ Have efforts been made to assign intelligence gathering tasks IAW the NCWC's intelligence requirements and according to the capability of the HN equipment under NCW control?

58. _____ Have efforts been made to pool intelligence and battlespace information into a HN/NCW centralized processing and exploitation center?

59. _____ Has the rapid dissemination of targeting materials been provided for?

60. _____ Does the United States have an acquisition cross-service agreement with HN?

61. _____ Do other U.S. legal authorities permit the provision of logistic support to HN?

62. _____ Has the NCWC's authority to redistribute logistic assets and services been defined and agreed to?

63. _____ Have reimbursement or replacement-in-kind procedures been developed and agreed upon?

64. _____ Have contractor procedures been established to allow U.S. participation in contracts led by non-U.S. personnel and used by U.S. personnel?

65. _____ Have logistic reporting procedures been established and issued?

66. _____ Are there existing standardization agreements that could facilitate mutual support?

67. _____ Can the HN provide support and, if so, have negotiations to secure support either been established or completed?

68. _____ Has HNS been evaluated in the deployed location(s) to determine the logistic requirements?

69. _____ Are the mission economic and infrastructure repair plans known and being complied with by all nations, services, and units?

70. _____ Is there a means in place that authorizes exchange of mutual logistic support of goods and services between the United States and HN and accounts for the amounts received?

71. _____ Has a logistic determination been made (i.e., what country will provide what piece of the logistics system and health service logistics)?

72. _____ Has the probable cost of the HNS been determined and are there mechanisms in place to track the cost?

73. _____ Have logisticians assessed the feasibility, supportability, and risks of the mission?

74. _____ Is a transitional plan available to facilitate deployment and operational assumption of in-place contracts, equipment, facilities, and personnel belonging to the HN?

75. _____ Has funding been identified to pay for HNS?

76. _____ Has it been determined if, or to what extent, operational-related expenses will be reimbursed from common funding or sources external to national funding by the HN?

77. _____ Is the NCWC aware of existing agreements among participating Services and HN in the form of bilateral or multilateral arrangements, funding, and training?

78. _____ Are HN medical facilities identified to support the operation? Are evacuation plans, both intra-theater and intertheater, in place?

79. _____ Are mortuary procedures in place to service multinational casualties, to include recognition of cultural differences in dealing with casualties?

80. _____ Has a PSYOP program(s) been developed to support the operation?

81. _____ Have PSYOP assets been requested?

82. _____ Have procedures been established for coordination and approval of PSYOP objectives, themes, programs, and products?

83. _____ Have population and resource control measures, and the commander’s authority to impose them, been included in the NCW plan?

84. _____ Are there adequate CA personnel on hand to assist planners?

85. _____ Are there special operations personnel available to support the execution of unconventional military options?

86. _____ Has a public affairs (PA) plan been promulgated that provides a contingency statement to use in response to HN media queries before initial public release of information concerning the NCWC and its mission?

87. _____ Has a PA plan been promulgated that states from which nation (United States or HN) makes the initial public release concerning the NCWC and its mission?

88. _____ Has a PA plan been promulgated that states agreed-upon procedures for the subsequent release of information concerning the NCW operation and its national components?

89. _____ Is predeployment media training complete?

90. _____ Is the relationship between the inevitable media coverage of tactical operations and future strategic decisions understood by all commanders?

91. _____ Have requirements for combat camera support, including communicating to NCWC the need for operational documentation, been arranged?

92. _____ Has an operation historian been designated?

93. _____ Is a mechanism in place for the collection, assessment, and reporting of lessons learned?

94. _____ Is the NCWC aware of the commander's desired end-state and exit strategy for translation into unit objectives and the sustaining of unit mission orientation?

95. _____ What are the redeployment and/or withdrawal plans for NCW forces? Is the departure of NCW forces to be accomplished under tactical conditions?

96. _____ What are the environmental standards to be met by withdrawal in humanitarian or other peaceful operations?

97. _____ What NCW forces, equipment, and supplies will remain behind? Has disposal of U.S. equipment supplies been properly planned?

98. _____ What are the C2 and command arrangements for departure?

99. _____ Who will support NCW forces that remain behind?

100. _____ Have the C2 systems support required for the diminishing NCW presence been identified?

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APPENDIX F

SALUTE Report

F.1 OVERVIEW

A SALUTE report is an abbreviated, formatted means to report contact information and is explained in this appendix. The acronym, SALUTE, is an established method to remember how and what to report about potential enemy contacts.

F.2 REPORT FORMAT

Standard contact reporting procedures from/to the RSSC, MSP, IBU/PSU craft, NCWRON, and all nonorganic NCW assets shall utilize the SALUTE report. This enables uniformity throughout the chain of command and allows all units to update track information when amplifying information becomes available. The SALUTE report shall contain the following:

1. Size (number and size of craft being reported)

2. Activity (what is the craft is doing)

3. Location (using a grid reference or another agreed-upon system of position reference to include estimated course, speed, range bearing, and target angle of the craft)

4. Unit (name, if visible, nationality, type of craft, and number of people observed)

5. Time (when observed)

6. Equipment (type of equipment, sensors, and weapons observed).

MIUWU to IBU/PSU craft SALUTE reports (bearing and range to contact) can be given in various forms. The RSSC should be the reference point. The reference point also can be the specific boat, which requires the RSSC to have a positive track on each boat. A predetermined grid system (e.g., Cartesian, World Geodetic Survey 1984) or a predetermined geographic reference point (GEOPOINT) can also be utilized. However, grid systems are not the optimal method of reporting contacts to the boats. The preferred reporting reference is by direct bearing and range and/or GEOPOINT.

F.3 SAMPLE REPORTS

1. Sample contact report from IBU/PSU craft to MIUWU:

   "(TACON c/s), this is (boat c/s). I have one 40-foot fishing boat approaching the harbor. It is 3,000 yds north of West Point on course 185 at speed one-five kts. No name or flag visible. Boat is white with blue on pilothouse and hull. Three crewmen in sight. Time: 1542. No visible weapons, civilian type navigational radar. Large equipment on aft deck is covered by tarps."

2. Sample contact report from MIUWU to IBU/PSU craft:

"(Boat c/s), this is (TACON c/s). I have a contact bearing 045, possible high-speed contact of interest, range 6 miles point ALPHA, inbound, course 195, 18 kts, time 1345, recommend course of 060, best speed available."

F.4 MIUWU TO NCWRON CONTACT REPORTS

Only COIs need to be relayed to the NCWRON. Initial COI reports will be followed by amplified information as gained via IBU/PSU, lookout, coast watcher, MSP, or other assets.

1. Sample contact report from MIUWU to NCWRON:

    1. "(NCWRON#), this is (MIUWU#). I have a contact of interest, track #, bearing 045, range 6 miles point ALPHA, inbound, course 195, 18 kts, time 1345, dispatching IBU/PSU (c/s) to investigate."

    2. Sample amplification contact report from MIUWU to NCWRON:

        "(NCWRON#), this is (MIUWU#). Amplifying data, track #, visual identification information display (VID), no name or flag visible. Boat is white with blue on pilothouse and hull. Three crewmen in sight. Time: 1542. No visible weapons, civilian type navigational radar. Large equipment on aft deck is covered by tarps."

APPENDIX G

Intelligence Support to Naval Coastal Warfare

G.1 OVERVIEW

Intelligence support to the NCWC and subordinate commanders is centered on the availability of timely and accurate tactical intelligence support. This intelligence support provides timely warnings of any immediate threats. Intelligence support allows the supported commander to perform a threat analysis and define the order of battle based on operating environment, mission objectives, and force assets available. Additionally, this support enables planning and execution of operations at the component or unit level.

G.2 NAVAL COASTAL WARFARE INTELLIGENCE ORGANIZATION

While every NCW unit is essentially an intelligence-gathering unit, NCW has few intelligence personnel assigned. Intelligence billets are assigned to the NCWGRU and NCWRONs. Large-scale operations will necessitate augmenting the NCWGRU intelligence section from the Naval Reserve Intelligence Program (NRIP) in the form of an intelligence augmentation detachment (IAD). Additionally, intelligence personnel from other services can be used to satisfy priority AT/FP evolutions.

G.2.1 Naval Coastal Warfare Group Intelligence Roles

The NCWGRU intelligence department provides a cadre of skilled personnel who are trained in intelligence doctrine, operations, and crisis action procedures in support of exercises and real-world operations. At a minimum, the intelligence functional capabilities include, but are not limited to:

1. Watch standing
2. Collection management
3. Intelligence systems capability
4. RFI management
5. Intelligence dissemination.

G.2.2 Organization

A standard NCW intelligence department consists of an N-2 and two to five ISs (E-4 through O-4). The N-2 reports to the deployed mission commander or the NCWC. Additionally, an intelligence support cell is maintained at a suitable site to assist the IAD with theater-specific items and logistic support during sustained deployed operations.

G.3 CONCEPT OF INTELLIGENCE OPERATIONS

Intelligence operations in support of an NCW operation primarily involves evaluating tactical intelligence in order to provide threat analysis and I&W of immediate threats. The naval component N-2 of the theater to which NCW

forces are deployed is an excellent source for current intelligence as well as baseline information. Details of some of the specific intelligence areas that NCW forces can utilize are discussed in the following sections.

G.3.1 Intelligence Requirements Management

Intelligence requirements management is defined as managing any question or subject at any level of specificity where there is a need for collection of information and the production of an intelligence product. The requirement shall focus on the information needed for the mission, and not specify a particular collection or production action. These requirements can include:

1. Priority intelligence requirements (PIRs) — Those requirements for which a commander has a stated priority in order to assist in planning and decision making.

2. RFIs — Those ad hoc requirements for information or products in support of an ongoing operation or crisis.

3. Production requirements (PRs) — An RFI requiring assignment to a production center in order to receive validation.

4. Collection requirements (CRs) — Discipline-specific CRs are needed to expand upon information currently available.

G.3.2 Indications and Warnings

I&W comprise those intelligence activities intended to detect and report time-sensitive intelligence that forewarns the NCW mission commander of adversary actions or intentions. The I&W process analyzes and integrates operations and intelligence information to assess the probability of hostile actions and provides sufficient warning to counter or moderate their outcome.

G.3.3 Counterintelligence Support

CI support consists of national agency assets operating in the deployment area. National agency assets are contacted prior to deployment in order to obtain the CI picture for the AO. Commanders are briefed prior to and during the operations on the capabilities of human intelligence (HUMINT) and CI assets available. Commanders are also briefed on the current CI picture prior to deployment so that operational plans can be modified accordingly. Prior to deployment, unit members are briefed on CI and HUMINT issues. During operations/exercises, all members are watchful of the surroundings and the general environment. Any suspicious activity is reported to the intelligence watch officer. Unit members are also conscious of CI/HUMINT issues while on liberty. Any questioning which is overly personal or is related to the Navy/military whatsoever is reported to the intelligence watch officer; members are to note specifics of any of such questioning.

The intelligence watch documents and reports this information to CI/HUMINT representatives. The intelligence watch keeps records of normal local activity and reports abnormalities to the chain of command. The intelligence watch liaises and regularly meets with in-country agencies, such as NCIS, to obtain relevant information that can then be reported to local commanders. During these meetings, information flows in both directions. A successful operation is dependent on a good working relationship between CI/HUMINT assets and NCW. Due to the mission of NCW, CI/HUMINT assets are thoroughly briefed on NCW mission and requirements.

G.3.4 Medical Intelligence Support

Medical intelligence can be obtained from the Armed Forces Medical Intelligence Center (AFMIC) on SIPRNET at http://www.afmic.dic.smil.mil/intel/afmic/afmic.html.

G.3.5 Force Protection Information Support

Intelligence assets provide early warning of impending hostile action and reduce risk to NCW forces by detecting adversary actions (and potential actions) that may impact on friendly planning assumptions. Landward and seaward security teams are briefed at the earliest opportunity when enemy action is suspected. Effective FP limits the effectiveness of enemy deception and events. To fulfill premission briefing requirements when operating overseas, personnel must be briefed in accordance with the highest terrorism threat level established by DOD or the AOR commander for each individual country. Country terrorism threat levels are established for DOD by the Defense Intelligence Agency (DIA) per DOD Directive 2000.12, DOD Antiterrorism/Force Protection (AT/FP) program.

G.3.5.1 Naval Criminal Investigative Service

One of the most useful sources of information available to the NCWC in regard to FP is the NCIS. Well before deployment, the intelligence officer should establish contact with the NCIS's Multiple Alert Threat Center (MATC) and begin analyzing any potential threats in the AO. By establishing the relationship with NCIS early, the intelligence officer lays the groundwork for the relationship once in the AO. The earlier information is available on a potential adversary, the better the chances the security force has of neutralizing the threat. Once in the AO, continued contact with the NCIS LNO is paramount, particularly in areas with an elevated threat. The MTAC maintains a 24-hour watch center.

G.3.6 Geospatial-Intelligence Support

National Geospatial Intelligence Agency (NGIA) (formerly known as National Imagery and Mapping Agency (NIMA)) provides timely, relevant, and accurate geospatial intelligence in support of national security. Geospatial intelligence is information about any object that can be located on the earth. It conveys where the friendly forces, the enemy, and the noncombatants are, as well as the physical environment. NGIA provides access to tailorable imagery, imagery intelligence (IMINT): and geospatial information at the lowest possible classification. NGIA is the functional manager for the National System for Geospatial Intelligence (NSGI). NSGI integrates technology, policies, capabilities, and doctrine necessary to conduct geospatial intelligence. Figure G-1 is a list of locations where NGIA maintains personnel and their contact numbers including Navy liaison contact information.

G.4 INTELLIGENCE PREPARATION OF THE BATTLESPACE

Intelligence preparation of the battlespace (IPB) is the methodical and continuous analysis of the full spectrum of enemy capabilities and potential COAs. The collected information may facilitate the NCWC's mission planning and development of friendly COAs. Furthermore, this information shall be used to define the battlespace environment, describe the battlespace effects, evaluate the adversary, and determine the adversary's likely COA. In defining the battlespace environment, it is important to identify the limits and parameters of the COA and to determine any significant characteristics that could affect operations. These parameters include:

1. Terrain — LOCs, such as ferries, bridges, areas under construction, airfields, railroads, tunnels, types of roads (dirt, gravel, or paved), and other route information required for military operations are identified. Vegetation information, such as height, types, undergrowth, canopy closure, and tree spacing, should also be included. Obstacles are identified (natural or artificial) that may hinder military movement (mines, barricades, large holes, etc.).

2. Weather — Visibility, sea conditions, tidal information, sunrise/sunset times, outdoor temperature, precipitation, humidity, and moonrise/moonset times. The analysis must include effects of weather conditions on the hostile force's capabilities.

3. Port information — Size of port, accommodations (how many ships), location (shipping channel proximity), and capabilities of the port (e.g., fuel, oil, water, and cargo handling).

Location/Service	DSN	Commercial
Air Force	570	703-264-3003
Army	570	703-264-3001
Navy	570	703-264-3002
Marine Corps	570	703-264-3018
DIA	428	202-231-4831
PENTAGON	225	703-693-6425
USNORTHCOM	570	703-264-3043
USCENTCOM	287	301-227-1285
USEUCOM	570	301-227-6399
USJFCOM	570	703-264-3006
USPACOM	570	808-477-7293
USSOUTHCOM	570	703-264-3035
USSTRATCOM	693	314-263-4895
USTRANSCOM	693	314-263-4895
USSOCOM	287	301-227-1556
National, Civil, and Federal Law Enforcement Customers		703-264-3019
State Department		202-647-5130
Central Intelligence Agency		703-482-0977
National Security Agency		301-688-7916
NGIA PA		301-227-2057
NGA Office of International and Policy		301-227-7101
NGIA Customer Communications Center		301-227-1403
NGIA College		703-805-3268

Figure G-1. Contact Numbers

4. Geography — Outline of shorelines with annotated width, depth, and velocity of currents.

5. Medical — Location of medical care facilities, diseases prevalent in the area, poisonous natural elements (plants and animals), and sanitation/pollution issues.

6. Geopolitical — Historical information, governmental studies, terrorist/criminal activity, religions, cultural diversities, holidays observed, industry capabilities, agricultural capabilities, student groups, hostile organizations (including striking unions), and occurrences of civil disobedience.

Once the environment has been defined, it is important for the intelligence section to determine how those surroundings will affect adversarial and friendly COAs. This determination is made through careful analysis of all components of the battlespace environment. With an understanding of how the battlespace environment may affect COAs, the next step is to evaluate the adversary. Enemy centers of gravity and strongholds are identified. Likely objectives/priorities of the adversary are analyzed and enemy scenarios drafted in an attempt to determine the enemy COA. Organic FP is accomplished by researching the operational area prior to deployment to obtain information necessary to protect NCW forces. This information includes objective material such as:

1. Port studies

2. Overhead imagery

3. Charts/maps

4. Country studies: State Department, CIA.

G.5 INTELLIGENCE COLLECTION MANAGEMENT

The purpose of intelligence collection is to gather information to support the NCWC's needs (objectives and operational planning). Proper intelligence collection provides early warning of impending hostile actions and reduces risk to NCW forces and those platforms under their protection. Collection management is the formal process that guides and regulates collection systems by detailing CRs, tasking collection assets and resources, and disseminating collected information. It begins with the NCW mission and the commander's intent, and ends when intelligence is provided where it is needed to satisfy the commander's PIRs.

Collection management comprises two functions: requirements and operation. Collection requirements management (CRM) is all-source oriented. It compels collection assets and resources to collect, and it defines the requirements. Collection operations management (COM) focuses on specific assets and tells them how to collect the required intelligence.

G.5.1 Intelligence Sources

Intelligence collectors utilize several sources to meet the NCWC's objectives and requirements.

G.5.1.1 Human Intelligence

HUMINT embraces all forms of intelligence gathering by human beings, from direct reconnaissance and observation to the use of informants. HUMINT is used to analyze and assess espionage, terrorism, subversion, treason, and sabotage threats.

G.5.1.2 Imagery Intelligence

IMINT is utilized to analyze and assess hostile capabilities and activities, to include ground, air, sea, and undersea threats.

G.5.1.3 Signals Intelligence

Signals intelligence (SIGINT) is utilized to analyze and assess hostile capabilities and activities.

G.5.2 Intelligence Dissemination

The key element of intelligence collection is dissemination (get the right intelligence to the right place at the right time). Intelligence dissemination follows established procedures designed to push time-sensitive, threat-warning data to the NCWC, while allowing the NCWC to pull less time-sensitive intelligence required for the mission.

The NCWRON/NCWGRU intelligence officer (N-2) briefs the NCWC and others as necessary. Periodic briefings are tailored and presented to fulfill changing needs. Types of briefings that can be conducted by the IAD include:

1. Operational Intelligence (OPINTEL)
2. Platform/threat
3. Geopolitical
4. I&W
5. CI
6. AT/FP
7. Overseas predeployment.

G.5.3 Intelligence Oversight Restrictions

Intelligence oversight restrictions must be adhered to at all times. Naval and USCG personnel shall not collect (e.g., concealed monitoring, mail/physical searches, electronic/physical surveillance), retain, or disseminate information about U.S. persons unless done IAW the procedures contained in DOD Regulation 5240.1-R, and only if the information falls within one or more of the following categories:

1. Obtained with consent
2. Publicly available
3. Foreign intelligence
4. Potential sources
5. Physical security
6. Administrative purposes
7. Personnel security investigation
8. Communication security investigation
9. International narcotics

10. International terrorism

11. Overhead reconnaissance

12. Protection of sources/methods.

A U.S. person is defined as a U.S. citizen, a known permanent resident alien, an unincorporated association substantially composed of U.S. citizens or permanent resident aliens, or a corporation (if incorporated in the United States and not directed and controlled by a foreign government). Intelligence oversight limitations or restrictions are identified and explained to all participants prior to any NCW defense operations in the fifty states or any U.S. territory.

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APPENDIX H

Information Operations Support to Naval Coastal Warfare

H.1 PURPOSE AND SCOPE

IO are those actions taken to affect adversary information and information systems while defending one's own information and information systems. IO adds defense in depth to NCW operations. This appendix provides a brief description of the fundamental elements of IO and how IO can be used to support NCW missions.

H.2 TYPES OF INFORMATION OPERATIONS

IO permits NCW forces with tools and techniques to gain an advantageous posture of the information domain.

H.2.1 Operations Security

OPSEC is a process of identifying critical information and subsequently analyzing friendly actions attendant to military operations. OPSEC is the primary means of denying information to the adversary. A good OPSEC program will complicate adversary surveillance efforts and disrupt their targeting cycle. General examples of OPSEC actions include random antiterrorism (AT) measures, driving alternate routes to work, and removing distinctive markings from vehicles to identifying senior officers.

All Navy commands possessing critical information are required to have a designated OPSEC officer and OPSEC program. The Interagency OPSEC Support Staff can provide any required training and assistance in establishing an OPSEC program. The Joint COMSEC Monitoring Activity and the Navy Security Group have resources available to review telephone, radio, and computer communications for OPSEC vulnerabilities.

H.2.2 Computer Network Defense

Computer network defense (CND) is measures to protect and defend information, computers, and networks from disruption, denial, degradation, or destruction. Placing CND on the front line of NCW provides a layered defense against potential vulnerabilities and attacks.

All Navy commands with a computer network should have an information systems security manager to coordinate implementation of network security procedures. Direct support comes from the Navy Computer Incident Response Team (NAVCIRT), located Norfolk, VA.

Computer network vulnerability assessments (CNVAs) are performed to identify and eliminate vulnerabilities to hackers. Web risk assessments are performed to review official Navy websites for information that might be useful to adversaries.

H.2.3 Psychological Operations

PSYOP are planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals. The purpose of PSYOP is to induce or reinforce foreign attitudes and behavior favorable to the originator's objectives.

While not many Navy commands have an active PSYOP mission, all units must be aware of how their actions and statements shape the perceptions of others. The commander must set the tone for the message sent to the HN. For example, the value of some aggressive physical security measures must be weighed against the degree to which they may antagonize local civilians, raising hostility against the U.S. military presence.

Public affairs (PA) and civil affairs (CA) are the primary tools that may be utilized to shape the perceptions of the host nation and the supporting communities. The COCOM provides regional themes that encourage positive attitudes toward US forces and shape the battlespace to our needs. The U.S. Army's 4th Psychological Operations Group is the center of PSYOP expertise.

H.2.4 Military Deception

Military deception (MILDEC) is actions executed to deliberately mislead adversary decision makers as to friendly military capabilities, intentions, and operations, thereby causing the adversary to take specific actions (or inactions) that will contribute to the accomplishment of the friendly mission.

MILDEC can convey a misleading image of friendly activities and security measures. A deception story presented to the adversary may degrade their quality of surveillance and deny them information required for effective planning. Examples include deceptive lighting on installations to depict misleading activity patterns or highly visible security measures in operationally insignificant areas or periods. Displays of deceptively robust security measures may include mounting of equipment such as remote video cameras (which don't necessarily work or need to be connected to anything) or the increased presence of dogs and personnel (who perhaps aren't properly trained or equipped for their apparent mission).

H.2.5 Electronic Warfare

Electronic warfare (EW) is any military action involving the use of EM and directed energy to control the EM spectrum or to attack the enemy. Adversaries make use of the EM spectrum for communications, to remotely control weapons delivery vehicles, and to detonate weapons. With effective intelligence support, EW can detect such activity and deny the enemy use of the EM spectrum.

H.3 SPECTRUM MANAGEMENT

The physical behavior of the EM spectrum may be a determining factor in the outcome of operations. Planners must include METOC conditions during planning in order to mitigate its impact on the mission. Radar and sonobuoy ranges will be different on any given day due to METOC influences. Effective spectrum management enhances combat capability of communications, weapon systems, and other associated sensors and processors. Given the operating environments of most NCW missions, spectrum management can assist with the placement of sensor systems, determine optimum electronic equipment configuration, and mitigate the effects of electromagnetic interference (EMI) between electronic systems. Communication and radar frequency assignments must be requested from the AOR frequency manager. The Afloat Electromagnetic Spectrum Operations Program (AESOP) is the U.S. Navy program of record system for communication and radar frequency planning.

H.4 INFORMATION OPERATIONS PLANNING CONSIDERATIONS

Most naval force deployments currently include staff IO personnel who provide planning, training, and execution of IO tasks for operations. In order to improve IO awareness within the NCW organization, consideration is given to developing a cadre of personnel with IO-related skills. Figure H-1 provides general IO tasks and tools.

H.5 INFORMATION OPERATIONS PERSONNEL DUTIES AND RESPONSIBILITIES

Figure H-2 provides a recommended IO organization for NCW operations. This configuration closely matches that of the strike group (SG). The IO cell consists of an IO planner, an intelligence officer, METOC support, and various liaison representatives. To reduce manning, the intelligence officer may fill the duties of the IO planner. Additionally, METOC support can be provided by METs, if requested.

NCW Missions and Tasks	IO and IO-related tools
Assess friendly vulnerabilities against adversary capabilities	Vulnerability and threat assessments Battlespace awareness and shaping (BAS) OPSEC CNVA COMSEC monitoring
Conduct inshore surveillance operations	MILDEC OPSEC EW
Provide PSHD	MILDEC OPSEC EW
Mitigate consequences of terrorist attack	MILDEC OPSEC CND PSYOP EW

Figure H-1. IO Support to NCW

Position (Paygrade)		Minimum Qualifications
IO Planner (O-2/ W-2)	**Intelligence Officer (O-2)**	**Served on SG staff** Attended IW/IO Formal Courses
METOC (AG, E-6), Spectrum Manager (IT, E-6)	**METs**	**METOC Forecaster (NEC 7412)** Frequency Manager (NEC 2301)
Liaison Representatives: USCG, MIUWU, Port Operations, MSC, others as required		**None Specific**

Figure H-2. Recommended NCW IO Cell Configuration

The configuration provided in Figure H-2 supports the NCWC by providing an increased level of situational awareness about the dynamics of the battlespace. The following paragraph describes general duties and responsibilities for NCW IO personnel. IO personnel general duties:

1. Basic function:

   a. Serve as NCW command primary POC for NCWRONs and subordinate commands.

2. Duties and responsibilities:

   a. Develop and execute IO plans to support the mission.

   b. Formulate IO tactics and recommendations.

   c. Coordinate the development of risk mitigation techniques based on friendly vulnerability assessments and adversary threat assessment.

   d. When feasible, incorporate IO into all training events and exercises.

   e. Maintain close liaison with other IO planning cells operating within the area.

There are several IO courses offered at Fleet Information Warfare Center (FIWC) to assist in training personnel assigned to these positions.

APPENDIX I

Port Data Questionnaire

I.1 PURPOSE

This questionnaire provides the NCWC and staff with the planning data needed to plan and conduct PS operations.

I.2 QUESTIONNAIRE

Specific port data includes the following:

1. Types of port
2. Lengths and locations of breakwaters
3. Depth, length, and width in the fairway
4. Current speed and direction in the fairway
5. Size and depth of the turning basin
6. Location and description of navigational aids
7. Pilotage procedures required
8. Location and degree of silting
9. Frequency and effectiveness of dredging operations
10. Description of the port's dredger
11. Description of sandbars or reefs in the area
12. Composition of the harbor bottom
13. Description of approach to harbor
14. Type and mean range of the tide.

I.3 WEATHER AND HYDROGRAPHICS

Weather and hydrographic information includes the following:

1. Types of weather conditions encountered in the area
2. Time of year these conditions occur

3. Prevailing wind direction per calendar quarter
4. Percent of time for wind speed 1 to 6 kts, 7 to 16 kts, and over 17 kts per calendar quarter
5. Maximum, minimum, and average precipitation per month to the nearest 1/10 inch
6. Maximum, minimum, and average surface air temperature per month
7. Frequency, duration, and density of fog and dust
8. Effects of weather on the terrain
9. Effects of weather on ship movement
10. Effects of weather on logistic operations (offloading materials on vehicle or rail)
11. Seasonal climatic conditions that would inhibit port operations for prolonged periods (24 hours or more)
12. Minimum and maximum water temperature
13. Percentage of time surf is within 0 to 4 ft, 4 to 6 ft, 6 to 9 ft, and over 9 ft per calendar quarter
14. Percentage of time swells are within 0 to 4 ft, 4 to 6 ft, 6 to 9 ft, and over 9 ft per calendar quarter.

I.4 ANCHORAGES

Essential information on anchorages includes the following:

1. Location
2. Maximum and minimum depth
3. Speed and direction of the current
4. Radius
5. Bottom material and holding characteristic
6. Exposure condition
7. Offshore or near-shore obstacles; what they are and their distance/true bearing from the anchorage.

I.5 WHARVES

Essential information on wharves includes the following:

1. Construction (e.g., wooden, concrete)
2. Length and width
3. Present condition
4. Type and location of equipment on wharves that may be used to offload cargo
5. Number and types of vessels that wharves can accommodate

6. Safe working load of the quays/piers (capable of supporting 60-, 130-, 150-ton vehicles or equipment)
7. Water depth alongside and approaches
8. Services available (water, fuel, electricity)
9. Available storage
10. Specialized facilities available for the discharge of roll-on/roll-off ships (e.g., ramps)
11. Height above mean water level
12. Current use
13. Type of fender system
14. Railroad tracks (if any), including length and gauge
15. Special considerations for handling ammunition and hazardous cargo.

I.6 CRANES

Essential information on cranes includes the following:

1. Number and location
2. Characteristics for each:
   a. Lift capability
   b. Type of power
   c. Dimensions (maximum/minimum radii, outreach beyond wharf face and above/below wharf hoist)
   d. Speed (lifting, luffing, and revolutions)
   e. Height and width of terminal clearance
   f. Track length and gauge
   g. Make, model, and manufacturer
   h. Age and condition
   i. Emergency power availability
   j. Certification and characteristics for handling explosive and hazardous cargo.

I.7 MATERIALS HANDLING EQUIPMENT

Essential information on material handling equipment (MHE) includes the following:

1. Number, location, and type
2. Characteristics:

a. Type of power

b. Lift capability

c. Make, model, and condition

d. Age

e. Compatibility with military equipment, lifting/handling points

f. Certification and characteristics for handling explosive and hazardous cargo.

I.8 STEVEDORES

Essential information on stevedores includes:

1. Number and size of gangs
2. Efficiency
3. Working hours
4. Availability and condition of stevedore gear and local vendor to replace or purchase damaged gear
5. Arrangements for services
6. Availability of other local, national, or third-country labor
7. HNS.

I.9 HARBOR CRAFT

Essential information on harbor craft includes the following:

1. Number, type, and location of craft (e.g., tug, pusher, ferry, pipelaying, barges, fire, patrol, salvage, hazardous spill control) located in or near the port
2. Characteristics for each craft:

   a. Size and capacity

   b. Number of crew

   c. Berthing spaces

   d. Types of engines

   e. Number of engines and number of propellers

   f. Types of generators

   g. Number of generators

   h. Kilowatt (kw) rating for each generator

i. Types and number of air compressors

j. Cubic ft per minute of air compressors

k. Types of engine control (e.g., hydraulic, air)

l. Location of engine control (wheelhouse or engine room)

m. Normal working hours per day of crew

n. Engine order telegraph

o. Engine manufacturers (e.g., Morse, Detroit Cooper-Bessemer), types of hull (e.g., modified V or round)

p. Hull construction (e.g., wood, steel, cement, or fiberglass)

q. Number and type of rudders (e.g., steering or flanking)

r. Number of propellers

s. Types of radios and frequency range.

I.10 STORAGE FACILITIES

Essential information on storage facilities includes the following:

1. Number and location
2. Characteristics:

a. Product stored

b. Type of storage (e.g., open, covered, or refrigerated)

c. Capacity or dimensions

d. Floor material

e. Wall material

f. Roof material

g. State of repair

h. Special facilities

i. Security facilities

j. Map of storage facilities

k. HAZMAT facilities.

I.11 TERMINAL EQUIPMENT REPAIR FACILITIES

Essential information on terminal equipment repair facilities includes the following:

1. Location, size, and capabilities
2. Type of equipment
3. Number and ability of repairmen
4. Availability and system of procuring repair parts.

I.12 SHIP REPAIR FACILITIES

Essential information on ship repair facilities includes the following:

1. Number and type of dry docks
2. Quality of work and level of repairs
3. Capacity of dry dock(s)
4. Location, size, and use of other buildings
5. Method for obtaining potable and feed water
6. Method for obtaining fuel, lube, and diesel oil
7. Medical personnel
8. Electrical generating facilities in port or provisions for obtaining electricity from an external source.

I.13 LINES OF COMMUNICATIONS AVAILABILITY

Essential information on LOCs includes the following:

1. Primary and secondary roads:
   a. Type of primary roads (e.g., concrete, asphalt)
   b. Primary and secondary roads that allow north-south and east-west movement
   c. Capacity of intraterminal road networks
   d. Present condition
   e. Bridges constructed along these roads
   f. Width and weight allowance of the bridges
   g. Overpasses and tunnels located along these routes
   h. Width and height allowances of the overpasses and tunnels
   i. Major cities enter and exit routes

j. Names, addresses, and telephone numbers of highway authorities

k. Tolls or user fees for use of port area roads and bridges.

2. Railroads:

a. Rail capacity

b. Type of rail line

c. Type of rail network

d. Location of rail bridges

e. Weight allowance of rail bridges

f. Location and restriction of overpasses and tunnels that pass over rail lines

g. Gauges

h. Equipment available (e.g., steam or diesel locomotives, flatcars, boxcars)

i. Ownership of rail network (private or government)

j. Address and telephone number of rail network authorities.

3. Inland waterways:

a. Width of the waterway

b. Average depth and current

c. How close to the shore will water depth allow vessels

d. Capacity to conduct clearance operations

e. Points at which tugs will be needed to support ship movement

f. Types of channel markers

g. Points that are most suitable for mining of waterway

h. Locations at which waterways narrow into chokepoints

i. Other than chokepoints, locations where vessels are vulnerable to shore fire

j. Security that is available for vessels (underway, at anchor, or moored)

k. Type of hostile special operations units that can threaten vessels

l. Local shore security available to protect vessels once they are docked

m. Type and number of local watercraft available to move cargo

n. Maintenance capability that exists for these vessels

o. Docks along the waterway

p. Local regulations that govern inland waterway operations

q. Addresses and telephone numbers of the waterway authorities, if any.

I.14 THREAT

Essential information on threat includes the following:

1. Enemy threat and capability in the operational area
2. Description of local overt or covert organizations from which hostile action can be expected
3. Availability of local assets for rear-area security operations
4. In addition to port and/or LOTS operations, other primary targets in the area (e.g., military bases, key industrial activities, political and/or cultural center, SATCOM)
5. Physical security characteristics of port area (see also PS assessment checklist)
6. Criminal activity and local LE procedures.

I.15 COMMUNITY INFORMATION

Community information should include the following:

1. General:
   a. Name of town(s) within a 25-mile radius
   b. Grid coordinates and longitude and latitude of the town(s)
   c. Size and significance of the town(s)
   d. Primary means of livelihood
   e. Form of government that exists
   f. Description of the local police and/or militia
   g. Description of the local fire department and equipment
   h. Local laws or customs, including environmental sensitivities, that may impact operations in this area
   i. Availability of billeting.
2. Population:
   a. Size
   b. Racial makeup
   c. Religious makeup

d. Languages spoken

e. Political or activist parties that exist in the town

f. If population is considered friendly or hostile.

3. Labor. Names, addresses, and telephone numbers of contracting agents available with services that may be needed during operations (e.g., husbanding agents, potable or boiler water, ship repair, coastal vessels, lighterage, machinists, and skilled/unskilled labor).

4. Water:

a. Availability of potable and boiler feed water

b. Size, location, and condition of water purification or desalinization plants

c. Other sources of water

d. Quantity, quality, method, and rates of water delivery

e. Special size connections required

f. Water barges available

g. Water requiring special treatment before use.

5. HSS:

a. Locations, size, capabilities, and standards of local hospitals and other medical treatment facilities

b. Availability of physicians (specialized), nurses, hospital beds, MEDEVAC assets, medical, supplies, and potable water

c. Any local diseases that require special attention or preventive action

d. Overall health and sanitary standards of the town and surrounding area

e. Method of reimbursement for HSS

f. HSS requirements if HNS is not available.

6. Electricity:

a. Location, size (kw), and condition of the power station servicing the area

b. How power station is fueled

c. Location and size of transformer stations

d. Voltage and cycles of the electricity

e. Other significant sources of electricity (e.g., large generators) in the area.

7. POL:

a. Locations and size of wholesale fuel distributors in the area (including type of fuel)

b. Location and size of POL storage areas or tanks in the area (including type of fuel).

8. Communications:

a. Address of telephone or telex office

b. Description of domestic telephone service in the area (e.g., type, condition, number of lines, switching equipment, and use of landlines or microwave)

c. Description of required U.S. military and government communications services.

I.16 MARSHALING YARD PROVISIONS AND CONSIDERATIONS

1. A central control and inspection point with multiple lanes for cargo and containers entering or exiting the marshaling yard

2. Auxiliary internal checkpoints for containers and cargo entering the yard from a beach or rail spur, or by helicopter to a landing pad within the yard

3. A traffic circulation plan showing movement flows into, through, and out of the marshaling yard

4. Segregation of inbound containers and cargo by size and type and, within these groupings, further segregation

5. By priority, destination, and special handling (security, mail, hazardous cargo)

6. Segregation of retrograde cargo and containers by type and size, with empty and loaded containers further segregated

7. Security area for break-bulk or containerized sensitive and high-dollar-value cargo

8. Sheltered facilities for inventory and control, documentation, and movement control elements

9 Cleaning and/or decontamination of retrograde containers, equipment, supplies, and vehicles

10. Minor repair of damaged containers

11. Equipment parking

12. Unit maintenance of equipment

13. Messing and comfort facilities.

I.17 TERMINAL UNITS OPERATIONAL PLANNING DETERMINATIONS

1. Point of discharge (wharf or anchorage)

2. Piloting services (MSC coordinated)

3. Types of terminal units required

4. Tugboat requirements (MSC coordinated)

5. Equipment required for special or heavy lifts, and priorities of discharge
6. Arrangements for terminal clearance, including transportation
7. Requirements for temporary holding or further segregation of cargo
8. Security and safety requirements
9. Estimates of hatch or vessel completion times
10. Considerations of specific ship characteristics (e.g., shore cranes may be used to load flat-racks or sea-sheds on fast sealift ships).

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APPENDIX J

Waterside Security Checklist

J.1 INTRODUCTION

This checklist is a tool designed to assist NCW personnel in developing information about individual port facilities within their AO. It is not intended to address every issue or contingency, and may be modified for local use as necessary. When completed, the security checklist should be marked "For Official Use Only." Although the checklist addresses waterside security, the analytical techniques and security issues identified are equally applicable to terminals and facilities that are adjacent to water areas. As used in this checklist, "port" refers to waterside security areas. This checklist can be used to initiate PS improvements by HN authorities and, therefore, can be jointly completed with a representative from the HN military or civil authority.

INTRODUCTION				
Unit/activity being surveyed:				
Country:				
Is a security officer designated in writing?	Yes		No	
Security officer: Office address: Phone:				
Is the security officer included in all initial construction review processes?	Yes		No	
Notes:				

SECURITY PLANNING				
Does the port facility have a current port security plan?	Yes		No	
Date of plan:				
Does the PSP include:				
Preventive measures to reduce opportunities for introduction to bombs?	Yes		No	
Procedures for evaluating and handling bomb threats?	Yes		No	
Policy for evacuation and safety of personnel?	Yes		No	
Procedures to be used to search for bombs?	Yes		No	
Procedures in the event a bomb or suspected bomb is found on the port?	Yes		No	
Procedures for obtaining assistance and support of LEAs and EOD units?	Yes		No	
Procedures to be taken in the event of a bomb explosion or detonation?	Yes		No	
Does the port have a countersabotage program?	Yes		No	
Does the security officer ensure that physical security surveys are conducted at least annually?	Yes		No	
How often does the port request a threat assessment?				
Notes:				

SECURITY MEASURES				
Does the port have a loss-prevention plan?	Yes		No	
What is the date of the port facilities most recent risk and threat analysis?				
Have areas been designated in writing by the port operator as restricted areas as necessary?	Yes		No	
Are the basic security measures for restricted areas in effect?	Yes		No	
Are all restricted area points appropriately posted?	Yes		No	
Are security measures in effect to protect:				
Electrical power supplies and transmission facilities?	Yes		No	
Communication centers/equipment?	Yes		No	
Arms, ammunition and dangerous cargo?	Yes		No	
Are physical security surveys of the port conducted at least annually under the auspices of the security officer?	Yes		No	
What is the date of the most recent physical security inspection, audit, or review by an immediate supervisor in the port?				
Does the port have an effective after hours or weekend restricted area security check by the security force?	Yes		No	
Are results of security checks promptly reported to the port security officer?	Yes		No	
Does the port have a POV parking plan including:				
Restriction of POV parking in exclusive and limited areas?	Yes		No	
Fenced/enclave parking in controlled areas?	Yes		No	
Does the port have a traffic control program?	Yes		No	
Notes:				

THE SECURITY FORCE				
Is the present security force strength and composition commensurate with the degree of security protection required?	Yes		No	
Are all security posts, fixed and mobile, provided with security force orders?	Yes		No	
Are security force orders reviewed by the security officer for currency at least monthly?	Yes		No	
Are security force personnel inspected by a supervisor prior to being posted?	Yes		No	
Do supervisors inspect each post/patrol/activity at least twice per shift?	Yes		No	
Does port or local community maintain an organized and equipped crisis response force?	Yes		No	
Does the crisis response force receive adequate training?	Yes		No	
How many personnel are available within the port?				
Outside the port, how many additional security forces could be brought in:				
One-hour notice?				
Four-hour notice?				
Any pertinent comments?				
Has liaison been established with HN local, State, and Federal LEAs whereby early warning of threat situation will be provided?	Yes		No	
Do security force personnel record or report their presence at key points in the port by means of:				
Portable watch clocks?	Yes		No	
General watch clock stations?	Yes		No	
Telephones?	Yes		No	
Two-way radio communications equipment?	Yes		No	
Other?	Yes		No	
Are guard assignments, times, and patrol routes varied at frequent intervals to avoid establishing routines?	Yes		No	
Notes:				

PERSONNEL AND VEHICLE MOVEMENT CONTROL				
Is a pass or badge identification system used to identify all personnel within the confines of restricted areas in effect?	Yes		No	
Does the identification medium in use provide the desired degree of security?	Yes		No	
Are personnel who require infrequent access to a restricted area or have not been issued a permanent pass or badge for such, treated as visitors, and issued a visitors badge or pass?	Yes		No	
Do guards at control points compare badges to bearers, both upon entry and exit?	Yes		No	
If no, upon entry only?	Yes		No	
Upon exit only?	Yes		No	
Is supervision of the personnel identification and control system adequate at all levels?	Yes		No	
Are badges and serial numbers recorded and controlled by rigid accountability procedures?	Yes		No	
Are lost badges replaced with badges bearing different serial numbers?	Yes		No	
Have procedures been established that provide for issuance of temporary badges for individuals who have forgotten their permanent badges?	Yes		No	
Are badges of such design and appearance as to enable guards, and other personnel to recognize quickly and positively the authorizations and limitations applicable to the bearer?	Yes		No	
Are procedures in existence to ensure the return of identification badges upon termination of employment or assignment?	Yes		No	
Have effective visitor escort procedures been established when necessary?	Yes		No	
Are visitors properly escorted within restricted areas when necessary?	Yes		No	
Are permanent records of visits maintained?	Yes		No	
By whom?				
Are POVs and contractor vehicles which are allowed routine access to the installation registered with the security office?	Yes		No	
Are random administrative inspections made of automobiles?	Yes		No	
Are administrative inspection procedures issued by the port authority and are they concise and specific?	Yes		No	
Notes:				

BARRIERS AND OPENINGS				
Does the fenced portion of the port area barrier meet the minimum specifications for security fencing?	Yes		No	
Is it of chain link (cyclone) composition?	Yes		No	
Is it constructed of 9-gauge or heavier wire?	Yes		No	
Is the mesh opening no larger than 2 inches?	Yes		No	
Is selvage twisted and barbed at top and bottom?	Yes		No	
Is the bottom of the fence within 2 inches of solid ground?	Yes		No	
In areas where the fence exceeds 2 inches from solid ground, have compensatory measures been taken?	Yes		No	
Is the top guard strung with barbed wire (or barbed tape/razor edge) and angled outward from protected site and upward at a 45° angle?	Yes		No	
Is the fence at least 8 feet in height (including outrigger) in all required areas?	Yes		No	
Does the port facility provide for security force inspection of the security barrier, including clear zones, at least once per month?	Yes		No	
Are deficiencies noted and are remedial actions promptly effected?	Yes		No	
If masonry wall if used, does it meet minimum specifications for security fencing?	Yes		No	
If building walls, floors and roofs form a part of the barrier, do they provide security equivalent to that provided by the security barrier?	Yes		No	
Are all openings properly secured?	Yes		No	
If a building forms a part of the barrier, does it present a potential penetration hazard at the point of juncture with the perimeter security fence?	Yes		No	
If a body of water forms any part of the barrier, are additional security measures provided?	Yes		No	
Are openings such as culvert, tunnels, manholes for sewers and utility access, and sidewalk elevators which permit access to the port and restricted area properly secured?	Yes		No	
Are all portals in perimeter barriers guarded or secured?	Yes		No	
Do the gates and/or other entrances in perimeter barriers exceed the number required for safe and efficient operations?	Yes		No	
Are all perimeter barrier portals equipped with secure locking devices?	Yes		No	
Are they locked when not in use?	Yes		No	

Do all gates provide protection equivalent to that provided by the barrier of which they are part?	Yes		No	
Are prescribed clear zones maintained on both sides of the restricted area barriers?	Yes		No	
If clear zone requirements cannot be met, have compensatory security measures been implemented?	Yes		No	
Are any perimeters protected by intrusion detection systems (IDSs)?	Yes		No	
Notes:				

APPENDIX K

Patrol Orders

K.1 INTRODUCTION

Boat unit watch officers brief ongoing crews using the format in this appendix. This is a five-paragraph order using the SMEAC format, providing the boat crew with general information to execute expected and contingency operations during the watch. The boat unit watch officer works closely with the TACON authority to continuously update the patrol order with current information. Specifically, all boat crew personnel must be briefed on ROE and any changes prior to relieving the watch. Prior to relieving the offgoing crew, oncoming crewmembers conduct a brief (approximately five minutes) turnover to provide information on equipment status, contacts, and so forth. Offgoing crews will debrief with the watch officer upon their relief. This provides perspective on environmental conditions, traffic patterns, new contacts, equipment status, and other changing conditions. The offgoing crew may also debrief with the TACON authority and the NCWRON intelligence department if needed to convey developing intelligence information.

K.2 PATROL ORDER FORMAT

SITUATION

Waterway/OPAREA: _____

Navigation charts/maps in use: _____

Current weather forecast:

Clear/cloudy/rain/fog, etc.: _____

Wind direction and speed: _____

High/low temperatures: _____

Chance of precipitation: _____

Sunrise/sunset: _____

Tides and currents:

HIGH TIDE		LOW TIDE		CURRENTS		SLACK WATER	
Time	Height	Time	Height	Direction	Speed	Time	Time

Friendly and neutral forces:

Higher force — Whom do we support? _____

Adjacent forces — Who is around us? _____

Any units attached to or detached from our unit? _____

No-fire zones: _____

Enemy forces: _____

MISSION

Statement of WHO, WHAT, WHERE, WHEN, WHY and future missions:

_____
_____
_____
_____

EXECUTION

CONOPS: _____

_____

Type of operation being conducted (port security, MPF offload, etc.): _____

Type(s) of patrols (screen, barrier, surveillance): _____

Sector assignments: Boat 1 _____ Boat 2 _____ Boat 3 _____ Boat 4 _____

Use of Force Actions (Cross off actions not authorized. Self-defense is always authorized.)

ACTION	
Show a waterborne presence	
Radio hail, warn to remain clear	
Verbal hail, warn to remain clear	
Siren	
Maneuver to position between COI and HVA	
Aggressive maneuvers between COI and HVA to encourage COI to change course	
Herding contact to cause course change in desired direction	
Use parachute flares	
Shine spotlights on COI pilothouse	
Visit, board, and search	
Bumping COI to cause course change in desired direction	

ACTION		
Ramming COI to damage or destroy		
Warning that the COI will be fired upon		
Disabling fire, directed at engines		
Destructive fire		
THREATCON	EMCON	MOPP level

Fire support plan (from other boats, shore batteries, mortars, artillery): _____

_____

Tasks and responsibilities: _____

Actions prior to departure: _____

Special operations during the watch (HVA escort, sonobuoy deployment, etc.): _____

_____

Intelligence CRs: _____

_____

Departure and reentry points, when boats leave and enter sector: _____

_____

ADMINISTRATION AND LOGISTICS

Beans: (food and water required onboard to start patrol): _____

Bullets: .50 cal _____ 7.62 mm _____5.56 mm _____ 12 ga. _____ 9 mm _____ 40 mm _____

Illumination _____ Smoke _____ M3A2 _____

Band-aids (location for receiving wounded): _____

Bad guys (location for receiving prisoners): _____

Fuel state: Boat 1_____ Boat 2 _____ Boat 3 _____ Boat 4 _____ Boat 5 _____ Boat 6 _____

C2

Call signs: Boat 1_____ Boat 2 _____ Boat 3 _____ Boat 4 _____ Boat 5 _____ Boat 6 _____

Challenge and reply _____

Frequencies: Primary _____ (Secure/Plain) Secondary _____ (Secure/Plain)

Admin. _____

Other frequencies (SAR, MEDEVAC, fire support, HN, etc.): _____

_____

Required reports:

Time for Ops — Normal reports _____

Position reports_____

Contact reporting — Use SALUTE format

TACON authority and location _____

MISCELLANEOUS INFORMATION

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX L

Naval Coastal Warfare Boat Characteristics

L.1 OVERVIEW

This appendix provides tables on the small boats employed by NCW forces.

	PSU-TPSB	IBU Gen I	IBU Gen II
Length/beam	25 ft/8 ft	27 ft/8 ft	32 ft/10 ft
Hull type	Fiberglass with gelcoat, modified "V" with reverse chines	Aluminum deep V	Aluminum deep V
Manufacturer	Boston Whaler	Commencement International	Willard Metalcraft
Cockpit	Open with removable canopy	Enclosed	Enclosed
Smallest airlift capable	Navy-configured C-130	C-130	C-130
Fuel	MOGAS (87 octane)	#2 Diesel (DFM)	#2 Diesel (DFM)
Propulsion	175 hp outboard (2)	200 hp outdrive (2)	355 hp jet drive (2)
Speed, maximum	40+ kts	36 kts	40 + kts
Standard armament	M2HB .50 cal (1), M240B 7.62 mm (2)	M2HB .50 cal (1), M240N 7.62 mm (1)	M2HB .50 cal (2), M240N 7.62 mm (1)
Optional weapons	Mk 3A2 concussion grenade	Mk 19 40 mm GMG, Mk 3A2 concussion grenade	Mk 19 40 mm GMG, Mk 3A2 concussion grenade
Individual weapons	M16A3, M870, M9, M203	M16A3, M870, M9	M16A3, M870, M9
Standard ammunition loadout	400 rounds .50 cal, 1,200 rounds 7.62 mm	400 rounds .50 cal, 600 rounds 7.62 mm	400 rounds .50 cal, 1,200 rounds 7.62 mm
Navigation	GPS	GPS	GPS
Radar	Furuno 1933C	Raytheon R4DX	Furuno NAVET
Night vision	Yes	Yes DVE Thermal	Yes DVE Thermal
Communications	Marine Band PRC-117F, Motorola Astro W7	Marine Band PRC-117F, secure VHF-FM	Marine Band PRC-117F, secure VHF-FM, PRC-150 secure HF
Interior communications	No	Yes	Yes
Normal refueling cycle (to maintain 50% + fuel)	12 hrs	24 hrs	24 hrs
Crew	Coxswain, Engineer, 2 Gunners	Coxswain, Engineer, 2 Gunners	Coxswain, Engineer, 3 Gunners
Optimum Crew Endurance	4 hrs	4 hrs	4 hrs
Maximum Crew Endurance	8 hrs	8 hrs	8 hrs
Maximum sea conditions for full performance	4 ft wave height 30 kt winds	4 ft wave height	4 ft wave height
Launch capabilities	Ramp, Crane (with lift points or slings), Beach	Ramp, Crane (with slings only)	Ramp, Crane (with lift points)
Beaching capability	Yes	No	Yes
Tow capability (limited)	Yes	Yes	Yes

	MSD	IBU Gen III	MSST RB-S
Length/beam	25 ft/8 ft	34 ft/12 ft	25 ft/8 ft
Hull type	Fiberglass/Aluminum cathedral	Aluminum V	Aluminum V
Manufacturer	SAFE Boat	Sea Ark	SAFE Boats International
Cockpit	Open T-Top	Enclosed Cabin (AC/Heat)	Enclosed Cabin (heat)
Smallest airlift capable	C-130	C-5	C-130
Fuel	MOGAS (87 octane)	#2 Diesel, DFM	MOGAS (87 octane)
Propulsion	225 hp outboard (2)	370 hp outdrive (2)	225 hp outboard (2)
Speed, maximum	35+ kts	40+ kts	40+ kts
Standard armament	M2HB .50 cal (1), M240N 7.62 mm (1), MK19 Mod 3 40 mm (1)	M2HB .50 cal (2), M240N 7.62 mm (1), Mk 19 Mod 3 40 mm (1)	M240N 7.62 mm (2)
Optional weapons	MK3A2 concussion grenade	MK3A2 concussion grenade	Running Gear Entanglement System (prototyping)
Individual weapons	M16A3, M870, M9,	M16A3, M870, M9, M203	M16A3/M4, M9, M500 (with nonlethal rounds)
Ammunition load out	400 rounds .50 cal, 1200 rounds 7.62 mm, 96 rounds 40 mm	400 rounds .50 cal, 1200 rounds 7.62, 96 rounds 40 mm	400 rounds 7.62
Navigation	GPS	GPS	GPS
Radar	Raytheon R4DX	Raytheon SL74	Furuno 1933C
Night vision	Yes	Yes DVE System	Yes
Communications	PRC-117F secure VHF-FM	Marine Band PRC-117F secure VHF-FM, PRC-150 Secure HF	VHF/FM marine radio (encrypted), AN/PRC 117V2 tri-band
Interior communications	No	Yes	No
Normal refueling cycle (to maintain 50%+ fuel)	12 hrs	24 hrs	8 hrs
Crew	Coxswain, Engineer, 2 Gunners	Coxswain, Engineer, 3 Gunners	Coxswain, Engineer, Gunner
Optimum Crew Endurance	4 hrs	4-6 hrs	4 hrs
Maximum Crew Endurance	8 hrs	12 hrs	8 hrs
Maximum sea conditions for effective performance	4 ft wave height 30 kt winds	6 ft wave height 35 kt winds	4 ft wave height
Launch capabilities	Ramp, Crane (with lift points), Beach	Ramp, Crane (with lift points)	Ramp, Crane (with lift points)
Beaching capability	Yes	Yes	No
Tow capability (limited)	Yes	Yes	Yes

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APPENDIX M

Enemy Weapons Threat Matrix

Weapon	Range	Guidance	Remarks
Antiaircraft Weapons			
ZSU-23-4	2,500m 3,000m	Optical track Radar track	Cyclic rate of fire 4,000 rounds per minute
SA-6	24 km	Radar	Tracked vehicle
SA-7	3.5 km	IR heat seeker	Man portable
SA-8	10 km	Radar	Wheeled vehicle
SA-9	8 km	IR heat seeker	BRDM vehicle
SA-14	4.5 km	IR heat seeker	Man portable
SA-16	5.2 km	IR heat seeker	Man portable
S-60 57mm Antiair	6 km	Radar tracked towed	4.2 km optical track
Small Arms			
AK-47, 7.62mm	400m		Asia, Middle East, China, Finland, North Korea
AK-74, 7.62mm	400m		
RPK-74, Light MG, 5.45mm	800m		
FN, 7.62mm FAL Rifle	650m		
65, 7.62mm H&K Rifle	800m		
RPD, 7.62mm light MG	800m		China, Vietnam, North Korea, Egypt, Pakistan
RPK-74, 5.45mm	800m		
SVD, 7.62mm Sniper Rifle	900m		

Weapon	Range	Guidance	Remarks
Crew-Served Weapons			
AGS-17, 30mm Auto Grenade Launcher	1,730m		
SG43/SGM Goryunov, 7.62mm Medium MG	1,000m		Middle East, Africa, Asia
KYPT, 14.5mm, HMG	2,000m		
NSV, 12.7mm HMG	2,000m		
KPV, 14.5mm MG	2,000m	Mounted on BTR-60/ 70/80, BRDM-2	
M37, 82mm Mortar	3,000m		
M43, 120mm Mortar	5,700m		
Rocket-Propelled Grenade (RPG)			
RPG-7, Rocket	300-500m		
RPG-16, Rocket	500-800m		
RPG-18, Rocket	200m		
RPG-22, Rocket	250m		
Antitank-Guided Missiles (ATGM)			
Malyutka (AT-3)	3,000m		
Fagot (AT-4)	2,500m		
Konkurs (AT-5)	4,000m		
Shturm (AT-6)	5,000m		
Metis (AT-7)	1,000m		
Kobra (AT-8)	4,000m		
Ataka (AT-9)	6,000m		
Basnya (AT-10)	4,000m		
Svir (AT-11)	5,000m		
Metis (AT-13)	1,500m		

APPENDIX N

Airfield Survey

N.1 OVERVIEW

Many NCW missions require conducting an OCONUS airfield survey. Photographs, sketches, local maps, and points of contact pertinent to the airfield can be combined to produce a thorough survey.

N.2 AIRFIELD SURVEY FORM

NCW forces should use the sample airfield survey form provided in this appendix as a guide.

Airfield Survey

1. Airfield Name/Location: _____ Date: _____
2. Fencing/Walls:
   a. Is the airfield perimeter completely fenced or walled (type, height, condition, gaps, etc.)?
   b. Is the flight line/ramp fenced (type, height, condition, gaps, holes, etc.)?
   c. Are there clear zones on each side of the fence/wall?
   d. Is the airfield perimeter or flight-line area posted "No Trespassing" or "No Admittance"?
   e. Other physical barriers.
   f. List different types, locations, and numbers of barriers used on the perimeter, and on/near the flight line/ramp.
   g. Are the airfield or aircraft parking areas under CCTV?
3. Security Force:
   a. How many guards are typically on duty during the day and night?
   b. Are these guards host military units? Police or security police? Contract personnel?
   c. To what extent, and for how long, can this force be augmented by in-place/nearby personnel?
   d. What are shift duration and shift change procedures/times?
   e. What local customs might result in decreased security (e.g., national holidays, traditional daily rest periods, etc.)?
   f. Are personnel well trained and professional? (Does this vary by position; are the supervisory personnel better trained or more motivated?)
   g. What factors make individual members or groups susceptible to blackmail/bribery (e.g., low pay, irregular pay, mistreatment by senior leadership, etc.)?
   h. What is the predominant language/dialect spoken by security forces (also indicate what percentage speak English, if applicable)?
   i. To what degree are they willing to work with U.S./Allied personnel?
   j. Are security forces willing/able to provide increased security for U.S./allied missions? If so, how are such arrangements made? Through the Defense Attaché Office (DAO)?
   k. Is the perimeter and/or flight line controlled by armed guards?

l. Frequency and regularity of patrols. (Are the patrols conducted on a predictable schedule or are they conducted randomly by the airport security force? If not on a regular schedule, is the variance purposeful [i.e., a security measure])?

m. Is patrol made on foot, using animals, or vehicles?

n. How many people are on each patrol?

o. Do patrols use MWDs?

4. Security Equipment:

a. What types of weapons are carried by guards?

b. What additional weapons are available (what weapons can be used, if needed; what weapons are used on vehicles, at entry points, guard towers, etc.)?

c. What forms of communications gear do the security personnel use?

d. Are there watch towers/fixed guard positions?

e. What are their number, location, and description (ground level guard shack, elevated tower, fixed-fighting positions/bunkers, etc.)?

f. What are the number of guards at each location?

5. Quick Reaction/Counterterrorist Units:

a. Is it a professional organization?

b. Is it on or near the airport?

c. What is its reaction time?

d. How large a force is it?

e. To what degree is responsibility delegated in crisis situations?

f. How is the force trained and equipped?

g. Does it have higher morale than the regular guard force?

h. Has it successfully conducted operations in the past?

6. ECPs:

a. Is entry controlled to the installation and flight line/ramp?

b. List the number, location, and description of ECPs at the perimeter and flight line/ramp areas.

c. Are gates locked if unmanned?

d. List the number of guards at each entry point (military/civilian, airport police, day/night).

e. Are x-ray machines and/or metal detectors used at any of the entry points?

f. If entry is controlled, what form of personal identification is required for individuals and vehicles?

g. Are private vehicles allowed? If so, what method of registration is required?

h. Are all persons in a vehicle required to show identification?

i. What are visitor control procedures (i.e., procedures for visitor approval, identification of same)?

j. What are visitor escort procedures?

k. To what degree are vehicles, personnel, and their possessions searched?

l. Do any of the above procedures vary at night (i.e., all personnel must show identification at night when entering the installation, etc.)?

7. Lighting:

a. Is the entire boundary, flight line, and parking ramp lighted at night?

b. Are additional fixed spotlights located at watch towers/entry points?

c. Are mobile mounted/towable spotlights available?

8. Parking:

a. Are USG aircraft parked in special locations? If so, are additional guards posted?

b. Is the area clearly marked as a restricted area?

c. Are U.S. personnel authorized to have weapons on the flight line/ramp?

d. Are weapons storage facilities available to transient crews?

9. Billeting When Aircraft Must Remain Overnight at Foreign Airfields:

a. Does the AMEMB provide billeting in its compound? If billeting is unavailable at the compound, does AMEMB/DAO maintain a list of hotels that meet minimum security requirements?

b. If the AMEMB maintains a standing list of recommended hotels; request the following information on each, if available:

(1) Basic description (design, height, towers, interior/exterior entrances, number of rooms)

(2) General layout (parking areas, fencing, lighting, proximity to highways/major roads)

(3) Number of elevators/stairways (internal/external), building entrances/exits, vehicle entrances/exits.

c. Are U.S. personnel billeted together or are they separated?

d. How is the crew transported to and from the hotel?

e. Are metal detectors/x-ray machines used at hotel entrances?

f. Are security forces available to escort crews transiting to/from airport?

10. Off-Installation Route Security When Aircraft Must Remain Overnight at Foreign Airfields:

    a. Distance from airport to hotel?

    b. Number of different routes from airport to hotel?

    c. Route description?

    d. Chokepoints on route (to include excessive traffic lights, congestion)?

    e. Number of lanes each way?

    f. One-way streets?

    g. Number and location of safe houses (i.e., police stations) along route?

    h. Does HN regularly patrol these routes?

    i. Any bridges, overpasses or tunnels along the route?

11. Personnel Threat:

    a. Are dissidents known to operate in the area of the airport?

    b. Identify these groups by name with leaders, if known.

    c. Are dissidents known to possess standoff weapons (SAMS, RPGS, mortars, etc. [specific type and any known modification])?

    d. Are these groups known to possess communications monitoring equipment (identify type and capability if known)?

    e. Are these groups known to have anti-U.S. sentiments?

    f. What past incidents have occurred that targeted U.S. personnel, equipment, or facilities?

    g. Do hostile elements have any specific times/dates when they are historically active?

    h. Do they have the support of the local populace?

12. Physical Location:

    a. What natural/man-made obstacles are in the vicinity of the airport (e.g., power lines, tall buildings, etc.)?

    b. Identify areas surrounding flight-line parking that could be used by hostile elements to covertly surveil airport operations and to launch attacks.

    c. How suitable is the surrounding terrain and vegetation for a standoff attack? Does this vary seasonally?

13. Include maps or a sketch locating security information (aircraft parking areas, fencing, lighting, ECPs, etc.). Digital photos of all items are requested, if capability exists.

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APPENDIX O

Entry Control Point Procedures

O.1 OVERVIEW

The two types of ECPs are vehicle and personnel. Each type of ECP incorporates a funneling effect and is covered by both fire and observation. They are responsible for identification checks/verification, baggage and personnel searches, vehicle searches, and control of all access to and from the security perimeter.

The system is three-tiered at a minimum. The first tier, warning, consists of signs that indicate who may enter and posts the rates of speed for vehicles approaching the checkpoint. The second tier, the trigger position, is where searches are conducted and identification is checked. The third tier, observation and fire, is where weapons capable of engaging incoming vehicles and personnel are located. Special orders for each post are established. The third tier, however, has the well-defined mission to immediately neutralize any vehicle or person passing the checkpoint without proper authorization.

O.2 ENTRY CONTROL POINT PERSONNEL

An ECP inspection team should consist of no less than two personnel: a search man and cover man. Additional personnel may be necessary depending on the amount of vehicle and personnel traffic through the ECP. Due to the direct contact with personnel in the performance of the ECP duties, they must remain firm, courteous, professional, and alert throughout their tour of duty.

O.2.1 Search Man

The search man is responsible for conducting searches of personnel, equipment, and vehicles in the ECP. He allows no one to pass without proper identification and authorized access to the compound. He employs mirrors, metal detectors, and MWDs in the performance of his duties.

O.2.2 Cover Man

The cover man covers the search man in the performance of his duties and allows no one to get between himself and the search man. He provides security for the search man.

O.3 INSPECTION OF PERSONNEL AND BAGGAGE PROCEDURES

The person being searched is placed in a designated search area. The individual starts facing the searcher and then turns around with legs apart and arms straight out to the side with palms up. The search man works from behind, initially asking the individuals if they have any weapons or explosives in their possession. The cover man observes from an advantageous position with a clear passage to the individual being searched. The search man then employs the metal detector over the individual's body, being careful to check all positive responses. The search man, depending on the threat, conducts a more thorough search of the individual if needed.

O.3.1 Personnel Search

There are two types of personnel searches that may be conducted based on the current threat.

O.3.1.1 Hasty Body Search

The hasty body search is used in low-threat areas or as a preliminary search to detect weapons and explosives. Search from head to toe in stroking motion with both hands, checking under hats, armpits, inside legs, hands, any medical bandages, bags or cases, sticks, umbrellas, or crutches. Alternate methods include the pat and crush technique.

O.3.1.2 Detailed Body Search

The detailed body search follows the same procedures for the hasty search. This type of search is only done under extreme conditions and under specific guidance from the unit commander. When possible, use a special room. Have individuals remove footwear, turn out pockets, and remove clothing and jewelry. Inspect body from head to toe, paying special attention to all orifices. Examine clothing for hidden pockets, linings, and buttons. Conduct detailed baggage search. Women must search women and men search men. If need be, detain individual until proper search arrangements can be made.

O.3.2 Baggage Searches

Designate an area for baggage searches and have the individual open the baggage away from the searcher. The individual will take items out of the baggage and place them on the search table at the search man's direction. Once all items have been checked, the search man directs the individual to put the items back into the baggage.

O.4 EXPLOSIVE DETECTOR DOG VEHICLE SEARCHES

Specific explosive detector dog **(**EDD) vehicle search procedures vary according to local policy, individual MWD handler preference, and the abilities of individual canines. The typical procedures follow five general steps:

1. The driver exits the vehicle and opens all doors, the hood, trunk lid, any other compartments, and any packages and is placed in a holding area where he or she cannot witness the vehicle search. (The driver should also be physically searched.)

2. The EDD team (the handler and the dog) proceeds directly to the downwind side of the vehicle.

3. The EDD team starts the search at a specific point and searches in a counterclockwise manner, with the handler visually guiding the EDD to search for scents along the fenders, wheel wells, hubcaps, spare tire, and bumpers.

4. The dog is directed to search all opened compartments, vehicle seats, and floorboard.

5. The dog is directed to search any packages and parcels.

O.5 SPECIAL-CASE VEHICLES

Certain special types of vehicles require specific search techniques and procedures. Water/fuel tankers, cement-mixer trucks, and hot-mix asphalt trucks represent potential bomb platforms that may not be effectively screened using traditional or physical inspection methods previously mentioned. The current approaches used to address these special-case vehicles are:

1. Control access by cross-loading cargo to known "clean" vehicles within the security perimeter.

2. Establish transfer stations — pumping the cargo from the "dirty" vehicle outside the perimeter to bladders or "clean" vehicles inside the perimeter.

3. Physically search the driver.

4. Search the vehicle before cargo is reloaded and then escort the delivery vehicle while in the security perimeter.

O.6 VEHICLE SEARCH PROCEDURES

The driver of the vehicle should open all compartments, doors, hood, and trunk. During the vehicle search, if anything suspicious is found the team should follow established procedures (the search area will be evacuated and EOD will be notified). Remember that a vehicle can conceal a "big bomb," a weapon, an improvised explosive device (IED), or a cache of explosives. A vehicle can be considered suspicious if the driver refuses to open any compartment. The following checklist provides detailed search techniques.

Vehicle Search Checklist

Item
1. Make eye contact.
2. Signal vehicle to halt.
3. Greet driver and state that vehicle inspections are being conducted (ensure window is down and driver is able to hear directions).
4. Direct the vehicle to place where inspection is to be conducted (if different from stop point).
5. Ask for ID for all occupants and inspect them (retain ID until inspection is complete).
6. Determine reason for visit. Check documentation against access list or other document provided to the watch.
7. Direct driver to turn off the engine, remove keys, unlock all doors, release the hood lock and trunk lock (if equipped) and open all interior compartments.
8. Direct any passengers to an area away from the vehicle.
9. Have the driver open all doors, hood, trunk, and gas cap.
10. Have driver remove all bags and packages.
11. Ask the driver if there is anything in the vehicle they don't want the inspector to find.
12. Direct driver to area away from vehicle.
13. One team member performs inspection while second watches occupant(s).
INSPECTION
Item
1. Note time the inspection started.
2. Walk completely around vehicle and make visual inspection. Look for tinted windows, unusual shapes or packages inside, and indications that vehicle might be weighed down in rear or on one side.
3. Inspect consoles, door cutouts, or compartments and armrests. (Driver's side front)
4. Inspect under, around, and between seats. (Driver's side front)
5. Inspect headrests, headliner, and visors. (Driver's side front)
6. Check dashboard. Look (do not feel) under dashboard. Look for anything odd (shavings, wires, etc.). (Driver's side front)
7. Check under floormats and seat covers. (Driver's side front)
8. Close driver's door, checking action of door(s). (Unusual weight)
9. Tap the driver's side front tire (listen for reverb sound). Visually inspect wheel well.
10. Start detailed inspection at front of vehicle. (Grill/behind front bumper/headlights)
11. Check engine compartment. Look for wires, loose objects, unusual containers/items taped or wired in place.
12. Close hood, checking action of hood (weight) and check for foreign objects on inside of hood.
13. Tap the passenger's side front tire (listen for reverb sound) and visually inspect wheel well.
14. Inspect consoles, door cutouts, or compartments and armrests. (Passenger's side front)
15. Inspect under, around, and between seats. (Passenger's side front)

16. Inspect headrests, headliner, and visors. (Passenger's side front)
17. Check dashboard. Look (do not feel) under dashboard. Look for anything odd (shavings, wires, etc.). (Passenger's side front)
18. Check under floormats and seat covers. (Passenger's side front)
19. Inspect glove box.
20. Close passenger's door, checking action of door(s). (Unusual weight)
21. Check rear passenger's side under seat.
22. Check rear passenger's seat.
23. Check rear passenger back window area.
24. Close back passenger's door, checking action of door(s). (Unusual weight)
25. Tap the passenger's side rear tire. Listen for reverb sound. Visually inspect wheel well.
26. Check main trunk area, around wheels, spare tire compartment, and inspect items found in the trunk.
27. Look in exhaust pipe. (WARNING: don't touch the exhaust pipe.)
28. Close trunk, checking action of trunk lid and for objects on inside of lid.
29. Tap the driver's side rear tire. Listen for reverb sound. Visually inspect wheel well.
30. Check rear passenger's side under driver's seat.
31. Check rear passenger seat.
32. Check rear passenger rear window area.
33. Close rear passenger's door, checking action of door(s). (Unusual weight)
34. Inspect gas cap (if it is on that side). May require driver to unlock.
35. Inspect underside of vehicle with inspection mirror. Start under driver's door and work around front of vehicle, down passenger's side, rear of vehicle, driver's side back to driver's door.
36. If applicable, crawl under vehicle to inspect area. (WARNING: do not touch vehicle.)
37. Use bag inspection procedures if applicable.
38. Note time when inspection is completed.
PREARRANGED CODE
Item
1. Select a prearranged code to alert the other team member if you find a weapon or IED without letting the suspect know.
IMMEDIATE ACTION IF SOMETHING FOUND
Item
1. Alert team member.
2. Notify security. Do not use cell phone/radio if item found is an IED.
3. Ensure occupants of vehicle remain under control.
4. Be prepared to initiate procedures to clear the area or use appropriate force as needed.

5. Tell security when search started and ended.
6. Provide a description of what was found during the vehicle search.
ACTIONS IF NOTHING FOUND
1. Return ID cards to vehicle occupants.
2. Thank driver for patience.
3. Direct driver to designated parking area or on to pier (if on access list).
COVER MAN
1. Establish reactionary gap.
2. Establish triangulation position in relation to the vehicle being inspected.
3. Monitor person(s) eye/body movement.
4. Maintain positive control.
5. If necessary, use appropriate level of force to maintain control.

APPENDIX P

Facility Antiterrorism Checklist

MEASURE	REMARKS
Establish early warning system	
Erect traffic signs—direct traffic/entrances	
Establish access control—channelize personnel/vehicles	
Establish pass/badge system	
Ensure vehicle access control measures	
(1) Restrict to a minimum	
(2) Protect from reverse entry/ramming	
(3) Lock/block unused entrances	
(4) Protect guard positions	
(5) Establish contraband area	
(6) Establish search area	
(7) Install lighting	
(8) Provide for vehicle egress	
Control/monitor parking	
Construct fences, walls—standoff/clear zones/protection	
Establish perimeter protection/marking	
Assess building structure/composition concerns	
Conduct search/sweep of buildings—area	
Construct temporary barriers	
Ensure layered barrier system	
Construct vehicle/personnel barriers	
(1) Location	
(2) Safety	
(3) Reliability	
(4) Maintainability	
Consider physical and psychological boundaries	
Implement increasing security controls	
(1) Perimeter/property boundaries	
(2) Exterior security zone	
(3) Interior security zone	
(4) High security/exclusion areas	
Ensure no unobserved access to facility	
Employ technology/sensors	
Conduct random patrolling	
Establish observation/countersurveillance	
Man security positions	
Provide dedicated office/floor/building	
Designate/man response force	
Ensure communications	

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APPENDIX Q

Waterborne Vessel Inspection Checklist

Q.1 OVERVIEW

As indicated in Chapter 6, NCW forces do not as a rule conduct VBSS operations; however, they do have a requirement to conduct vessel inspections at a waterside ECP. These inspections normally consist of NCW forces embarking suspect vessels transiting near or engaged in providing services to protected HVAs to ensure these vessels pose no threat. The checklist in this appendix will aid NCW forces in planning and executing a vessel inspection.

PREBOARDING PHASE:			
ITEM	SAT	UNSAT	N/A
1. Prepare equipment			
2. Review current intelligence			
3. Brief the situation to the team to include ROE/RUF			
4. Plan your operation			
5. Brief the plan of action			
Weapons and communications gear issue			
THREAT ASSESSMENT PHASE:			
ITEM	SAT	UNSAT	N/A
1. Identify vessel to be inspected. Crew size will determine number of inspection team members.			
2. Determine reason for visit. Check documentation against access list or other document provided to the watch by husbanding agent.			
3. Make initial visual observations of vessel, including type and condition of vessel and gear.			
4. Note personnel aboard and their reaction as they approach for inspection.			
5. Signal vessel to come to all stop by way of hand signal, marine radio, or by force as required.			

6. Direct vessel to appropriate berth/anchorage for inspection (ensure master repeats back instructions to berthing/anchorage).			
7. Maintain secure perimeter during approach and berthing/anchoring of vessel.			
8. Hail and greet master of craft. Inform him/her of intentions to board and inspect. Ensure all crewmembers are brought to a visible area on the vessel. Identify number of crew and cargo onboard.			
9. Once vessel is berthed/anchored, inform master to secure engines, remove key or associated starting device, identify engine-starting system, uncover all topside gear, and open all interior compartments.			
10. Inform vessel master to stand by for inspection team.			
SECURITY PHASE			
ITEM	SAT	UNSAT	N/A
1. Ask master for vessel documents and crew papers and inspect/retain documents until inspection is complete. Be sure to obtain full names, dates of birth, and nationalities of people on board.			
2. Place crew on pier/barge (if feasible), or in area topside, away from inspection spaces.			
3. Check documentation against access list or other documents provided by the husbanding agent.			
4. Document inspection team reviews crew papers and provides crew-member security on pier/topside.			
5. Interview master for illegal or contraband cargo. Determine presence of weapons on vessel ("For our safety, we are required to ask you about weapons. Without reaching for them or touching them, do you or your crew have any weapons on board?") If affirmative, determine location of weapons. Make safe.)			
6. View available charts, GPS, or other navigation tools.			
7. Perform inspections with master, inform chain of command of results.			
8. Clear or divert craft as required.			
INSPECTION PHASE			
ITEM	SAT	UNSAT	N/A
1. Note time the inspection started. Inform master he will accompany inspection team and will open any compartments, spaces, containers, boxes, etc. needing inspection. Use video camera and/or digital camera to record inspection.			

2. Identify draft of vessel and any lists to port or starboard.			
3. Walk completely around vessel and make visual inspection. Note new paint in old paint areas.			
4. Inspect for false bulkheads, storage or console centers, and visual changes in structure or compartments.			
5. Identify major and minor compartment areas.			
6. Familiarize team members with ingress and egress routing.			
7. Identify hazards and obstacles such as HAZMAT and structural obstructions.			
8. Identify storage areas. Procure documents as needed from master (cargo load and liquid load plans).			
9. Inspect berthing areas. (Spiral search technique — 1 high/1 low clockwise pattern then switch. Third member observes master for reaction.) Pay close attention to clothing storage spaces and bedding materials.			
10. Inspect galley compartment. (Spiral search technique — 1 high/1 low clockwise pattern then switch. Third member observes master for reaction.) Pay close attention to bags of powders and containers filled with powder substances.			
11. Inspect bridge or console areas. Use crush and feel method with spiral search techniques. Pay close attention to smuggler access areas within bulkheads and console areas.			
12. Inspect engine compartment access and room. Verify fuel tank and contents. Use water paste method or thief sampler. Look for wires, loose objects, and unusual containers/items taped or wired in place.			
13. Inspect engine drive assemblies for sabotage techniques (e.g., intentional wiring of flapper valves to remain open, drain valves in open positions, starter circuits with loose wires, alternate fuel supply piping, false bilge plates).			
14. Tap interior bulkheads for solid sound. Reverb indicates liquid space.			
15. Identify data plates and copy as required (digital camera is an excellent asset).			
16. Video or digital camera crew members as required (foreign nationals).			
17. Note time when inspection is completed.			
PREARRANGED CODE			
ITEM	SAT	UNSAT	N/A
1. Select a prearranged code to alert the other team member if you find a weapon or IED without letting crew know (e.g., Jacob's ladder, blue marlin, home run).			

IMMEDIATE ACTION IF SOMETHING FOUND			
ITEM	SAT	UNSAT	N/A
1. Alert team members.			
2. Notify team leader as discretely as possible (use code word).			
3. Secure crew immediately.			
4. Be prepared to initiate procedures to clear the area or use appropriate force as needed.			
5. Provide immediate response to egress or take vessel by force as required.			
6. Notify all necessary personnel (chain of command, HN LNO, and EOD team (if attached)).			
7. Provide a description of what was found during the inspection.			
DEBARKATION PHASE			
ITEM	SAT	UNSAT	N/A
1. Return vessel and crew documents to master.			
2. Thank master for patience and consideration, make entry into deck log if applicable.			
3. Communicate with controller that vessel is cleared or diverted.			
4. Release crew from holding area.			
5. Execute planned egress (head count of team, inventory of all equipment, disembark the vessel).			
6. Maintain security of vessel until services completed and warning zone is cleared outbound.			
POSTBOARDING PHASE			
ITEM	SAT	UNSAT	N/A
1. Weapons and communications gear turn-in.			
2. Team debrief.			
3. After-action report (document lessons learned).			
4. Equipment inspection and maintenance.			
5. Prepare for next operation.			

APPENDIX R

Maritime Homeland Security/Maritime Homeland Defense of Ports and Waterways

R.1 INTRODUCTION

HLS is the prevention, preemption, deterrence of, and defense against, aggression targeted at U.S. territory, sovereignty, domestic population, and infrastructure, as well as the management of the consequences of such aggression and other domestic emergencies. HLS is a national effort that begins with local, state, and federal organizations. DoD's HLS roles include HLD and civil support.

HLD is the protection of U.S. territory, domestic population, and critical infrastructure against military attacks emanating from outside the United States. Civil support is where the military provides "specialized assistance" that may not be available in the civilian sector. Statutes, including the Posse Comitatus Act, that prohibit direct military involvement in LE activities, govern military operations within the United States. These DOD roles are further limited to providing support to LFAs.

The Navy and CG are working closely together to confront maritime threats to the United States through complementary M-HLS and maritime homeland defense (M-HLD) initiatives, and in forward deployed operations. For example, the services are jointly investing in improved MDA to detect and monitor potential threats transiting through the maritime domain and have agreed in concept to the development of a "National Fleet" to leverage complementary Navy and CG capabilities. This close cooperation exists because the terrorist threat environment has blurred the lines between the conventional front lines and rear areas, and the roles that the services play in the defense of the nation at home and abroad.

In the United States the CG leads M-HLS operations. The CG is the LFA for M-HLS and is responsible for reducing vulnerability to and for averting terrorist attack, and consequence management in the maritime domain. As a military service with broad LE authorities, the CG is in the unique position of also being part of both M-HLS and M-HLD efforts. DOD is likely to designate the CG as the naval component commander for M-HLD operations.

R.2 MILITARY'S ROLE

The military provides support to LFAs when requested by appropriate civil authorities through United States Northern Command (USNORTHCOM) in accordance with U.S. laws, and as directed by the President or SecDef. USNORTHCOM is responsible for land, aerospace, and sea defense of the United States, as well as commanding all forces that operate within the United States in support of civil authorities. USNORTHCOM has an ongoing cooperative relationship with federal agencies to prevent terrorism. These organizations share information and work together to coordinate plans and actions to prevent threats, attacks, and other acts of aggression against the United States. Military assistance is always in support of an LFA such as the FEMA and may include domestic disaster relief operations that occur during fires, hurricanes, floods, and earthquakes. Support also includes consequence management assistance, such as would occur after a terrorist event employing a WMD. In providing civil support, USNORTHCOM operates through subordinate joint task forces. There are also several standing task forces assigned to USNORTHCOM that provide the capability to execute important missions on a daily basis.

R.2.1 Joint Task Force — Civil Support

JTF-CS, headquartered at Fort Monroe, VA, was established by direction of the DOD Unified Command Plan 1999. JTF-CS is unique in that it is the only standing JTF directed by national authority to plan for and integrate DOD domestic support to a LFA for consequence management of an incident involving a CBRNE weapon. JTF-CS's role, when deployed in response to a state request for federal assistance, is to save lives, prevent further injury, and provide temporary critical life support beyond those capabilities available from local, state, and other federal agencies. JTF-CS is composed of active-duty members from all the military services, as well as Reserve and National Guard members. This diversity adds experience and depth that enrich the unit's knowledge base and experience.

R.2.2 Joint Forces Headquarters—National Capital Region

Joint Forces Headquarters-National Capital Region (JFHQ-NCR), based at Fort Lesley J. McNair, Arlington, VA, is responsible for land-based HLD, military assistance to civil authorities, and consequence management in the Washington, DC, area. As the key command for civil support to a multijurisdictional area that encompasses six counties, four cities, and the District of Columbia, JFHQ-NCR draws together resources from the Army, Navy, Air Force, Marine Corps, and CG under a single joint headquarters for planning, coordination, and execution of the USNORTHCOM mission.

R.3 POSSE COMITATUS ACT

The PCA prohibits military forces from conducting LE, except "in such cases, and under such circumstances as such employment of said force may be expressly authorized by the Constitution, or by an act of Congress." Prohibiting direct military involvement in LE is in keeping with long-standing United States law and policy limiting the military's role in domestic affairs. By policy, DOD has extended these prohibitions to all of its military services. However, Congress has enacted a number of exceptions that allow the military, in certain situations, to assist civilian LEAs in enforcing the laws of the United States. The military does not currently interdict vehicles, vessels, and aircraft; conduct surveillance, searches, pursuit and seizures; or make arrests on behalf of civilian LE authorities. PCA does not apply to the CG.

R.4 OPERATIONS PLANNING CONSIDERATIONS

This paragraph shows what needs to be considered when planning M-HLS/M-HLD joint operations.

R.4.1 Deliberate Planning

Deliberate planning translates national objectives into military capabilities and is executed using JOPES policy, procedures, and ADP support. Deliberate planning for M-HLS/M-HLD is accomplished through a memorandum of agreement (MOA) between the Navy and CG. Area commanders are responsible for coordination and planning to ensure the most appropriate Navy–Coast Guard force package is developed to meet M-HLS/M-HLD requirements.

R.4.2 Crisis Action Planning

The primary difference between deliberate planning and crisis planning is the use of longer range planning assumptions like the Joint Strategic Capabilities Plan (JSCP) in deliberate planning and using real-time information in CAP.

R.4.3 Organization

M-HLS and M-HLD planning may involve two types of organizational structures: the military functional divisions used by DOD, and the ICS structure used by federal, state, and local organizations. The CG may use either organization depending on the specific operation. DOD will always use military functional divisions within

any assigned task force. When the ICS structure is used, a military liaison is assigned to the federal, state, or local organization.

R.4.3.1 Military Principle Functional Divisions or Directorates

The function of the military staff is to execute the responsibilities of the commander, e.g., developing policy, preparing and coordinating plans, and overseeing all functions assigned to the commander. The functional staff organization normally includes personnel, intelligence, operations, logistics, planning, and communications. The N designator is used for a Navy staff, the J designator is for a joint staff, G designator is for an Army or Marine Corps staff, and the Air Force uses a letter code designation. This functional organization allows two or more military staffs to speak a common language on common ground. Although different designators are used (e.g., J-, N-, G-), there is consistency in the functional subdivisions of the staffs. It is well suited for long-term operations among vertical command structures such as the standard military task force organization. The U.S. CG does not use this system of designators.

R.4.3.2 Incident Command System

ICS is an on-site incident management system used by local, state, and federal organizations. Its principles can be applied to all types of incidents such as floods, hurricanes, SAR, LE, oil spills, and hazardous substance releases. ICS provides a uniform process, organization, and language for emergency response management, ensuring that all emergency responders, regardless of agency or organization, respond as a coordinated team with common objectives. The ICS functional organization includes operations, planning, logistics, and finance/administration.

The ICS is simple, encourages initiative, and allows for a decentralization of tasking, spreading workloads over a greater number of participants (span of control). The ICS is focused on an ad hoc short-term response to an incident and is not designed for deliberate planning and long-term operational response missions.

R.4.3.3 Basic Organizational Comparison

The ICS organization is built around the four major functions shown above that are required at each incident. The N-staff has six major functions. A basic comparison of the two organizations is depicted in Figure R-1.

R.5 MARITIME HOMELAND SECURITY MEASURES

The maritime terrorism threat is among the most significant affecting global security. With countries increasing airline and land transportation security, terrorists are likely to exploit “soft targets” — those that lack a security infrastructure or are more easily penetrable. The USG has implemented new security measures to build upon the layers of security that are already in place in U.S. ports. Figure R-2 outlines the DHS’s approach to HLS.

In addition to the requirements of the International Ship and Port Security Code, U.S. vessels and port facilities are taking additional security measures per the MTSA of 2002. The CG is taking a layered approach to M-HLS by identifying and intercepting threats before they reach U.S. shores.

N-Staff	N-Staff Responsibilities	Proposed ICS Position Equivalents
N-1: Manpower & Personnel	All matters concerning human resources and, unit personnel strength and readiness status. Monitors and assesses elements of personnel administration and management. Receives information for coordinating, advising, and planning to assist the CG Commander in accomplishing the mission.	Safety Officer: Develops & recommends measures for assuring personnel safety. Liaison Officer: Where incidents are multijurisdictional, or have several agencies, individual is contact for personnel assigned to incident by these agencies. Resources Unit: Maintains status of all assigned resources at an incident (key supervisory personnel, primary & support resources, etc.). Documentation Unit: Maintains accurate, up-to-date incident files. Time Unit: Accurate recording of daily personnel time, compliance with time recording policies, and managing commissary operations. Finance Section Chief: Manage all financial aspects of incident; provide financial and cost analysis information; develop operating plan for Finance/Administration; meet with assisting and cooperating agency representatives; and help with financial input for demobilization planning.
N-2: Intelligence	Has cognizance over all matters concerning military and contingency intelligence. Acquires various intelligence information and data. Analyzes and evaluates intelligence and data. Provides analyzed information and data to CG Commander with recommendations.	Situation Unit: Collects, processes, and organizes all of the incident information.
N-3: Operations	Has cognizance over all matters concerning contingency operations, tactical plans, tactical response organization, and training. Maintains current operations estimate situation in coordination with other staff elements. Coordinates and develops the operations, tactical plans, and OPORDs. Responsible for all tactical activities. Responsible for all personnel and unit training within the command organization.	Operations Section Chief: Manages tactical operations, requests resources as needed, supervises execution of the Incident Action Plan for Operations, approves release of resources from assigned status. Other Branches, Task Forces, Single Resources, Staging Area Manager, Air Operations, Air Tactical Group, etc: Assigned duties, as directed under the standard ICS organization.

Figure R-1. N-Staff and ICS Function Comparison (Sheet 1 of 3)

N-Staff	N-Staff Responsibilities	Proposed ICS Position Equivalents
N-4: Logistics	Has cognizance over all matters concerning organization supplies, maintenance, transportation, and services. Determines supply requirements and coordinates/processes supply requests. Ensures supply security. Supervises collection, staging, distribution, and transportation of supplies.	Logistics Section Chief: Provides all incident support (exception being aviation support). Demobilization Unit: Develops incident demobilization plan. Medical Unit: Procedures for managing major medical emergencies, provide medical aid, and assist with processing injury-related claims (determine level of emergency medical activities prior to activation, acquire and manage medical support, and establish procedures for handling serious injuries). Food Unit: Supplies food needs for the entire incident (determine food & water requirements, obtain necessary equipment and supplies, and order sufficient food and potable water, etc.). Supply Unit: Orders, receives, processes, and stores all incident-related resources. Provides supplies to planning, logistics and finance/admin sections, determines type and amount of supplies en route, orders, receives, distributes, stores supplies and equipment, and maintains inventory of supplies and equipment. Facilities Unit: Sets up, maintains and demobilizes all incident support facilities. Determines requirements for each incident facility, activates incident facilities, and provides security services, etc. Ground Support Unit: Provides maintenance, service, and fueling of all mobile equipment and vehicles; ground transportation of personnel, supplies, and equipment; support services for mobile equipment and vehicles; and orders maintenance & repair supplies, etc. Procurement Unit: Controls all matters pertaining to vendor contracts, leases, and fiscal agreements. Coordinates with local jurisdiction on plans and supply sources, drafts memoranda of understanding, and establishes contract agreements with supply vendors. Compensation/Claims: Oversees completion of all forms required by workers' compensation and local agencies. Also maintains file of injuries and illnesses associated with the incident. Closely coordinates with the Medical Unit. Claims Unit is responsible for investigating all claims involving property associated with or involved in the incident. Cost Unit: Provides all incident cost analysis. Insures proper identification of all equipment and personnel requiring payment, prepares estimates of incident costs, and maintains accurate records of incident costs.

Figure R-1. N-Staff and ICS Function Comparison (Sheet 2 of 3)

N-Staff	N-Staff Responsibilities	Proposed ICS Position Equivalents
N-5: Plans & Policy	All matters concerning the long range response organization planning. Prepares mission, concept, and overall operations plans for the contingency. Prepares the recommended COA and commander's estimates (CE), and provides response recommendations. Coordinates and facilitates all planning functions and processes.	Planning Section Chief: Evaluates, processes, and disseminates information for use at the incident. Reassigns out-of-service personnel already on-site to ICS organizational positions, as appropriate; establishes information requirements, and reporting schedules; determines need for any specialized resources; assembles information on alternative strategies; provides periodic predictions on incident potential; and reports any significant changes in incident status.
N-6: Command, Control & Communications	Has cognizance over all matters concerning command, control, communications and computer systems. (C4S) Handles command responsibilities for communications. Coordinates tactical communications (COMTAC) planning and execution. Manages and develops the electronics and automatic information systems.	Communications Unit: Develops plans for the use of incident communications equipment and facilities, installs and tests the communications equipment, supervises the Incident Communications Center, and distributes and maintains communications equipment.
Special Staff	Gives technical, administrative, and tactical advice. Prepares parts of plans, estimates, and Orders. Coordinates and supervises staff activities.	
Personal Staff	Responsible directly to the commander for special matters over which commander chooses to exercise close personal control (usually includes the political adviser).	

Figure R-1. N-Staff and ICS Function Comparison (Sheet 3 of 3)

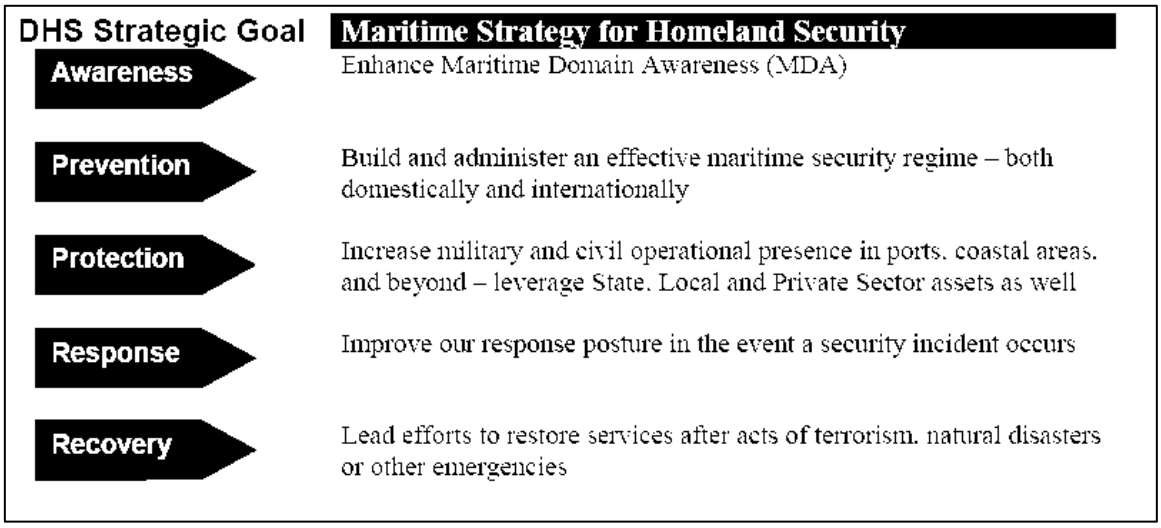

Figure R-2. Strategic Goals

R.5.1 Security Assessments and Plans

Port facilities and vessels submit security assessments and security plans to the CG for review and approval. Security assessments identify vulnerabilities of each port facility and vessel and accompanying security plans outline specific measures that would be taken by each port or vessel to resolve those weaknesses. The CG also examines ports complexes as a whole and, working in conjunction with the local stakeholders, develops security plans to leverage the combined resources of the port areas to deter, prevent, and respond to terror threats.

R.5.1.2 Security Implementation

The CG is monitoring implementation of maritime security measures across the United States. Each plan is tailored to the individual port, facility, and vessel. Specific security measures may include increased identification checks on crew members and visitors to the port; additional canine detection teams; expanded baggage and passenger screening; perimeter fencing equipped with surveillance cameras; restricted access to sensitive areas; screening apparatus on large cruise ships; additional employee training and improved SOPs; increased number and scope of security patrols; and implementation of a robust certification program to ensure foreign flagged vessels calling on U.S. ports meet international security requirements.

The CG is conducting port assessments to identify vulnerabilities. Teams of analysts carry out possible terrorist scenarios against specific targets, analyze responses, and recommend how to further improve security. Additional training and exercises are also an important part of the ongoing PS effort. The CG has also implemented a verification program to ensure that all ports and vessels maintain their security measures.

R.5.2 Overview of the Strategy

The United States is using a layered approach to HLS. DHS is leveraging the expertise of the CG, customs and border protection (CBP), state and local authorities, and the private sector to create a comprehensive system of complementary security measures to monitor the movement of ships and cargoes from overseas areas, during transit, and within U.S. territories and ports. This information is useful to help security forces better understand the processes used to screen ships entering the United States but does not address external threats to the ships' security, which remains the primary focus of domestic NCW operations.

R.5.2.1 Overseas

The CG steered the United Nations' International Maritime Organization in developing safety of life at sea (SOLAS) security regulations and an international ship and port facility security code that mirrors the United States' maritime transportation regulations.

R.5.2.1.1 24-Hour Advanced Manifest Rule

CBP administers the Sea Automated Manifest System, which requires all ships, with the exception of bulk and approved break-bulk cargo carriers, to provide proper cargo descriptions and valid consignee addresses 24 hours before cargo is loaded at a foreign port for shipment to the United States. Failure to meet the 24-hour Advanced Manifest Rule results in a "do not load" message and other penalties. This program leads to better awareness of cargo and containers destined for the United States.

R.5.2.1.2 Container Security Initiative

CBP administers the Container Security Initiative (CSI) to screen containers originating from the top 20 ports that account for about two-thirds of the shipments to the United States. CBP officials work in concert with HN counterparts in these ports to identify and target high-risk containers and coordinate screening before loading.

R.6.2.1.3 Customs-Trade Partnership Against Terrorism

CBP leverages "trusted agents" through the Customs-Trade Partnership Against Terrorism (C-TPAT) Initiative to classify cargo that has been controlled and poses a minimal security risk. Importers, carriers, brokers, forwarders, ports and terminals, and foreign manufacturers have improved security of their supply chains and provide verifiable security information to become eligible for special consideration.

R.5.2.1.4 International Ship and Port Facility Security

The International Ship and Port Facility Security (ISPFS) Code requires vessels and port facilities to conduct security assessments, develop security plans, and hire security officers.

R.5.2.1.5 International Port Security Program

The CG and HN officials jointly evaluate a country's compliance with the ISPS Code. The CG uses this information to improve the United States' own security practices and to determine if additional security precautions are required for vessels arriving in the United States from these countries.

R.5.2.1.6 Operation SAFE COMMERCE

Operation SAFE COMMERCE is a pilot program that analyzes security in the commercial supply chain and tests solutions to close security gaps. The technologies tested through the program will enhance maritime cargo security, protect the global supply chain, and facilitate the flow of commerce.

R.5.2.2 In Transit

The following initiatives are designed to enhance security on vessels in transit.

R.5.2.2.1 Smart Box Initiative

The Smart Box couples an internationally approved mechanical seal affixed to the container with an electronic container security device to deter and detect tampering with the container door, and alert officials that a CSI screened container may pose a breech in security.

R.5.2.2.2 Ship Security Alert System

Per the ISPS, the Ship Security Alert System (SSAS) enables a ship to covertly alert officials ashore of incidents involving acts of violence, such as piracy or terrorism, that threaten or compromise the security of the ship. All passenger and cargo vessels larger than 500 gross tons will have the equipment installed by 1 July 2006. Other vessels may carry and use SSAS voluntarily.

R.5.2.2.3 Automated Targeting System

Automated targeting system (ATS) serves as the premier tool for performing transactional risk assessments and evaluating potential national security risks posed by cargo and passengers arriving by sea, air, truck, and rail. Using prearrival information and input from the intelligence community, this rules-based system identifies high-risk targets before they arrive in the United States.

R.5.2.2.4 96-Hour Advance Notice of Arrival

The 96-hour ANOA, required by all ships entering U.S. ports from foreign origins, enables the CG to analyze information on the crew, passenger, cargo, and voyage history using databases and intelligence information. This information includes previous security issues, illegal activities involving the ship or crew, or the security environment of previous ports of call to identify ships that require additional attention, including security precautions such as an at-sea boarding or armed escort during transit to and from port.

R.5.2.3 In United States Waters

The Navy and CG coordinate maritime intelligence, with the Navy primarily focused on global activity as the CG monitors activity closer to the United States. The numerous intelligence issues include drug trafficking, migrant interdiction, and maritime security.

R.5.2.3.1 National Targeting Center

The CBP's National Targeting Center (NTC) provides tactical intelligence and analytical support to identify suspects, support intradepartmental and interagency antiterrorist operations, and field operations.

R.5.2.3.2 Maritime Intelligence Fusion Centers

Maritime Intelligence Fusion Centers (MIFCs) in Dam Neck, VA, and Alameda, CA, compile and synthesize maritime security intelligence products from Federal, state, and local sources and disseminate maritime intelligence to operational units and HLS professionals responsible for port and waterway security. MIFCLANT shares facilities with the Naval Ocean Processing Facility, the Navy's intelligence center. The MIFCs work closely with the CG Intelligence Coordination Center at the National Maritime Intelligence Center (NMIC) in Suitland, MD.

R.5.2.3.3 Coast Guard Intelligence Coordination Center

The MIFCs provide information to operational units, but also work in concert with the CG Intelligence Coordination Center. The ICC is responsible for producing and disseminating intelligence with a Coast Guard perspective to support U.S. policy makers and operations. Collocated with the Navy and other agencies, it also provides quick access to others responsible for the nation's MDA.

R.5.2.3.4 Field Intelligence Support Teams

The CG has established subordinate Field Intelligence Support Teams (FISTs) in key ports. These teams are actively engaged in intelligence gathering and initial analysis in coordination with Federal, state, and local LE and intelligence agencies. They are "joint" in the broadest sense, providing critical top-down, bottom-up, and horizontal information sharing.

R.5.2.3.5 Joint Harbor Operations Center

To better protect the landside and waterside interface at Navy installations and some major ports, the Navy has teamed with the CG and developed the JHOCs that are C2 operations centers capable of providing a seamless response to potential conventional and asymmetric threats. These JHOCs function as well-defined, flexible, and seamless organizations to provide commanders with information to allow timely exercise of authority and direction over assigned and attached forces. In addition, this capability significantly improves connectivity and interoperability among maritime, joint, interagency, and selected commands that routinely conduct operations within a port environment.

R.5.2.3.6 Multiple Threat Alert Center

The DON's MTAC provides I&W for a wide range of threats to Navy and Marine Corps personnel and assets around the world. Operated by NCIS, the MTAC utilizes NCIS' worldwide presence and combination of LE, CI, intelligence, and security capabilities to identify all available threat indicators. Analysts, special agents, and military personnel work in the MTAC around the clock to produce I&W of possible terrorist activity, foreign intelligence threats, and criminal threats that may affect naval operations.

The MTAC epitomizes the multifaceted nature of the NCIS mission by linking terrorism, CI, intelligence, cyber, criminal, and security information. The MTAC is a unique platform in that it merges intelligence from other agencies with information from NCIS source networks and LE activities worldwide to provide the most relevant operational support to Navy and Marine Corps commanders.

R.5.2.3.7 High Interest Vessels Boardings

The 96-hour ANOA enables the CG to screen ships before they enter port. Higher risk vessels are targeted for offshore inspection by trained CG teams prior to port entry and additional vessels are randomly selected for inspection as a deterrent measure.

R.5.2.3.8 Operation PORT SHIELD

Operation PORT SHIELD focuses on verification and enforcement of security measures implemented under ISPS and the MTSA. The CG will inspect every vessel at sea or at the pier on its first visit to a U.S. port on or after 1 July 2004 to ensure that it complies with security standards.

R.5.2.3.9 Automatic Identification System

AIS automatically transmits detailed ship information to ships and shore-based agencies to enable instantaneous vessel tracking and monitoring. Large ships on international voyages are required to use AIS but the CG is attempting to expand requirements to include other vessels in U.S. waters.

R.5.2.3.10 Area Maritime Security Committees

Area maritime security committees coordinate the activities of port stakeholders, including all Federal, local, and state agencies, industry, and the boating public to deter, prevent, and respond to terror threats.

R.5.2.3.11 Port Security Assessment Program

The PS Assessment Program makes information gathered by the CG about the vulnerability of the nation’s 55 most economically and strategically important ports available to port officials to help them reduce vulnerabilities. The CG is also creating a system to display key port information in an electronic geospatially referenced format that can be easily searched for national, regional, and local information.

R.5.2.3.12 Nonintrusive Inspection Technology

CBP uses nonintrusive inspection technologies to screen a larger portion of commercial traffic more quickly while facilitating legitimate trade. Imaging systems safely and efficiently screen conveyances for contraband, including WMD. These units can scan the interior of a 40-ft container in under a minute. Inspectors use personal radiation detectors to scan for radioactive materials, and special high-tech tools such as density meters and fiber-optic scopes to peer inside suspicious containers.

R.5.2.3.13 Maritime Security Personnel

Several initiatives address specific maritime security needs. For external threats outside a ship, Maritime Safety and Security Teams can be moved into a port where a higher level of threat exists to enhance security. To counter internal threats aboard a ship, positive control boarding teams (PCBTs) are being placed on ships.

Maritime Safety and Security Teams. The CG's 13 MSSTs are a rapid response force assigned to vital ports and are deployable nationwide via air, ground, or sea. MSSTs have unique capabilities, including EEDs, personnel trained to conduct fast-roping deployments from a helicopter to a hostile vessel, and AT/FP small boat handling training.

Positive Control Boarding Teams. PCBTs ensure the safety and security of civilian commercial ships calling on U.S. ports. Normally a six-person team boards a vessel with the harbor pilot to ensure they remain under proper control and transit with minimal delays.

R.5.2.3.14 Transportation Workers Identity Card

The Transportation Workers Identity Card (TWIC) Program ensures a secure uniform credential to prevent potential terrorist threats from entering sensitive areas of transportation system.

R.5.2.3.15 America's Waterways Watch

America's waterway watch helps prevent acts of terrorism and other illegal activity that jeopardizes M-HLS by having members of the maritime and recreational boating industries, as well as the boating public, recognize and report to appropriate authorities suspicious activity that may be an indicator of potential terrorism.

R.6 MARINE SECURITY SYSTEM

The CG has a three-tiered system of MARSEC levels consistent with the DHS's Homeland Security Advisory System (HSAS) that provides a mechanism to communicate preplanned scalable responses to increased threats. The Commandant of the Coast Guard sets MARSEC levels commensurate with security threats.

R.6.1 Marine Security Levels

MARSEC levels reflect the prevailing threat environment to the marine elements of the national transportation system, including ports, vessels, facilities, and critical assets and infrastructure located on or adjacent to waters subject to the jurisdiction of the United States.

R.6.1.1 Level I

MARSEC Level 1 (baseline level of effort, "new normalcy") roughly corresponds to HSAS Low-Green, Guarded-Blue, and Elevated-Yellow. This level is the new MARSEC normalcy and will be maintained for an indefinite period.

R.6.1.2 Level 2

MARSEC Level 2 ("heightened risk") roughly corresponds to HSAS High: Orange. There is a heightened threat of an unlawful act against a port or vessel. Intelligence indicates that terrorists are likely to be active within a specific area or against a specific class of target. The risk level indicates that a particular segment of the industry may be in jeopardy but that no specific target has been identified. Additional protective measures may be expected to be sustained for substantial periods.

R.6.1.3 Level 3

MARSEC Level 3 ("incident imminent") roughly corresponds to HSAS Severe: Red. The threat of an unlawful act against a port, facility, or terminal is probable or imminent. Intelligence may indicate that terrorists have chosen specific targets, though it may not be possible to identify such targets. Additional protective measures are not expected to be sustained for substantial periods.

R.6.2 Marine Security Directive Compliance

Each maritime facility owner or operator must comply with a MARSEC directive issued by the Commandant of the CG when additional security measures are necessary to respond to a threat assessment, or to a specific threat against the maritime elements of the national transportation system. An owner or operator whose facility is not in compliance with the requirements of applicable MARSEC levels must inform the COTP and obtain approval prior to interfacing with a vessel or continuing operations. When notified of a change in the MARSEC level, the facility owner and operator must ensure:

1. Vessels moored to the facility and vessels scheduled to arrive at the facility within 96 hours of the MARSEC level change are notified of the new MARSEC level and the declaration of security is revised as necessary.

2. The facility complies with the required security measures within 12 hours.

3. The facility reports compliance or noncompliance to the COTP.

4. For MARSEC levels 2 and 3, the facility security officer must inform all facility personnel about identified threats, and emphasize reporting procedures and stress the need for increased vigilance.

R.6.3 Security Measures

The facility owner or operator must ensure the facility operates in compliance with the security requirements for the MARSEC level in effect for the port.

R.6.3.1 Declarations of Inspection

A declaration of inspection is required by certain passenger vessels and vessels carrying certain dangerous cargoes, in bulk for every evolution regardless of the MARSEC level. At MARSEC levels 2 and 3, all vessels and facilities must complete the declaration of security.

R.6.3.2 Security Measures for Access Control

In addition to the security measures required for MARSEC levels 1 and 2, the facility owner or operator must ensure the implementation of additional security measures, as specified for MARSEC level 3 in their approved facility security plan (FSP). Additional security measures may include:

1. Screening all persons, baggage, and personal effects for dangerous substances and devices

2. Performing one or more of the following on unaccompanied baggage

3. Screening unaccompanied baggage more extensively; for example, x-raying from two or more angles

4. Preparing to restrict or suspend handling unaccompanied baggage

5. Refusing to accept unaccompanied baggage

6. Being prepared to cooperate with responders and facilities

7. Granting access to only those responding to the security incident or threat
8. Suspending access to the facility
9. Suspending cargo operations
10. Evacuating the facility
11. Restricting pedestrian or vehicular movement on the grounds of the facility
12. Increasing security patrols within the facility.

R.6.3.3 Security Measures for Restricted Areas

In addition to the security measures required for MARSEC levels 1 and 2, at MARSEC level 3, the facility owner or operator must ensure the implementation of additional security measures per their approved FSP. These additional security measures may include:

1. Restricting access to additional areas
2. Prohibiting access to restricted areas
3. Searching restricted areas as part of a security sweep of all or part of the facility.

R.6.3.4 Security Measures for Handling Cargo

In addition to the security measures required for MARSEC levels 1 and 2, at MARSEC level 3, the facility owner or operator must ensure the implementation of additional security measures per the approved FSP. These additional security measures may include:

1. Restricting or suspending cargo movements or operations within all or part of the facility or specific vessels
2. Being prepared to cooperate with responders and vessels
3. Verifying the inventory and location of any dangerous goods and hazardous substances, including certain dangerous cargoes, held within the facility and their location.

R.6.3.5 Security Measures for Delivery of Vessel Stores and Bunkers

In addition to the security measures required for MARSEC level 1, at MARSEC level 2, the facility owner or operator must also ensure the implementation of additional security measures per the approved FSP. These additional security measures may include:

1. Detailed screening of vessel stores
2. Detailed screening of all delivery vehicles
3. Coordinating with vessel personnel to check the order against the delivery note prior to entry to the facility
4. Ensuring delivery vehicles are escorted within the facility
5. Restricting or prohibiting the entry of vessel stores that will not leave the facility within a specified period.

R.6.3.6 Security Measures for Monitoring

In addition to the security measures for MARSEC levels 1 and 2, at MARSEC level 3, the facility owner and operator must ensure implementation of additional security measures per the approved FSP. Examples of these additional security measures may include:

1. Checking all vessel stores more extensively
2. Restricting or suspending delivery of vessel stores
3. Refusing to accept vessel stores on the facility.

R.7 INTERNATIONAL SECURITY COOPERATION

R.7.1 Security Cooperation with Canada

USNORTHCOM has developed objectives, tasks, and milestones to expand defense cooperation with Canada in the maritime, land, and civil support domains. Both countries are in the process of developing a series of shared CONPLANs and cooperative procedures for binational defense and support to civil authorities with Canada.

R.7.2 Security Cooperation with Mexico

USNORTHCOM is leveraging existing relationships with the Mexican military and is pursuing efforts to expand assistance to Mexico using counterterrorism and counterdrug funding. In addition, USNORTHCOM is working with the National Guard to develop new training opportunities with the Mexican military in a variety of areas, such as biohazard and WMD incident management.

R.8 HIGH VALUE UNIT ESCORT

The USCG provides armed vessel escort of high value units (HVUs), vessels carrying CDC in bulk and certain passenger vessels. The definition of HVU also includes all submarines and aircraft carriers (United States and NATO), as well as all military sealift vessels conducting outload/offload operations in support of Operations IRAQI FREEDOM and ENDURING FREEDOM.

R.9 MARITIME INTERCEPTION OPERATIONS

USNORTHCOM supports the DHS in M-HLS, as needed. The CG has primary responsibility for MARSEC in the approaches to the United States and is tasked with identifying and intercepting maritime threats as far from U.S. shores as practical. In coordination with interagency partners, and regardless of who is supporting and who is supported, both Navy and CG units conduct maritime interception operations to degrade and disrupt terrorist acts, collect intelligence, and prevent attacks against the United States and its allies. As distance from the United States increases it is likely that the appropriate capable response units will be Navy and not CG, but each operation will be looked at on its own merits. Proximity and time until on scene combined with capability will be key factors.

M-HLS in areas such as the Gulf of Mexico and the Bering Sea require knowledge of events in assigned patrol areas as well as chokepoints and shipping lanes or transit corridors. Operational commanders safeguarding the exclusive economic zone (EEZ), areas adjacent to the continental shelf, and other waters of importance collectively known as deepwater operating areas need extensive knowledge of all activities that can impact on the maritime security of America. Here it is increasingly likely that CG units will be in place and will be more experienced in interceptions and will therefore be chosen to take the lead, improving the chances of successful prosecution of criminals following the interception. Exceptions are likely to be found when the magnitude of threat clearly indicates that a DOD lead and intercept is preferred.

R.9.1 Surveillance

Surveillance of immense maritime regions demands a range of sensors including space-based national sensors, maritime patrol aircraft (MPA), unmanned aerial vehicles, shore-based over the horizon (OTH) radars, all-source intelligence, data links between netted forces, and shipboard sensors such as air- and surface-search radars and passive electronic surveillance systems. The optimal combination of systems reflects a balance between economy and effectiveness. Leveraging information and intelligence assets of other agencies helps compensate for the size of forces relative to the area covered. It requires integrating surface assets and organic aircraft and boats, supporting MPA, and other systems. Dispersed but interconnected, these assets are key to surveillance and detection.

On the operational level, surveillance and detection of threats are conducted in several ways. MIFCs analyze intelligence and information from numerous sources and detect threatening trends, such as increased smuggler or alien migrant. Conversely, the centers may receive reports of a specific activity from deployed CG units, patrol aircraft, other forces or agencies, ship manifests, private individuals, or commercial ships.

To counter an adverse long-term trend, commanders may react to increased threats by the allocation of assets to conduct additional surveillance, deter activity, or rapidly respond to incidents. If a major emergency is involved, commanders initiate these activities and surge added CG maritime units and other forces. Once forces are committed, operating and supporting commands, as well as elements from other services, have access to a distributed COP.

R.9.2 Dynamic Maritime Positioning

The USCG maintains an active and sustained presence in domestic waters to act as a highly visible deterrent and rapid response force but cannot maintain a constant presence in every deep-water area. Instead it relies on dynamic maritime positioning based on intelligence and cuing. Just as police forces field their heaviest presence in high-crime areas, the bulk of deep-water presence is deployed in areas that most threaten maritime security. Intelligence and cuing, when combined with advanced command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR), add to deployed, highly mobile assets that place forces in the right place at the right time. Overall awareness of maritime events guides dynamic maritime positioning. Combining all sources of intelligence, including historical knowledge of trends in threats and real-time surveillance data, the CG can shift efforts and forces between areas. This requires highly mobile assets and flexible command, control, and logistics systems. Forward-patrolling forces will generally respond to an event. They may be reinforced in response to larger contingencies or to conduct coordinated campaigns.

R.9.3 Standoff Maritime Tactics

By exploiting the speed, range, and endurance of both armed helicopters and OTH, rigid hull inflatable boats (RHIBs), the CG can generate standoff operational capabilities. Because of advances in technology and operational doctrine, it is no longer necessary to put cutters alongside surface vessels to conduct a mission from start to finish. Instead a major cutter with armed helicopters or OTH-RHIBs can quickly make contact with ships within eyesight or 100 nm away, depending on weather and tactical scenarios. With such means for delivering boarding teams, the role of flight deck–capable cutters is to maneuver into an area of criminal activity so that their helo and/or boats can engage in the active portion of a law enforcement mission, providing true standoff capability for a quantum change in flexibility and usefulness.

R.9.4 Maritime Interception Operations Execution

Commanders determine the type and level of Navy/CG response capability needed in their AOR. A unit responds to potential or actual maritime events as directed by an operational commander, or the judgment of a major cutter CO (or commander of a multicutter task unit) who is acting within the limits of standing orders.

Once committed to prosecuting a contact, a unit fuses operational and tactical data to generate classification and identification of both threats and legitimate contacts and activities. The nature of the prosecution phase is

determined by the mission and particular situation. The major cutter acts as the C4ISR interface with other forces and sometimes supports operations with its embarked assets.

R.9.4.1 Expanded Maritime Interception Operations

MIO has taken on a global focus beyond the historical missions, when the President approved expanded maritime interception operations (E-MIO) to interdict terrorists and their resources globally. This order authorized commanders to stop, board, and search merchant ships identified to be transporting terrorists and/or terrorist-related materiel. E-MIOs are now significant mission areas for every deployed SG, especially along maritime transit lanes and chokepoints. Currently, E-MIOs are focused on USEUCOM and USCENTCOM AOR while USPACOM and the other combatant commanders are developing E-MIO plans.

R.10 NAVAL COASTAL WARFARE OPERATIONS IN A MARITIME — HOMELAND DEFENSE SCENARIO

NCW operations will be conducted under the same construct as discussed in previous sections of this NTTP, including security zone enforcement and vessel escort. ROE will be promulgated by the operational commander. In addition to areas where NCW forces may be used for civil support, military operations could include strategic mobility, security, and safe operating areas for U.S. and allied forces within the U.S. coastal areas. They may also be conducted to safeguard the United States from the introduction of hostile forces or contraband that threatens our national security in a supporting role to an LFA. The most serious threat is from asymmetric attacks by foreign terrorists that could include the use of innovative or nontraditional tactics to exploit vulnerabilities while avoiding the strengths of an opponent. Asymmetric threats could be the introduction of WMD through U.S. ports or sabotage directed at a U.S. harbor. In such a scenario, USNORTHCOM would become the supported commander, Navy and CG NCW reserve units would be activated and assigned, and a varying number of CG regular units would shift TACON and be assigned to support USNORTHCOM.

R.11 EMERGENCY SORTIE

The COTP or other responsible official could direct an emergency sortie as a preventive measure or reaction to an incident per COTP authorities in Title 33 United States CFR. The local port authority is responsible for executing the COTP order. Title 33 CFR Part 6 describes COTP authorities to implement an emergency sortie.

NCW resources Navy and/or CG will provide security for an emergency sortie as directed by the harbor defense commander (HDC).

R.12 CRITICAL INFRASTRUCTURE PROTECTION

The COTP is responsible and has authority to prevent damage to any vessel or waterfront facility, including piers, wharves, docks, or similar structures to which vessels may be secured and naval installations, including areas of land, water, and equipment and materials on them. The COTP may establish security zones and control entry and take action needed to enforce them.

NCW resources Navy and/or CG will provide security and enforce security zones to protect maritime critical infrastructure as directed by the HDC.

R.13 MARITIME REGION INTERFACE CONTROL OFFICER CELL

The maritime region interface control officer (RICO) cell enhances HLD by expanding maritime sensor coverage using linked naval assets and additionally offers a joint training capability. The maritime RICO cell maintains and operates a 24/7 real-time multi-tactical digital information link (TADIL) network (MTN) that provides the maritime tactical picture into a CTP. The maritime RICO cell is the conduit into North American Aerospace Defense Command (NORAD's) continental region (CONR) HLD MTN.

Commander, Second Fleet (C2F)/Commander, United States Navy North Fleet East (NNFE) has established a RICO cell at the fleet area control and surveillance facility (FACSFAC) Virginia Capes (VACAPES) (FFVC). The maritime RICO cell operates under the authority of C2F/commander NNFE.

R.13.1 Concept of Operations

In the Second Fleet AOR, C2F/NNFE is designated as RICO. SG interface control officers (ICOs) are the primary POC for all SG MTN operations and coordinate directly with the C2F/NNFE maritime RICO cell for all MTN operations. Ships, squadrons, and shore facilities coordinate directly with the maritime RICO cell for unit level operations. When working within an SG, unit ICOs coordinate and report directly to the SG ICO.

R.13.2 Duties and Responsibilities

The maritime RICO cell located at FFVC will serve as the executive agent for all MTN operations in the C2F/NNFE AOR. Duties and responsibilities include:

1. Provides 24/7 MTN connection into CONR HLD MTN.

2. Coordinates with CONR to ensure interoperability between the maritime MTN and the CONR HLD MTN.

3. Maintains 24/7 connectivity into NNFE CTP.

SG ICOs will coordinate directly with the maritime RICO cell for current and future MTN operations and training requirements. Duties and responsibilities include:

1. Upon getting underway, all units establish communications with the maritime RICO cell.

2. Provide joining report.

3. Upon successful communications, when directed enter MTN and remain established in MTN until return to homeport.

4. Report all MTN equipment casualties or degradations.

5. Maintain presence in C2F/NNFE RICO chat room.

R.14 CONSEQUENCE MANAGEMENT AND RECOVERY OPERATIONS

Public trust is often identified during CBRNE consequence management planning as a national center of gravity. Therefore, at least a part of DOD's role in maintaining public trust in the government is to provide timely and appropriate support to the LFA in assisting local and state authorities as they meet the needs of the local victims.

R.14.1 Local Response

Like all disasters, CBRNE incidents must be considered at the local level. This has a special implication in the realm of terrorism and attack upon the United States. On the local level, the COTP uses a security risk assessment tool that identifies critical infrastructure in the port. This helps determine how resources are best used in a crisis. It examines vulnerabilities as well as the severity of consequences. Individual vessel and facility owners are required to conduct self-assessments to determine their own vulnerabilities.

R.14.2 State Response

State assets (which include the National Guard and local governments) will play the lead role in first-response and consequence management. With the exception of unique skills, such as the Department of Energy's ability to handle nuclear weapons and the Defense Department's technical support following a chemical attack, the vast

majority of first-response assets will come from state and local governments — particularly following the mass disruption and consequences of a major biological or cyber attack. The federal government can play an important role in providing standards for equipment and training; however, these first responders (firefighters, police officers, and hazardous-material teams) will clearly be under the control of state and local officials.

R.14.3 Federal Response

Local emergency response plans provide the groundwork for JTF-CS in civil support response planning to determine the type of DOD capabilities that might be required locally or regionally. By understanding local capabilities, JTF-CS can develop CONPLANs for DOD forces, enabling a quicker response and possessing more refined consequence management capabilities.

R.14.4 CBRNE Effects

JTF-CS has determined that every CBRNE incident is going to be different. Even if the same WMD agent is employed on two cities, the impact on the cities will be different. Based on the location of the CBRNE incident, there will be differences that result from the cumulative variables such as:

1. Climatic conditions — Biological agents are directly affected by the weather—wind direction and speed are significant factors, as are temperature, humidity, and precipitation. Indirect factors such as seasonal population behavior can influence biological agent effectiveness.

2. Geographical variables — Geographical terrain barriers influence metropolitan areas' development and therefore will affect the population's potential exposure levels to the hazard. Considerations include whether the city is on the seacoast or by another large body of water, channeled in a valley, bounded by hills, or spread out on the plains. Rivers and canals in a city can result in sudden barriers if bridges are destroyed.

3. Demographics — The number of people exposed to the WMD effects really determines the size and impact of the CBRNE incident. Population density patterns and variables between day and night populations for business districts will significantly influence casualty counts. Also important in a contagious biological incident is whether the release occurred at something like a sports venue or airport where there is a transient population instead of where most initial victims are residents in the community. Age and personal health can also influence the life-and-death outcome of a CBRNE incident.

4. Infrastructure — The dynamic of commercial enterprise and construction — not only building type and style (for example, high-rise offices versus suburban sprawl), but also what industries are in the affected area — may result in huge variables during a CBRNE incident. HAZMAT manufacture or storage facilities can contribute to secondary effects. If the metropolitan area is a rail hub or seaport, there will be hazardous cargo that may be targeted or will add to the overall effects.

R.14.4.1 Bioterrorism Preparedness and Response

USNORTHCOM has the capability to assist local, state, and Federal authorities with planning and exercising to improve response to a bioterrorism attack. It can provide trained experts in the areas of chemical, biological, and radiological incidents at the request of a LFA to help prevent or contain an epidemic and respond to an actual attack.

R.15 MARITIME HOMELAND SECURITY EXERCISES

USNORTHCOM sponsors two large-scale exercises annually: DETERMINED PROMISE and UNIFIED DEFENSE. Exercise scenarios have involved air, maritime, and port threats; consequence management operations; protection of critical infrastructure; MIO; bioterrorist attacks; WMD and natural disasters. To date, over 57 state and Federal agencies have participated in these exercises. USNORTHCOM continues efforts to

increase international participation with Canada and Mexico. Canadian and Mexican representatives have observed Exercise UNIFIED DEFENSE.

Both Second and Third Fleet periodically conduct exercises at the operational and tactical levels that are designed to test C2 functionality as it relates to M-HLS/M-HLD in a mine warfare and E-MIO scenario. Participants generally include USN and USCG units as well as elements of the United States Federal Government and the Canadian Navy. The exercises typically involve:

1. The employment of EOD/MCM forces
2. The training of US/CN maritime forces in countermine detection/management scenario
3. Engaging interagency community to observe operations in unified command post (UCP)
4. Exercising MIW operations
5. Engaging/forcing greater intelligence flow and emphasis on intelligence scenario
6. Deploying mobile incident command center (MICP) in support of MCM operations
7. Exercising ICS in a joint USN/USCG mission in an HLS environment
8. Tactical doctrine validation of MCM in a confined environment
9. Conducting E-MIO exercises.

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REFERENCES

JP 1-02, DOD Dictionary of Military and Associated Terms.

JP 3-08, Interagency Coordination During Joint Operations.

JP 3-10, Doctrine for Rear Area Operations.

JP 3-10.1, TTP for Base Defense.

JP 3-15, Doctrine for Barriers, Obstacles, and Mine Warfare.

JP 3-57, Doctrine for Civil-Military Operations.

JP 4-01, Mobility System Policies, Procedures, and Considerations.

JP 4-01.2, TTPS for Sealift Support to Joint Operations.

JP 4-01.3, Movement Control, dated.

JP 4-01.5, TTPS for Water Terminal Operations.

JP 4-01.6, TTPS for Joint Logistics Over the Shore.

JP 5-00.2, JEFF Planning Guidance and Procedures.

NWP 1-02, Naval Supplement to the DOD Dictionary of Military and Associated Terms.

NWP 3-07, Naval Doctrine for MOOTW.

NWP 3-07.2, Antiterrorism and Force Protection.

NTTP 3-07.2.1, Antiterrorism Force Protection.

NWP 3-10 Naval Coastal Warfare.

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GLOSSARY

A

aggressor vessel. Any vessel that manifests a hostile intent against persons, facilities, or the marine environment located within the Harbor Defense Commander's area of operations. Note: This definition may fit any vessel regardless of the country of registry, ownership, charter, or crew makeup. (USCG Marine Safety Manual, Vol. VIII)

amphibious operation. A military operation launched from the sea by an amphibious force, embarked in ships or craft with the primary purpose of introducing a landing force ashore to accomplish the assigned mission. (JP 1-02)

antiterrorism. Defensive measures used to reduce the vulnerability of individuals and property to terrorist acts, to include limited response and containment by local military forces. Also called **AT.** (JP 1-02)

area of operations. An operational area defined by the joint force commander for land and naval forces. Areas of operation do not typically encompass the entire operational area of the joint force commander, but should be large enough for component commanders to accomplish their missions and protect their forces. Also called **AO.** (JP 1-02)

assault follow-on echelon. In amphibious operations, that echelon of the assault troops, vehicles, aircraft, equipment, and supplies that, though not needed to initiate the assault, is required to support and sustain the assault. In order to accomplish its purpose, it is normally required in the objective area no later than five days after the commencement of the assault landing. Also called **AFOE.** (JP 1-02)

B

base cluster. In base defense operations, a collection of bases, geographically grouped for mutual protection and ease of command and control. (JP 1-02)

blockade. A belligerent operation to prevent vessels and/or aircraft of all nations, enemy as well as neutral, from entering or exiting specified ports, airfields, or coastal areas belonging to, occupied by, or under the control of an enemy nation. A belligerent's purpose in establishing a blockade is to deny the enemy the use of enemy and neutral vessels or aircraft to transport personnel and goods from enemy territory. (NWP 1-14M)

bounded sea. Any sea space surrounded by land with restricted entry and exit routes and limited operating space. (NWP 3-10 Rev. B)

C

captain of the port. Within their jurisdictions, these USCG officers enforce port safety, security, and marine environmental protection regulations including, without limitation, regulations for the protection and security of vessels, harbors, and waterfront facilities, anchorages, warning zones, safety zones, regulated navigation areas, deep-water ports, water pollution, and ports and waterways safety. (33CFR1.0130 (a))

combat search and rescue. A specific task performed by rescue forces to effect the recovery of distressed personnel during war or military operations other than war. Also called **CSAR.** (JP 1-02)

combined operation. An operation conducted by forces of two or more allied nations acting together for the accomplishment of a single mission. (JP 1-02)

command, control, communications, and computer systems. Integrated systems of doctrine, procedures, organizational structures, personnel, equipment, facilities, and communications designed to support a commander's exercise of command and control across the range of military operations. Also called **C4 systems.** (JP 1-02)

common-user ocean terminal. A military installation, part of a military installation, or a commercial facility operated under contract or arrangement by the Military Traffic Management Command that regularly provides for two or more Services terminal functions of receipt, transit storage or staging, processing, and loading and unloading of passengers or cargo aboard ships. (JP 1-02)

controlled port. A harbor or anchorage at which entry and departure, assignment of berths, and traffic within the harbor or anchorage are controlled by military authorities. (JP 1-02)

convoy. 1. A number of merchant ships and/or naval auxiliaries usually escorted by warships and/or aircraft — or a single merchant ship or naval auxiliary under surface escort—assembled and organized for the purpose of passage together. 2. A group of vehicles organized for the purpose of control and orderly movement with or without escort protection that moves over the same route at the same time and under one commander. (JP 1-02)

convoy escort. 1. A naval ship(s) or aircraft in company with a convoy and responsible for its protection. 2. An escort to protect a convoy of vehicles from being scattered, destroyed, or captured. (JP 1-02)

coordinating authority. A commander or individual assigned responsibility for coordinating specific functions or activities involving forces of two or more Military Departments or two or more forces of the same Service. The commander has the authority to require consultation between the agencies involved, but does not have the authority to compel agreement. In the event that essential agreement cannot be obtained, the matter shall be referred to the appointing authority. Coordinating authority is a consultation relationship, not an authority through which command may be exercised. Coordinating authority is more applicable to planning and similar activities than to operations. (JP 1-02)

D

defensive coastal area. A part of a coastal area and of the air, land, and water area adjacent to the coastline within which defense operations may involve land, sea, and air forces. (JP 1-02)

defensive sea area. A sea area, usually including the approaches to and the waters of important ports, harbors, bays, or sounds, for the control and protection of shipping; for the safeguarding of defense installations bordering on waters of the areas; and for provision of other security measures required within the specified areas. It does not extend seaward beyond the territorial waters. (JP 1-02)

domestic support operations. Those activities and measures taken by the Department of Defense to foster mutual assistance and support between the Department of Defense and any civil government agency in planning or preparedness for, or in the application of resources for response to, the consequences of civil emergencies or attacks, including national security emergencies. Also called **DSO.** (JP 1-02)

E

electronic warfare. Any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. Also called **EW**. The three major subdivisions within electronic warfare are: electronic attack, electronic protection, and electronic warfare support. a. **electronic attack.** That division of electronic warfare involving the use of electromagnetic energy, directed energy, or

antiradiation weapons to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability and is considered a form of fires. Also called **EA.** EA includes: 1) actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum, such as jamming and electromagnetic deception, and 2) employment of weapons that use either electromagnetic or directed energy as their primary destructive mechanism (lasers, radio frequency weapons, particle beams). b. **electronic protection.** That division of electronic warfare involving passive and active means taken to protect personnel, facilities, and equipment from any effects of friendly or enemy employment of electronic warfare that degrade, neutralize, or destroy friendly combat capability. Also called **EP.** c. **electronic warfare support.** That division of electronic warfare involving actions tasked by, or under direct control of, an operational commander to search for, intercept, identify, and locate or localize sources of intentional and unintentional radiated electromagnetic energy for the purpose of immediate threat recognition, targeting, planning and conduct of future operations. Thus, electronic warfare support provides information required for decisions involving electronic warfare operations and other tactical actions such as threat avoidance, targeting, and homing. Also called **ES.** Electronic warfare support data can be used to produce signals intelligence, provide targeting for electronic or destructive attack, and produce measurement and signature intelligence. (JP 1-02)

electronic warfare support. See electronic warfare.

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.** (JP 1-02)

explosive ordnance disposal unit. Personnel with special training and equipment who render explosive ordnance safe (such as bombs, mines, projectiles, and booby traps), make intelligence reports on such ordnance, and supervise the safe removal thereof. (JP 1-02)

F

follow-up shipping. Ships not originally a part of the amphibious task force, but which deliver troops and supplies to the objective area after the assault phase has begun. (JP 1-02)

force protection. Actions taken to prevent or mitigate hostile actions against Department of Defense personnel (to include family members), resources, facilities, and critical information. These actions conserve the force's fighting potential so it can be applied at the decisive time and place and incorporate the coordinated and synchronized offensive and defensive measures to enable the effective employment of the joint force while degrading opportunities for the enemy. Force protection does not include actions to defeat the enemy or protect against accidents, weather, or disease. Also called **FP.** (JP 3-0)

H

harbor. A restricted body of water, an anchorage, or limited coastal water area and its mineable water approaches, from which shipping operations are projected or supported. Generally, a harbor is part of a base, in which case the harbor defense force forms a component element of the base defense force established for the local defense of the base and its included harbor. (JP 1-02)

harbor approach defense. The employment of forces to ensure the unimpeded use of an inshore coastal area, including a defensive sea area, by friendly forces and, as appropriate, to deny the use of the area to enemy forces. (NWP 3-10)

harbor defense. The defense of a harbor or anchorage and its water approaches against external threats such as: a. submarine, submarine-borne, or small surface craft attack; b. enemy minelaying operations; c. and sabotage. The defense of a harbor from guided or dropped missiles while such missiles are airborne is considered to be part of air defense. (JP 1-02)

harbor defense commander. An officer designated by the commander, joint task force or naval coastal warfare commander to conduct inshore surveillance, interdiction, vessel movement control, and waterside security operations in a port, harbor, anchorage, or designated defensive sea area. Also called **HDC.** (NWP 3-10)

haven. A safe area located in the forward operating area where ships can be staged for provisioning, repair, or to await tasking. (NWP 3-10)

high-water mark. Properly, a mark left on a beach by wave wash at the preceding high water. It does not necessarily correspond to the high-water line. Because it can be determined by simple observation, it is frequently used in place of the high-water line, which can be determined only by a survey. When so used, it is called the high-water line. (JP 1-02)

host nation. A nation that receives the forces and/or supplies of allied nations and/or NATO organizations to be located on, to operate in, or to transit through its territory. Also called **HN.** (JP 1-02)

host-nation support. Civil and/or military assistance rendered by a nation to foreign forces within its territory during peacetime, crises or emergencies, or war based on agreements mutually concluded between nations. Also called **HNS.** (JP 1-02)

I

information operations Actions taken to affect adversary information and information systems while defending one's own information and information systems. Also called **IO.** (JP 3-13)

information warfare. Information operations conducted during time of crisis or conflict to achieve or promote specific objectives over a specific adversary or adversaries. Also called **IW.** (JP 3-13)

initial response team. A composite team of active duty personnel and Selected Reserves from a naval coastal warfare unit, available for short-notice deployments in support of crisis response situations. The size of an initial response team varies with the requirement. Also called **IRT.**

inshore area. The water area adjacent to a landmass, in which the proximity and contour of the bottom or the nearby coastline influences and limits the effectiveness of deep-water assets and systems. This area normally extends seaward to a fixed distance established by the area commander, necessary to protect assets located in ports, harbors, approaches, amphibious objective areas, chokepoints, straits, and roadsteads from surface and subsurface threats. (NWP 3-10)

inshore boat unit. A deployable, armed, small craft unit that provides small craft security support for naval coastal warfare operations. (NWP 3-10)

inshore patrol. A naval defense patrol operating generally within a naval defense coastal area and comprising all elements of harbor defenses, the coastal lookout system, patrol craft supporting bases, aircraft, and USCG stations. (JP 1-02)

inshore undersea warfare. Operations conducted with the objective of denying the enemy the effective use of the inshore area.

intelligence. 1. The product resulting from the collection, processing, integration, analysis, evaluation, and interpretation of available information concerning foreign countries or areas. 2. Information and knowledge about an adversary obtained through observation, investigation, analysis, or understanding. (JP 1-02)

interdiction. An action to divert, disrupt, delay, or destroy the enemy's surface military potential before it can be effectively used against friendly forces. (JP 1-02)

in the U.S. For purposes of this publication, "in the U.S." means the United States, its territories, and adjacent territorial waters.

J

joint force. A general term applied to a force composed of significant elements, assigned or attached, of two or more Military Departments, operating under a single joint force commander. (JP 1-02)

joint force commander. A general term applied to a combatant commander, subunified commander, or joint task force commander authorized to execute combatant command (command authority) or operational control over a joint force. Also called **JFC.** (JP 1-02)

joint force maritime component commander. The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of maritime forces and assets, planning and coordinating maritime operations, or accomplishing such operational missions as may be assigned. The joint force maritime component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. Also called **JFMCC.** (JP 1-02)

Note

The joint force maritime component commander will normally be the commander with the preponderance of maritime forces and the requisite command and control capabilities.

joint logistics over-the-shore operations. Operations in which Navy and Army logistics over-the-shore (LOTS) forces conduct LOTS operations together under a joint force commander. Also called **JLOTS operations.** (JP 1-02)

joint rear area coordinator. The officer with responsibility for coordinating the overall security of the joint rear area in accordance with joint force commander directives and priorities in order to assist in providing a secure environment to facilitate sustainment, host-nation support, infrastructure development, and movements of the joint force. The joint rear area coordinator also coordinates intelligence support and ensures that area management is practiced with due consideration for security requirements. Also called **JRAC.** (JP 1-02)

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.** (JP 1-02)

L

law enforcement agency. Any of a number of agencies (outside the Department of Defense) chartered and empowered to enforce United States laws in the following jurisdictions: The United States, a state (or political subdivision) of the United States, a territory or possession (or political subdivision) of the United States, or within the borders of a host nation. Also called **LEA.** (JP 1-02)

level I threat. Threats comprised of agents, saboteurs, sympathizers, and terrorists that can be responded to with unit, base, and base cluster self-defense measures. (NWP 3-10)

level II threat. Threats from small tactical units, unconventional warfare forces, and guerrillas that can be responded to with self-defense measures and response forces(s) with supporting fires. (NWP 3-10)

level III threat. Threats from large tactical force operations, including airborne, heliborne, amphibious, infiltration, and major air operations that may have to be responded to with the timely commitment of tactical combat force. (NWP 3-10)

logistics over-the-shore operations. The loading and unloading of ships without the benefit of deep draft-capable, fixed port facilities in friendly or nondefended territory and, in time of war, during phases of theater development in which there is no opposition by the enemy; or as a means of moving forces closer to tactical assembly areas dependent on threat force capabilities. Also called **LOTS operations.** (JP 1-02)

M

marine mammal system. The employment of marine mammals by explosive ordnance disposal forces in locating, making, and recovering underwater objects, and in conducting mine countermeasures and other special operations. Also called **MMS.** (NWP 1-02)

maritime defense zone commander. One of the U.S. Navy echelon three commands, Maritime Defense Zone Atlantic and Maritime Defense Zone Pacific, responsible to their respective fleet commander for naval coastal warfare operations. Note: In Joint Chiefs of Staff rules of engagement, a geographic area for specified maritime military operations conducted outside the United States is referred to as a maritime defense zone, but is not related to Maritime Defense Zone Atlantic and Maritime Defense Zone Pacific as described in the previous sentence.

maritime interception operation. Means by which an exclusion zone at sea is enforced. Involves the visit of merchant ships, by armed boarding parties if necessary, bound to, through, or out of a defined area, to examine each ship's papers and cargo and to search for evidence of contraband. The provisions must be established by a sanctioning body and must be applied to ships of all nationalities. (NWP 1-02)

maritime pre-positioning force. A task organization of units under one commander formed for the purpose of introducing a Marine air-ground task force and its associated equipment and supplies into a secure area. The maritime pre-positioning force is composed of a command element, a maritime pre-positioning ships squadron, a Marine air-ground task force, and a Navy support element. Also called **MPF.** (NWP 1-02)

maritime pre-positioning ships. Civilian-crewed, Military Sealift Command-chartered ships that are organized into three squadrons and are usually forward-deployed. These ships are loaded with pre-positioned equipment and 30 days of supplies to support three Marine expeditionary brigades. Also called **MPS.** (JP 1-02)

merchant ship control zone. A defined area of sea or ocean inside which it may be necessary to offer guidance, control, and protection to Allied shipping. (JP 1-02)

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.** (JP 1-02)

mine countermeasures. All methods for preventing or reducing damage or danger from mines. Also called **MCM.** (JP 1-02)

mine warfare. The strategic, operational, and tactical use of mines and mine countermeasures. Mine warfare is divided into two basic subdivisions: the laying of mines to degrade the enemy's capabilities to wage land, air, and maritime warfare; and the countering of enemy-laid mines to permit friendly maneuver or use of selected land or sea areas. Also called **MIW.** (JP 1-02)

mine warfare forces (naval). Naval forces charged with the strategic, operational, and tactical use of naval mines and their countermeasures. Such forces are capable of offensive and defensive measures in connection with laying and clearing mines. (JP 1-02)

mobile ashore support terminal. A self-contained, modular-design, transportable command, control, communications, computers and intelligence (C4I) system that can be rapidly deployed on a C-130 aircraft and

made operational in 2 to 3 hours by a crew of six. A mobile ashore support terminal (MAST) provides an initial C4I capability for a naval component commander, joint task force commander, or naval detachment operating ashore. MAST capabilities include a comprehensive communications suite: UHF/VHF, satellite communications and associated crypto gear; a command, control and intelligence capability: Joint Maritime Command Information System/Global Command and Control System, global positioning system, and an integrated briefing system. (NWP 3-10). MAST systems come in several variants including MAST I, MAST II, MAST II+ and JMAST, each with slightly different capabilities beyond the core systems described above.

mobile inshore undersea warfare unit. A Navy surveillance unit that provides seaward security to joint logistics over-the-shore operations from either a port or harbor complex or unimproved beach sites. The mobile inshore undersea warfare unit is equipped with mobile radar, sonar, and communications equipment located within a mobile van. Also called **MIUWU.** (JP 1-02)

mobile sensor platform. A high mobility multi-purpose wheeled vehicle with telescoping radar and other sensors; used by a mobile inshore undersea warfare unit. (NWP 3-10)

N

naval coastal warfare. Coastal sea control, harbor defense, and port security, executed both in coastal areas outside the United States in support of national policy and in the United States as part of this nation's defense. Also called **NCW.** (JP 1-02)

naval coastal warfare area. An assigned geographic area of responsibility that includes offshore waters, harbor approaches, harbors, ports, waterfront facilities, and those internal waters and rivers that provide access to port facilities. (JP 1-02)

naval coastal warfare commander. An officer designated to conduct naval coastal warfare missions within a designated naval coastal geographic area. Also called **NCWC.** (JP 1-02)

naval coastal warfare group. Staff units providing both operational and administrative oversight to assigned harbor defense command units. Deployable command and control staff whose core competency is to provide staff elements to a naval coastal warfare commander. Also called **NCWGRU.** (NWP 3-10)

naval component commander. The commander of a naval component assigned or attached to a joint force (unified command) constituted and so designated by the Joint Chiefs of Staff or by a commander of an existing unified command that was established by the Joint Chiefs of Staff. Also called **NCC.** (NWP 1-02).

naval control of shipping organization. The organization within the Navy that carries out the specific responsibilities of the Chief of Naval Operations to provide for the control and protection of movements of merchant ships in time of war. Also called **NCSORG.** (JP 1-02)

naval vessel protection zone. A 500-yd regulated area of water surrounding large U.S. naval vessels that is necessary to provide for the safety or security of these U.S. naval vessels. (33 CFR Part 165 Sec. 165.2015)

Note

NVPZs apply in the navigable waters of the United States only.

O

offshore patrol. A naval defense patrol operating in the outer areas of navigable coastal waters. It is a part of the naval local defense forces consisting of naval ships and aircraft and operates outside those areas assigned to the inshore patrol. (JP 1-02)

P

point defense. The defense or protection of special vital elements and installations; e.g., command and control facilities or air bases. This could also include strategic sealift vessels, naval vessels, and port facilities. (JP 1-02)

port. A place at which ships may discharge or receive their cargoes. It includes any port accessible to ships on the seacoast, navigable rivers, or inland waterways. The term "ports" should not be used in conjunction with air facilities that are designated as aerial ports, airports, etc.

port complex. A port complex comprises one or more port areas of varying importance whose activities are geographically linked either because these areas are dependent on a common inland transport system or because they constitute a common initial destination for convoys. (JP 1-02)

port safety. The safeguarding of vessel, harbors, ports, and waterfront facility from accidents, negligence, civil disturbance, and disasters. (NWP 3-10)

port security. The safeguarding of vessels, harbors, ports, waterfront facilities, and cargo from internal threats such as destruction, loss, or injury from sabotage or other subversive acts: accidents; thefts; or other causes of a similar nature. (JP 1-02)

port security unit. A deployable USCG unit equipped with heavily armed, airlift deployable, small boat assets that provide waterborne point defense for the protection of high value assets.

Posse Comitatus Act. Prohibits search, seizure, or arrest powers to U.S. military personnel. Amended in 1981 under Public Law 97-86 to permit increased Department of Defense support of drug interdiction and other law enforcement activities. (Title 18, Use of Army and Air Force as Posse Comitatus, U.S. Code, Section 1385) (JP 1-02)

Presidential Reserve Callup Authority. Provision of a public law (U.S. Code, Title 10 (DOD), section 12304) that provides the President a means to activate, without a declaration of national emergency, not more than 200,000 members of the Selected Reserve and the Individual Ready Reserve (of whom not more than 30,000 may be members of the Individual Ready Reserve), for not more than 270 days to meet the support requirements of any operational mission. Members called under this provision may not be used for disaster relief or to suppress insurrection. This authority has particular utility when used in circumstances in which the escalatory national or international signals of partial or full mobilization would be undesirable. Forces available under this authority can provide a tailored, limited-scope, deterrent, or operational response, or may be used as a precursor to any subsequent mobilization. Also called PRCA. (JP 1-02)

protection of shipping. The use of proportionate force by U.S. warships, military aircraft, and other forces, when necessary for the protection of U.S. flag vessels and aircraft, U.S. citizens (whether embarked in U.S. or foreign vessels), and their property against unlawful violence. This protection may be extended (consistent with international law) to foreign flag vessels, aircraft, and persons. (JP 1-02)

R

radar sonar surveillance center. The mobile inshore undersea warfare unit tactical operations center. It is a military standard 8 x 8 x 20–foot van that contains surveillance sensor, communications, and command and control equipment. (NWP 3-10)

rear area. For any particular command, the area extending forward from its rear boundary to the rear of the area of responsibility of the next lower level of command. This area is provided primarily for the performance of support functions. (JP 1-02)

reconnaissance. A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or potential enemy, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area. Also called **RECON.** (JP 1-02)

regulated navigation area. A water area within a defined boundary for which regulations for vessels navigating within the area have been established. (33 CFR)

S

sabotage. An act or acts with intent to injure, interfere with, or obstruct the national defense of a country by willfully injuring or destroying, or attempting to injure or destroy, any national defense or war material, premises, or utilities, to include human or natural resources. (JP 1-02)

safe anchorage. An anchorage considered safe from enemy attack to which merchant ships may be ordered to proceed when the shipping movement policy is implemented. (JP 1-02)

safety zone. 1. A water area, shore area, or water and shore area to which, for safety or environmental purposes, access is limited to authorized persons, vehicles, or vessels. It may be stationary and described by fixed limits or it may be described as a zone around a vessel in motion. (33CFR165, sub part c) 2. An area (land, sea, or air) reserved for noncombat operations of friendly aircraft, surface ships, submarines or ground forces. (Note: DOD does not use the word “submarines.”) (JP 1-02)

seaport of debarkation. The port at which cargo or personnel are discharged. Also called **SPOD.**

seaport of embarkation. The port in a routing scheme from which cargo or personnel depart to a seaport of debarkation. For unit and nonunit requirements, it may not coincide with the origin. Also called **SPOE.**

search and rescue. The use of aircraft, surface craft (land or water), submarines, specialized rescue teams, and equipment to search for and rescue personnel in distress on land or at sea. Also called **SAR.** (JP 1-02)

security zone. 1. An area of land, water, or land and water that is so designated by the Captain of the Port or district commander for such time as is necessary to prevent damage or injury to any vessels or waterfront facility; to safeguard ports, harbors, territories, or waters of the United States; or to secure the observance of the rights and obligations of the United States. 2. The purpose of a security zone is to safeguard from destruction, loss, or injury from sabotage or other subversive acts, accidents, or other causes of a similar nature: vessels, harbors, ports, and waterfront facilities in the United States and all territory and water, continental or insular, that is subject to the jurisdiction of the United States. (33 CFR 165, sub part d)

shallow water. For the conduct of inshore undersea warfare, shallow water is the water mass extending from the mean high-water mark ashore to the 100-fathom curve seaward. (NWP 3-10)

special boat unit. Those United States Navy forces organized, trained, and equipped to conduct or support naval special warfare, riverine warfare, coastal patrol and interdiction, and joint special operations with patrol boats or other combatant craft designed primarily for special operations support. Also called **SBU.** (JP 1-02)

statutory authority. For purposes of this doctrine, statutory authority refers to the statutory and regulatory powers vested in the USCG under the United States Code and the regulations promulgated under those statutes.

strategic sealift. The afloat pre-positioning and ocean movement of military material in support of U.S. and multinational forces. Sealift forces include organic and commercially acquired shipping and shipping services, including chartered foreign-flag vessels and associated shipping services. (JP 1-02)

supported commander. 1. The commander having primary responsibility for all aspects of a task assigned by the Joint Strategic Capabilities Plan or other joint operation planning authority. In the context of joint operation planning, this term refers to the commander who prepares operation plans or operation orders in response to requirements of the Chairman of the Joint Chiefs of Staff. 2. In the context of a support command relationship, the commander who receives assistance from another commander's force or capabilities, and who is responsible for ensuring that the supporting commander understands the assistance required. (JP 1-02)

supporting commander. 1. A commander who provides augmentation forces or other support to a supported commander or who develops a supporting plan. Includes the designated combatant commands and Defense agencies as appropriate. 2. In the context of a support command relationship, the commander who aids, protects, complements, or sustains another commander's force, and who is responsible for providing the assistance required by the supported commander. (JP 1-02)

Surface Deployment and Distribution Command. A major command of the U.S. Army, and the U.S. Transportation Command's component command responsible for designated continental U.S. land transportation as well as common-user water terminal and traffic management service to deploy, employ, sustain, and redeploy U.S. forces on a global basis. Formerly called Military Management Traffic Command (MTMC).

surveillance. The systematic observation of aerospace, surface, or subsurface areas, places, persons, or things by visual, aural, electronic, photographic, or other means. (JP 1-02)

T

terrorism. The calculated use of unlawful violence or threat of unlawful violence to inculcate fear; intended to coerce or to intimidate governments or societies in the pursuit of goals that are generally political, religious, or ideological. (JP 1-02)

time-phased force and deployment data. The Joint Operation Planning and Execution System (JOPES) database portion of an operation plan; it contains time-phased force data, non-unit-related cargo and personnel data, and movement data for the operation plan, including: 1. In-place units. 2. Units to be deployed to support the operation plan with a priority indicating the desired sequence for their arrival at the port of debarkation. 3. Routing of forces to be deployed. 4. Movement data associated with deploying forces. 5. Estimates of non-unit-related cargo and personnel movements to be conducted concurrently with the deployment of forces. 6. Estimate of transportation requirements that must be fulfilled by common-user lift resources as well as those requirements that can be fulfilled by assigned or attached transportation resources. Also called **TPFD.** (JP 1-02)

W

waterfront facility. All piers, wharves, docks, and similar structures to which vessels may be secured; areas of land, water, or land and water under and in immediate proximity to them; buildings on such structures or contiguous to them; and equipment or materials on such structures or in such buildings. (33 CFR 126.01)

waterside security. Measures or actions taken to prevent or guard against the use of a waterside approach to a waterfront facility or vessel by persons or vessels intent on theft, sabotage, terrorism, and/or belligerent acts. (USCG Marine Safety Manual, Vol. VII)

water terminal. A facility for berthing ships simultaneously at piers, quays, and/or working anchorages, normally located within sheltered coastal waters adjacent to rail, highway, air, and/or inland water transportation networks. (JP 1-02)

weapons of mass destruction. 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. Weapons of mass destruction can be high explosives or nuclear, biological, chemical, and radiological weapons, but exclude the means of transporting or propelling the weapon where such means is a separable and divisible part of the weapon. Also called **WMD.** (JP 1-02)

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LIST OF ACRONYMS AND ABBREVIATIONS

ACU	assault craft unit
ADA	air defense artillery
ADCON	administrative control
ADP	automated data processing
ADVON	advanced echelon
AESOP	Afloat Electromagnetic Spectrum Operations Program
AFMIC	Armed Forces Medical Intelligence Center
AFOE	assault follow-on echelon
AFOSI	Air Force Office of Special Investigations
AIS	automated identification system
ALSS	advanced logistic support site
AMC	Air Mobility Command
AMCM	airborne mine countermeasures
AMEMB	American Embassy
AMW	amphibious warfare
AO	area of operations
AOR	area of responsibility
APOD	aerial port of debarkation
APOE	aerial port of embarkation
ASD	area search detachment
ASW	antisubmarine warfare
AT	antiterrorism
ATCON	antiterrorism condition
ATF	amphibious task force
AT/FP	antiterrorism/force protection
ATS	automated targeting system

BDA	battle damage assessment
C2	command and control
C2ISR	command, control, intelligence, surveillance, and reconnaissance
C3	command, control, and communications
C4I	command, control, communications, computers, and intelligence
C4ISR	command, control, communications, computers, intelligence, surveillance, and reconnaissance
C4S	command, control, communications, and computer systems
CA	civil affairs
CAP	crisis action planning
CATF	commander, amphibious task force
CBP	customs and border protection
CBRNE	chemical, biological, radiological, nuclear and high-yield explosive
CCD	charge coupled device
CCOI	critical contact of interest
CCTV	closed circuit television
CDC	certain dangerous cargoes
CESE	civil engineering support equipment
CFR	Code of Federal Regulations
CG	Coast Guard
CGFOREAST/WEST	Coast Guard Forces East and West
CGIS	Coast Guard Investigative Service
CGO	cargo (vessel)
CHB	cargo handling battalion
CI	counterintelligence
CIA	Central Intelligence Agency
CIC	combat information center
CID	criminal investigation division

CIWS	close-in weapons system
CJTF	commander, joint task force
CLF	combat logistics force
CND	computer network defense
CNO	Chief of Naval Operations
CNVA	computer network vulnerability assessment
CO	commanding officer
COA	course of action
COCOM	combatant commander
CODEL	congressional delegation
COG	chief of the guard
COI	contact of interest
COM	collection operations management
COMARFPCOM	Commander, Maritime Force Protection Command
COMDT COGARD	Commandant, United States Coast Guard
COMDTINST	Commandant, United States Coast Guard Instruction
COMLANTFLT	Commander, United States Atlantic Fleet
COMNAVSURFLANT	Commander, Naval Surface Force, Atlantic
COMNCWGRU	Commander, Naval Coastal Warfare Group
COMPACFLT	Commander, United States Pacific Fleet
COMPHIBGRU	Commander, Amphibious Group
COMSEC	communications security
COMTAC	tactical communications
CONOPS	concept of operations
CONPLAN	contingency plan
CONR	continental region
CONUS	continental United States
COOP	craft of opportunity

COP	common operational picture
COTP	captain of the port
CR	collection requirement
CR-I	crisis response-immediate
CRM	collection requirements management
CS	orthochlorbenzalmalononitrile
CSAR	combat search and rescue
CSI	Container Security Initiative
CSOM	Computer System Operator Manual
CSSD	combat service support detachment
CT	counterterrorism
CTC	cargo transfer company (USA), or counterterrorist center
CTF	combined task force
CTG	commander, task group
CTM	class tactical manual
CTP	common tactical picture
C-TPAT	Customs-Trade Partnership Against Terrorism
CTT	cryptologic technician, technical
CUDIXS	common user digital information exchange system
DAO	Defense Attaché Office
DD	destroyer (Navy ship)
DDG	guided missile destroyer
DHS	Department of Homeland Security
DIA	Defense Intelligence Agency
DIW	dead in the water
DOD	Department of Defense
DON	Department of the Navy
DOS	Department of State

DOT	Department of Transportation
DOWW	Disease Occurrence Worldwide Report
DR	detection range
DSA	defensive sea area
DST	domestic support team
DV	distinguished visitor
ECP	entry control point
EDD	explosive detector dog
EEFI	essential elements of friendly information
EEZ	exclusive economic zone
EM	electromagnetic
EMCON	emission control
EMI	electromagnetic interference
E-MIO	expanded maritime interception operations
EO	electro-optics
EOD	explosive ordnance disposal
EO-IR	electro-optical-infrared
EPA	Environmental Protection Agency
EPW	enemy prisoner of war
ES	electronic warfare support (previously ESM)
ET	Electronics Technician (rating)
EW	electronic warfare
EXORD	exercise order
FAST	fleet antiterrorist security team
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FFG	guided missile frigate
FIST	Field Intelligence Support Teams

FIWC	Fleet Information Warfare Center
FLIR	forward-looking infrared
FLS	forward logistic site
FM	field manual
FO	fiber optic
FORSCOM	United States Army Forces Command
FOTC	force over-the-horizon track coordinator
FP	force protection
FPCON	force protection condition
FPO	force protection officer
FRP	Federal response plan
FSP	facility security plan
ft	feet, foot
G-2	Army or Marine Corps component intelligence staff officer
GCCS	Global Command and Control System
GCCS-K	Global Command and Control System-Korea
GCCS-M	Global Command and Control System-Maritime
GDFS	graphical data fusion system
GEOPOINT	geographic reference point
GPS	global positioning system
HA	humanitarian assistance
HAD	harbor approach defense
HAZMAT	hazardous materials
HD	harbor defense
HDC	harbor defense commander
HF	high frequency
HFDF	high frequency direction finding
HIV	high interest vessel

HLD	homeland defense
HLS	homeland security
HMMWV	high mobility multipurpose wheeled vehicle
HN	host nation
HNS	host-nation support
HQ	headquarters
HSAS	Homeland Security Advisory System
HSS	health service support
HUMINT	human intelligence
HVA	high value asset
HVU	high value unit
I&E	intercept and escort
I&W	indications and warning
IAD	intelligence augmentation detachment
IAMSAR	International Aeronautical and Maritime Search and Rescue
IAP	incident action plan
IAT	intelligence augmentation team
IAW	in accordance with
IBU	inshore boat unit
ICC	integrated command center
ICO	interface control officer
ICS	incident command system
IDS	intrusion detection system
IED	improvised explosive device
IMINT	imagery intelligence
INMARSAT	international maritime satellite
IO	information operations
IOS	International Organization of Standardization

IPB	intelligence preparation of the battlespace
IRT	Initial Response Team
IS	intelligence specialist
ISI	initial safety inspection
ISIC	immediate superior in command
ISPFS	International Ship and Port Facility Security
ISR	intelligence, surveillance, and reconnaissance
IUW	inshore undersea warfare
IW	information warfare
J-2	intelligence directorate of a joint staff
JCS	Joint Chiefs of Staff
JEL	Joint Electronic Library
JFC	joint force commander
JFMCC	joint force maritime component commander
JHOC	joint harbor operations center
JIATF	joint interagency task force (DOD)
JLOTS	joint logistics over-the-shore
JMCIS	joint maritime command information system
JOA	joint operations area
JOPES	Joint Operation Planning and Execution System
JP	joint publication
JRAC	joint rear area coordinator
JSCP	Joint Strategic Capabilities Plan
JTF-CS	Joint Task Force-Civil Support
KAPP	Key Asset Protection Program
kt	knot
kw	kilowatt
LAN	local area network

LASS	light array sensor system
LCAC	landing craft air cushion
LCM	landing craft, mechanized
LCU	landing craft, utility
LE	law enforcement
LEA	law enforcement agency
LEDET	Law Enforcement Detachment (USCG)
LEO	law enforcement operations
LFA	lead federal agency
LNO	liaison officer
LOAC	law of armed conflict
LOC	line of communications
LOFAR	low frequency analysis and recording
LOGREQ	logistics requirement
LOI	letter of instruction
LOS	line of sight
LOTS	logistics over-the-shore
LOW	law of war
LSO	landward security officer
LZ	landing zone
MAA	Master-at-Arms
MAGTF	Marine air-ground task force
MARAD	Maritime Administration
MARDEFCOM	maritime defense command
MAST	mobile ashore support terminal
MCD	mobile communications detachment
MCM	mine countermeasures
MDA	maritime domain awareness

MDR	median detection range
MDSU	mobile diving and salvage unit
MDZ	maritime defense zone
MDZLANT	Maritime Defense Zone Atlantic
MDZPAC	Maritime Defense Zone Pacific
MEDEVAC	medical evacuation
MEP	marine environmental protection
MER	merchant vessel
MET	mobile environmental team
METOC	meteorological and oceanographic
MHC	minehunter, coastal
M-HLD	maritime homeland defense
MHE	materials handling equipment
M-HLS	maritime homeland security
MICP	mobile incident command center
MIFC	Maritime Intelligence Fusion Center
MILDEC	military deception
MIO	maritime interception operations
MIUW	mobile inshore undersea warfare
MIUWU	mobile inshore undersea warfare unit
ML&S	mine location and scoring
MMS	marine mammal system
MOA	memorandum of agreement
MOL	military outload
MOOTW	military operations other than war
MPA	maritime patrol aircraft
MPF	maritime pre-positioning force
MPS	maritime pre-positioning ship

MRE	meal, ready to eat
MSC	Military Sealift Command
MSCA	military support to civil authorities
MSD	mobile security detachment
MSO	marine safety office(r)
MSP	mobile sensor platform
MSR	main supply route
MSS	mobile security squadron
MSSS	Modular Sensor String Suite
MSST	maritime safety and security team
MTN	multitactical digital information link network
MTSA	Maritime Transportation Security Act
MWD	military working dog
MWR	morale, welfare, and recreation
N-2	Navy component intelligence staff officer
NAO	National Shipping Authority Allocation Order
NAVCIRT	Navy Computer Incident Response Team
NAVMACS	Navy Modular Automated Communications System
NAVOCEANO	Naval Oceanographic Office
NBG	naval beach group
NCAPS	naval coordination and protection of shipping
NCC	naval component commander
NCIS	Naval Criminal Investigative Service
NCO	noncombat operations
NCP	national contingency plan
NCS	naval control of shipping
NCSORG	naval control of shipping organization
NCW	naval coastal warfare

NCWC	naval coastal warfare commander
NCWGRU	naval coastal warfare group
NCWRON	naval coastal warfare squadron
NEO	noncombatant evacuation operation
NGIA	National Geospatial Intelligence Agency
NGO	nongovernmental organization
NIIMS	National Interagency Incident Management System
NIMA	National Imagery and Mapping Agency
nm	nautical mile
NMIC	National Maritime Intelligence Center
NMS	National Military Strategy
NNFE	Navy North Fleet East
NOD	night observation device
NORAD	North American Aerospace Defense Command
NORTHCOM	Northern Command
NPRN	national port readiness network
NRIP	Naval Reserve Intelligence Program
NSE	Navy support element
NSGI	National System for Geospatial Intelligence
NSPO	National Shipping Authority Service Priority Order
NSS	National Search and Rescue Supplement
NSSE	national special security event
NTC	National Targeting Center
NTCS-A	Navy Tactical Command System Afloat
NTDS	naval tactical data system
NTRP	Navy tactical reference publication
NTTP	Navy tactics, techniques, and procedures
NVG	night vision goggle

NVPZ	naval vessel protection zone
NVS	night vision sight
NVPZ	naval vessel protection zone
NWDC	Navy Warfare Development Command
NWP	Navy warfare publication
OC	oleoresin capsicum
OCONUS	outside the continental United States
OIC	officer in charge
ONI	Office of Naval Intelligence
OOD	officer of the deck
OP	observation post
OPAREA	operating area
OPCEN	operations center (USCG)
OPCON	operational control
OPINTEL	operational intelligence
OPLAN	operation plan
OPNAV	Office of the Chief of Naval Operations
OPNAVINST	Chief of Naval Operations Instruction
OPNOTE	operational notice
OPORD	operation order
OPSEC	operations security
OPTASK	operation task
OPTEMPO	operating tempo
OS	operations specialist
OSC	on-scene commander
OTC	officer in tactical command
OTCIXS	officer in tactical command information exchange system
OTH	over the horizon

PA	public affairs
PAO	public affairs officer
PC	patrol coastal (ship)
PCA	Posse Comitatus Act
PCBT	postive control boarding teams
PCIP	Protection of Critical Infrastructure Program
PCT	patrol cycle time
PD	point defense
PIR	priority intelligence requirement
PLAD	plain language address directory
PLANORD	planning order
PLS	phone locator system
PND	Ports for National Defense
POC	point of contact
POE	projected operating environment
POL	petroleum, oil, and lubricants
PPO	port planning order
PR	production requirement
PRC	port readiness committee
PRCA	Presidential Reserve Callup Authority
PSC	port security company
PSS	port security specialist
PSHD	port security and harbor defense
PSP	portable sensor platform
PSU	port security unit
PSYOP	psychological operations
PVO	private volunteer organization
PWCS	ports, waterways, and coastal security

RC	Reserve Component
RF	radio frequency
RFI	request for information
RHIB	rigid hull inflatable boat
RICO	region interface control officer
ROC	required operational capability
ROE	rules of engagement
RPG	rocket-propelled grenade
RUF	rules for the use of force
RSSC	radar/sonar surveillance center
SALUTE	size, activity, location, unit, time, and equipment
SAM	surface-to-air missile
SAR	search and rescue
SATCOM	satellite communications
SAU	stand-alone unit
SBDS	small boat deployment system
SBU	special boat unit
SCONUM	ship control number
SCOOP	submarine continuity of operations
SCP	shipping control point
SCT	shipping control team
SCUBA	self-contained underwater breathing apparatus
SDDC	Surface Deployment and Distribution Command
SDDC-DSC	Surface Deployment and Distribution Command-Deployment Support Command
SDDC-TEA	Surface Deployment and Distribution Command-Transportation Engineering Agency
SDV	submerged delivery vehicle
SEAL	sea-air-land team
SELRES	Selected Reserve

SG	strike group
SIGINT	signals intelligence
SINCGARS	single-channel ground and airborne radio system
SIPRNET	SECRET Internet Protocol Router Network
SIV	special interest vessel
SJA	Staff Judge Advocate
SLOC	sea line of communications
SLRP	survey, liaison, and reconnaissance party
SMCM	surface mine countermeasures
SMEAC	situation, mission, execution, administration and logistics, command and signal
SOA	speed of advance
SOE	schedule of events
SOFA	status-of-forces agreement
SOLAS	safety of life at sea
SOP	standard operating procedure
SPOD	seaport of debarkation
SPOE	seaport of embarkation
SROE	standing rules of engagement
SSAS	Ship Security Alert System
SSO	seaward security officer
SSS	Sonobuoy Sensor System
STARC	state area coordinators
STG	sonar technician
SUW	surface warfare
TAC	tactical advanced computer
TACLET	tactical law enforcement team
TACON	tactical control
TACSUP	tactical supervisor

TADIL	tactical digital information link
TALCE	tanker airlift control element
TAO	tactical actions officer
TAR	Training and Administration of the Reserve
TF	task force
THREATCON	terrorist threat condition
TIS	thermal imaging system
TOA	table of allowance
TPFDD	time-phased force and deployment data
TPSB	transportable port security boat
Ts	target speed
TTB	transportation terminal battalion
TTP	tactics, techniques, and procedures
TTY	teletype
TWIC	Transportation Workers Identity Card
TYCOM	type commander
UCP	unified command post
UHF	ultrahigh frequency
UN	United Nations
UNAAF	Unified Action Armed Forces
UNK	unknown vessel
U.S.	United States
USCG	United States Coast Guard
USG	United States Government
USJFCOM	United States Joint Forces Command
USMC	United States Marine Corps
USN	United States Navy
USNAVNORTH	United States Naval Forces North

USNORTHCOM	United States Northern Command
USNR	United States Navy Reserve
UWD	unambiguous warning device
VBSS	visit, board, search, and seizure
VHF	very high frequency
VID	visual identification information display
VIS	visual imaging system
VTS	vessel traffic service
VTSS	Vessel Traffic Separation Services
WBGP	waterborne guard post
WHEC	high-endurance cutter (USCG)
WILCO	will comply
WLB	buoy tender (USCG)
WMD	weapons of mass destruction
WMEC	Coast Guard medium-endurance cutter
WPB	Coast Guard patrol boat
yd	yard

LIST OF EFFECTIVE PAGES

Effective Pages	Page Numbers
APR 2005	1 thru 26
APR 2005	1-1 thru 1-8
APR 2005	2-1 thru 2-10
APR 2005	2A-1 thru 2A-4
APR 2005	3-1 thru 3-18
APR 2005	4-1 thru 4-16
APR 2005	5-1 thru 5-12
APR 2005	6-1 thru 6-24
APR 2005	7-1 thru 7-6
APR 2005	8-1 thru 8-6
APR 2005	9-1 thru 9-16
APR 2005	10-1 thru 10-20
APR 2005	A-1 thru A-4
APR 2005	B-1, B-2
APR 2005	C-1 thru C-6
APR 2005	D-1, D-2
APR 2005	E-1 thru E-8
APR 2005	F-1, F-2
APR 2005	G-1 thru G-8
APR 2005	H-1 thru H-4
APR 2005	I-1 thru I-12
APR 2005	J-1 thru J-8
APR 2005	K-1 thru K-4
APR 2005	L-1 thru L-4
APR 2005	M-1, M-2
APR 2005	N-1 thru N-6
APR 2005	O-1 thru O-6
APR 2005	P-1, P-2
APR 2005	Q-1 thru Q-4
APR 2005	R-1 thru R-20
APR 2005	References-1, References-2
APR 2005	Glossary-1 thru Glossary-12
APR 2005	LOAA-1 thru LOAA-18
APR 2005	LEP-1, LEP-2

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NTTP 3-10.1
APR 2005