



Draft

Environmental Impact Statement /  
Overseas Environmental Impact Statement

**GUAM AND CNMI MILITARY RELOCATION**

Relocating Marines from Okinawa,  
Visiting Aircraft Carrier Berthing, and  
Army Air and Missile Defense Task Force

**Volume 1: Overview of Proposed Actions and Alternatives**

November 2009

Comments may be submitted to:

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**DRAFT**  
**ENVIRONMENTAL IMPACT STATEMENT/  
OVERSEAS ENVIRONMENTAL IMPACT STATEMENT (EIS/OEIS)**

**Lead Agency:** Department of the Navy  
**Title of Proposed Action:** Guam and Commonwealth of the Northern Mariana Islands (CNMI)  
Military Relocation  
**Affected Jurisdictions:** Guam, CNMI  
**Designation:** EIS/OEIS

**Abstract**

The National Environmental Policy Act of 1969 requires federal agencies to examine the environmental effects of their proposed actions. On behalf of the Department of Defense, the Department of the Navy is preparing this Draft EIS/OEIS to assess the potential environmental effects associated with the proposed military activities. The Navy is the lead agency for preparation of this Draft EIS/OEIS. The Office of the Secretary of Defense directed the Navy to establish a Joint Guam Program Office that serves as the NEPA proponent of the proposed actions. A number of federal agencies were invited to be cooperating agencies in the preparation of this Draft EIS/OEIS. These agencies have either jurisdiction or technical expertise for certain components of the proposed actions or a potentially affected resource. The agencies that have accepted the invitation to participate as cooperating agencies are United States (U.S.) Fish and Wildlife Service, Department of Transportation Federal Highways Administration, Federal Aviation Administration, U.S. Environmental Protection Agency Region 9, U.S. Office of Insular Affairs, U.S. Department of Agriculture, U.S. Army Corps of Engineers, and U.S. Air Force.

The proposed actions are complex, multi-service projects involving components of the U.S. Marine Corps, Navy, and Army. Each volume evaluates a discrete portion of the proposed actions. Volume 1 presents an overview of the proposed actions and alternatives. The analyses presented in Volumes 2 through 6 each include the details of alternatives and a no-action alternative. The no-action alternative represents status quo. The proposed actions would not occur and there would be no changes to military facilities, training or operations, in Guam and on Tinian. Volume 2 analyzes the effects of the proposed facilities and infrastructure to accommodate the Marine Corps relocation to Guam, including the associated training and operations on Guam. Volume 3 analyzes the effects of the proposed facilities and infrastructure for the Marine Corps, including operations and training on Tinian in the CNMI. Volume 4 analyzes the effects of the Navy's proposed deep-draft port with shoreside improvements creating a new capability in Apra Harbor, Guam, to support a transient nuclear-powered aircraft carrier. Volume 5 analyzes the proposed site of the Army's Air and Missile Defense Task Force. Volume 6 evaluates related actions such as utilities and roadway projects on Guam. Volume 7 summarizes the best management practices, potential mitigation measures, and preferred alternatives' impacts from Volumes 2 through 6. In addition, Volume 7 includes an assessment of cumulative impacts. Volume 8 presents other environmental and regulatory considerations that were evaluated and addressed.

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**November 2009**

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# Guam and CNMI Military Relocation EIS/OEIS

## Volume 1: Overview of Proposed Actions and Alternatives

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# CHAPTER 1.

## PURPOSE OF AND NEED FOR ACTION

### 1.1 INTRODUCTION

This Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) was prepared in compliance with the National Environmental Policy Act (NEPA) (42 United States Code § 4321, as amended); the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (Title 40 Code of Federal Regulations [CFR] §§ 1500–1508, July 1, 1986); and the United States (U.S.) Department of the Navy (Navy) Procedures for Implementing NEPA (32 CFR § 775).

Under customary international law, U.S. territory generally extends into the ocean a distance of 3 nautical miles (nm) (5.63 kilometer [km]) from the coastline. By Presidential Proclamation 5928, issued December 27, 1988, the U.S. extended its exercise of sovereignty and jurisdiction under international law to 12 nm (22.2 km). The Navy policy has been to apply the NEPA to the 12 nm (22.2 km) limit established by the Proclamation. Impacts within these boundaries are subjected to analysis under the NEPA. Actions with the potential to significantly harm the environment beyond U.S. territorial waters (i.e., beyond 12 nm [22.2 km]) must be analyzed using the procedures set forth in Executive Order (EO) 12114 and associated implementing regulations. An impact statement prepared under EO 12114 is identified as Overseas Environmental Impact Statement (OEIS).

The Notice of Intent to prepare an EIS published in the Federal Register identified this document as an EIS/OEIS and it was similarly identified at the public scoping meetings in order to ensure that alternatives, whether inside or outside the territorial seas, would be analyzed in the same document. This inclusive approach required compliance with both EO 12114 and NEPA regulations.

As the proposed actions were more fully developed through public scoping and subsequent refinement of requirements, as discussed in Volume 3, only routine vessel and aircraft transit activities between Guam and Tinian are proposed to occur outside the geographic scope of NEPA. The character of these activities has been studied and determined not to have the potential to significantly harm the global commons. Therefore, only NEPA requirements are applicable to the proposed actions since no activities trigger coverage by EO 12114. The document through this draft remains labeled as an EIS/OEIS. It will be re-titled as an EIS in the final and developed solely under NEPA, if no additional information to the contrary is revealed during the public comment process.

An illustration of the EIS/OEIS organization is presented in the Reader's Guide. A list detailing the organization of the EIS/OEIS is provided below:

#### **Chapter 1:**

- 1.1 Introduction*
- 1.2 Existing Military In The Marianas*
- 1.3 Purpose and Need*
- 1.4 Global Perspective Background*
- 1.5 Decisions To Be Made*
- 1.6 Site Specific Analysis vs. Analysis of Long-term Projects*
- 1.7 Summary of Action Alternatives*
- 1.8 National Environmental Policy Act and Executive Order 12114 Compliance*
- 1.9 Agency Coordination*
- 1.10 Sustainability*
- 1.11 Documents Incorporated by Reference*

- *Volume 1: Overview of the Proposed Actions and Alternatives.* This volume includes the executive summary, overarching purpose of and need for all actions, a brief description of military facilities and associated training on Guam and Commonwealth of Northern Mariana Islands (CNMI), and a summary of alternatives.
- *Volume 2: Marine Corps Relocation – Guam.* This volume provides resource-specific information about existing conditions on Guam, a description of the purpose and need for the action, a description of reasonable alternatives including the proposed action, impact analysis, and identifies and discusses mitigation measures.
- *Volume 3: Marine Corps Relocation – Training on Tinian.* This volume provides resource-specific information about existing conditions in the Commonwealth of the Northern Mariana Islands (CNMI), a description of the purpose and need for the action, a description of reasonable alternatives, provides an impact analysis, and identifies and discusses mitigation measures.
- *Volume 4: Aircraft Carrier Berthing.* This volume discusses the purpose and need for the action, describes the reasonable pier location alternatives, analyzes impacts, and identifies and discusses mitigation measures.
- *Volume 5: Army Air and Missile Defense Task Force (AMDTF).* This volume discusses the purpose and need for the action, describes the reasonable alternatives, analyzes impacts, and identifies and discusses mitigation measures.
- *Volume 6: Related Actions – Utilities and Roadway Projects on Guam.* This volume discusses alternatives, provides an impact analysis, and identifies and discusses mitigation measures.
- *Volume 7: Potential Mitigation, Preferred Alternatives’ Impacts and Cumulative Impacts.* This volume summarizes potential mitigation measures, best management practices, Clean Water Act, § 404 actions and preferred alternatives’ impacts from Volumes 2 through 6. The mitigation chapter includes a discussion of adaptive management practices that would reduce the construction phase impacts of the proposed actions. Volume 7 concludes with a cumulative impact analysis of the incremental impacts of the preferred alternatives when added to the impacts of other past, present, and reasonably foreseeable future actions.
- *Volume 8: Additional Items Required by NEPA.* The Navy and regulatory agencies have kept CEQ apprised of interagency issues and progress on resolving those issues. This volume discusses consistency with other federal, state and local land use plans, policies, and controls; required permits and approvals, irreversible and irretrievable commitments of resources; the relationship between short term use of the environment and long-term productivity; and sustainability. Finally, this volume provides a distribution list for the Draft EIS, references, and a list of preparers.
- *Volume 9: Appendices, including certain agency correspondence, highly cited studies, and the classified annex.*
- *Volume 10: Public Comments on the Draft EIS/OEIS.* This volume will contain the full list of public comments received on the Draft EIS/OEIS, analysis, and responses to these comments (Volume to be included in the Final EIS).

Volumes 2 through 5 are organized into the following chapters:

- *Chapter 1: Purpose of and Need for Action.* This chapter states the purpose of and need for the proposed action and presents background information about the proposed action.

- *Chapter 2: Proposed Action and Alternatives.* This chapter describes the siting criteria and the screening process to evaluate and identify the reasonable alternatives, the proposed action and reasonable alternatives, and the no-action alternative.
- *Chapters 3-19: Resource Sections.* These chapters describe existing conditions and identify potential impacts to the respective resources:
  - Chapter 3: Geological and Soil Resources
  - Chapter 4: Water Resources
  - Chapter 5: Air Quality
  - Chapter 6: Noise
  - Chapter 7: Airspace
  - Chapter 8: Land and Submerged Land Use
  - Chapter 9: Recreational Resources
  - Chapter 10: Terrestrial Biological Resources
  - Chapter 11: Marine Biological Resources
  - Chapter 12: Cultural Resources
  - Chapter 13: Visual Resources
  - Chapter 14: Marine Transportation: This chapter covers marine transportation.  
(Volume 6 covers roadway transportation)
  - Chapter 15: Utilities
  - Chapter 16: Socioeconomics and General Services
  - Chapter 17: Hazardous Materials and Waste
  - Chapter 18: Public Health and Safety
  - Chapter 19: Environmental Justice and the Protection of Children
  - Chapter 20: References

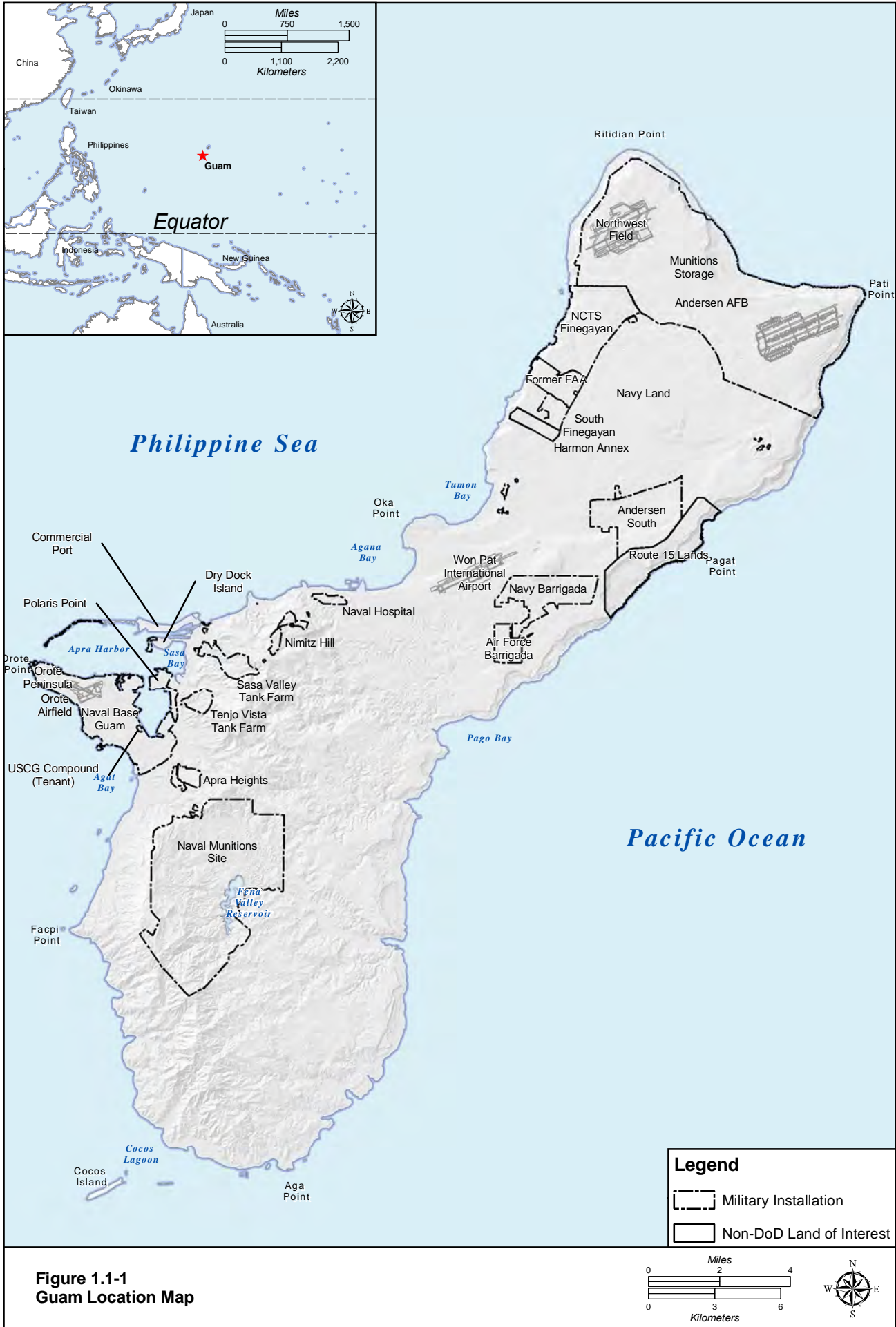
The proposed actions include components involving the U.S. Marine Corps (Marine Corps), the Navy and the U.S. Army (Army). A summary overview of the proposed actions and alternatives is presented in Chapter 2 of this volume. The three main components of the proposed actions are briefly stated as follows:

1. *Marine Corps.* (a) Develop and construct facilities and infrastructure to support approximately 8,600 Marines and their 9,000 dependents relocated from Okinawa (Japan) to Guam. (b) Develop and construct facilities and infrastructure to support training and operations on Guam and Tinian (CNMI) for the relocated Marines.
2. *Navy.* Construct a new deep-draft wharf with shoreside infrastructure improvements creating the capability in Apra Harbor, Guam to support a transient nuclear-powered aircraft carrier.
3. *Army.* Develop facilities and infrastructure on Guam to support relocating approximately 600 military personnel and their 900 dependents to establish and operate an Army AMDTF.

The proposed action for the Marine Corps relocation includes personnel from the units being relocated and the associated base support personnel that must also be present at an installation to support the military mission.

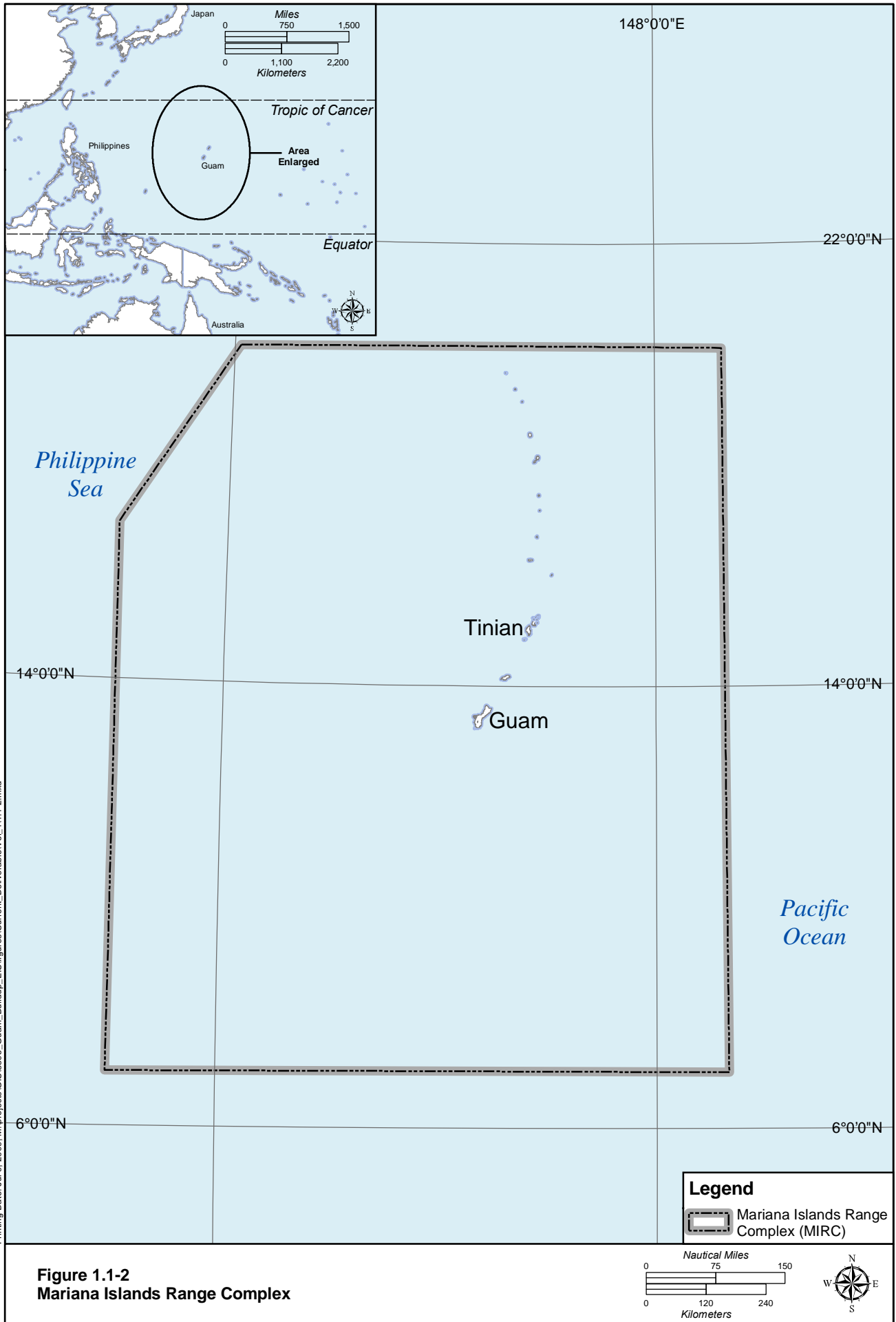
The project locations addressed in this EIS/OEIS are Guam, a territory of the U.S., and Tinian, a part of the CNMI, a commonwealth of the U.S., both are governed under Article II of the U.S. Constitution. Both Guam and the nearby island of Tinian have existing military training uses that are geographically part of the Mariana Islands archipelago (Figure 1.1-1). They are located within the Mariana Islands Range

Complex (MIRC), an area used by the Department of Defense (DoD) for readiness training (Figure 1.2-1). Under an independent action, upgrades and changes to the MIRC are being analyzed in a separate EIS/OEIS. The Guam and CNMI Military Relocation EIS/OEIS is based upon the assumption that the MIRC EIS preferred alternative represents “existing” or baseline conditions of training in the MIRC through 2015. Further discussion on the military activities within the MIRC and the relationship between the MIRC EIS/OEIS and this EIS/OEIS are provided in Section 1.2.5 below.



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**Figure 1.1-1  
Guam Location Map**



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**Figure 1.1-2  
Mariana Islands Range Complex**

## 1.2 EXISTING MILITARY IN THE MARIANAS

The Air Force and Navy have an established military presence in the Marianas and manage existing military facilities and lands under DoD jurisdiction on Guam. The CNMI is currently used for training for all military services that reside on Guam or transit through the Marianas. The Army also has facilities in the CNMI, on Saipan. Figure 1.2-1 and 1.2-2 show the military facilities for Guam and the CNMI, respectively.

The U.S. Coast Guard (USCG) controls a portion of Victor Wharf, and the adjacent shoreside property is used by USCG-Sector Guam.

The Navy is also the executive agent for DoD lands in Guam and the CNMI including the military leased areas in the CNMI. An overview of the existing military facilities and the MIRC is discussed below.

### 1.2.1 Navy

The Navy in Guam supports naval activities to maintain operational readiness—maintaining the ability of units to respond to regional threats and to protect interests of the U.S. and its allies. The Naval Base Guam at Apra Harbor is the Navy's operations center and is located on the southwest coast of Guam around Apra Harbor, including the Orote Peninsula. It serves as the forward deployment base and logistics hub, including main munitions storage and distribution center for sea, land, and air forces operating in Asia and the Western Pacific. Navy-controlled lands at Apra Harbor have land uses ranging from industrial to recreational. Other lands on Guam are used for communications facilities (Naval Communication Annex, also known as Naval Computer and Telecommunications Station [NCTS], Finegayan [communications receivers], and Barrigada [communications transmitters]); family housing/community support (Apra Heights, Nimitz Hill, and NCTS Finegayan), two petroleum, oil and lubricant storage areas (Defense Logistics Agency [DLA] and Defense Fuels also known as Sasa Valley and Tenjo Vista fuels farms); munitions storage facilities (Naval Munitions Site [NMS] also known as Naval Magazine Apra Heights); the Naval Hospital; a DoD Education Activity high school (adjacent to the Naval Hospital); a Military Operations on Urban Terrain (MOUT) training range; and Navy golf course at Barrigada. In 1998 there were 3,946 active duty Navy personnel stationed on Guam. As of 2007, there were 3,879 active duty Navy personnel stationed on Guam.

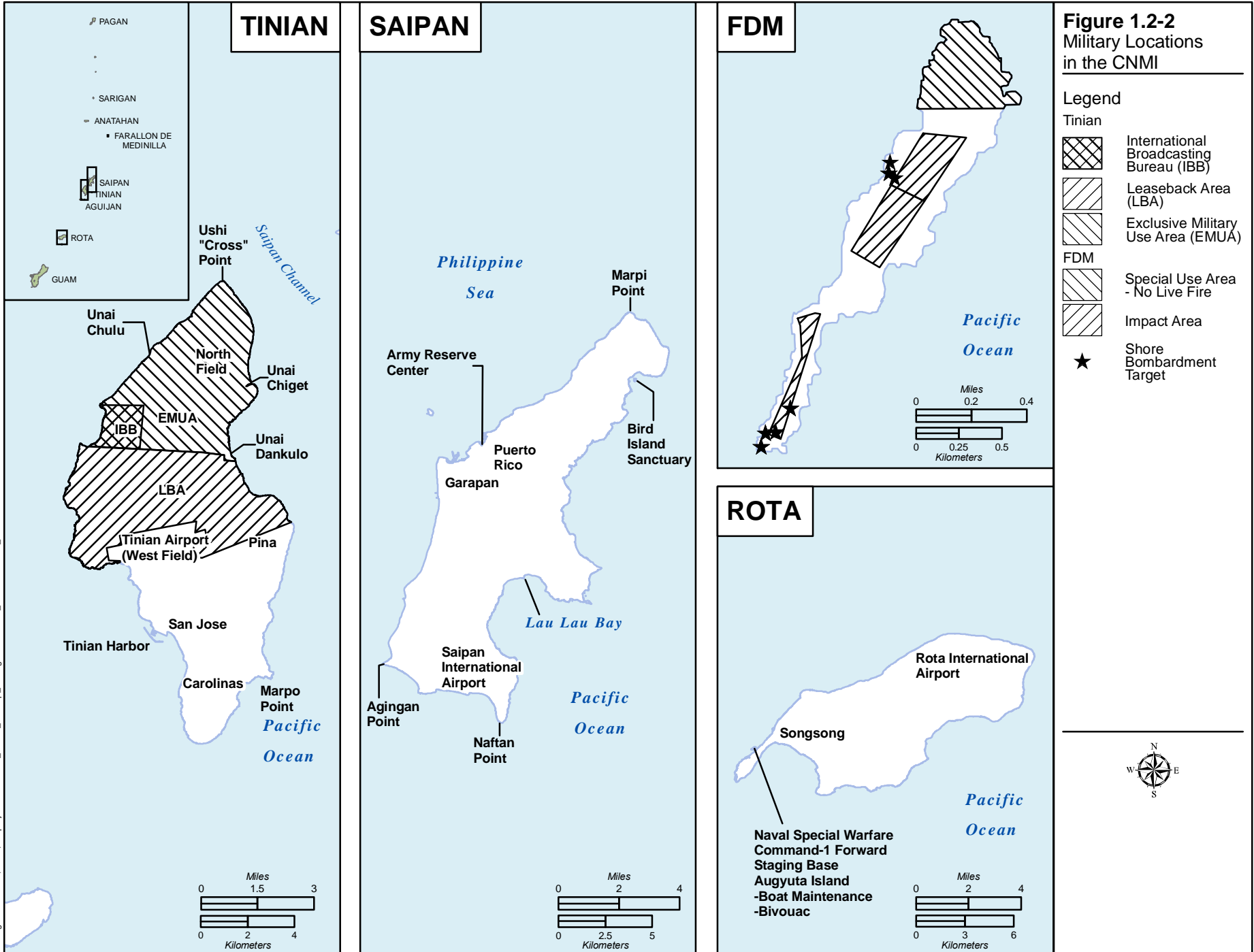
### **Chapter 1:**

- 1.1 *Introduction*
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- 1.10 *Sustainability*
- 1.11 *Documents Incorporated by Reference*





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### 1.2.2 Air Force

Andersen Air Force Base (AFB) is the most forward U.S. sovereign AFB in the Pacific. Its role is to employ, deploy, integrate, and enable air and space forces from its location on the northern part of Guam. It serves as an important main operating base for combat and mobility contingency forces deploying or assigned in the Pacific and Indian Ocean areas. Andersen AFB is home to the 36<sup>th</sup> Wing, the Air Mobility Command 734<sup>th</sup> Air Mobility Support Squadron, Navy Helicopter Sea Combat Squadron Twenty-Five, and several tenant organizations. Andersen AFB airfield has two parallel runways approximately 11,000 feet (ft) (3,350 meters [m]) long. To the northwest of the airfield operations area is the Munitions Storage Area (MSA) which provides land for current and projected Air Force ordnance storage requirements on Guam. Explosive Safety Quantity Distance arcs from the existing magazines impact much of the central portion of the base. To the northwest of the MSA, the Air Force manages the abandoned World War II era Northwest Field for training and expeditionary air field operations. Beyond Andersen AFB boundaries, the Air Force manages Andersen South for urban training and Barrigada (Air Force) and Mount Santa Rosa for communications. About 3,562 acres (ac) (1,443 hectares [ha]) in Northwest Field are the primary maneuver training areas available at Andersen AFB for field exercises and helicopter operations. In 1998 there were 2,119 active duty Air Force personnel stationed on Guam. As of 2007, there were 1,596 active duty Air Force personnel stationed on Guam.



### 1.2.3 Army

The Army trains the Guam Army National Guard, Army Reserves, and also supports training of allied personnel. It leases 24 ac (9.72 ha) of unimproved Navy land at Barrigada for Guam Army National Guard operations and 15 ac (6.1 ha) of land in Dededo. Headquarter facilities for the Guam Army National Guard is located adjacent to Navy land at Barrigada. Navy Barrigada is 1,418 ac (574 ha), with 250 ac (101 ha) available for development. In 1998, there were 178 active duty Army personnel stationed on Guam, and as of 2007 there were 632 active duty Army personnel stationed on Guam.



### 1.2.4 Marianas-Installation Management Transition

The 2005 Base Closure and Realignment Act recommendations included a directive to realign DoD installation management functions on Guam to the Commander, Naval Forces, Marianas. The strategic imperative driving the realignment is twofold: the Joint Region Marianas (JRM) provides installation support to the military missions; and it identifies significant savings through consolidation. Installation management functions were duplicated in the Navy's regional model for installation management. The realignment reduces duplication of overhead costs and would deliver common DoD levels of service more efficiently.

The transfer of installation management functions during the Initial Operational Capability began on January 31, 2009. As installation support functions were transferred and personnel were integrated into the Joint Region organizational structure, the Joint Region Commander (JRC) assumed responsibility and authority for those functions. As the JRC assumed authority and responsibility for functions, the supported component echelons above the installation relinquished authority to the supporting component,

but retained resourcing responsibility and oversight until Total Obligation Authority and real property transfer at Full Operational Capability on October 1, 2009.

The resulting organization created by this realignment is the JRM. The Navy and Air Force maintain their distinct missions and retain operational command, but regional installation support is managed by the Navy including:

- Planning, programming, budgeting, and execution
- Delivery of installation support – policies, procedures, and contracts

The JRC is responsible for environmental permitting (Navy 2009a) as of October 1, 2009. In addition, the JRC will ensure regulatory requirements are adhered to and will manage, maintain, and renew all required permits.

### 1.2.5 Mariana Islands Range Complex (MIRC)

A range complex is a compilation of training ranges within a defined geographic region. The MIRC consists of existing DoD and Service properties used for training, international air and sea space, and certain private properties within the geographical boundaries in Micronesia. Under an independent action, upgrades and changes to the MIRC are being analyzed in a separate EIS/OEIS. The Guam and CNMI Military Relocation EIS/OEIS is based upon the assumption that the MIRC EIS preferred alternative represents “existing” or baseline conditions of training in the MIRC through 2015.

The geographic expanse of the MIRC is depicted in Figure 1.1-2. It covers approximately 501,873 square nautical miles (nm<sup>2</sup>) (1,721,376 square kilometers [km<sup>2</sup>]) of open-ocean and coastal areas. The MIRC consists of three primary components: (1) ocean surface and subsurface areas, (2) Special Use Airspace (SUA), and (3) land training areas. The ocean surface and subsurface areas of the range complex extend from the south of Guam to north of Pagan (part of the CNMI), and from the Pacific Ocean east of the Marianas to the middle of the Philippine Sea to the west. The range complex includes land ranges and training areas/facilities on Guam and in the CNMI. The range complex includes approximately 63,000 nm<sup>2</sup> (216,084 km<sup>2</sup>) of SUA's and Air Traffic Control Assigned Airspaces including Warning Area 517 and Restricted Area 7201 over Farallon de Medinilla (FDM). CNMI training locations include areas on Guam, Tinian, Saipan, FDM, and Rota.

The complex is available for use by all branches of the Armed Services. Although the Marine Corps has not had a permanent presence in the Marianas, it has trained in the MIRC on a transient basis. The following provides a general description of the Marine Corps' current utilization of the MIRC. Marine Corps training within the MIRC would increase in frequency and intensity upon relocation of the Marines from Okinawa to Guam.

In order to understand the context for the proposed training needed to support the relocation of Marines, it is necessary to understand the existing training and training infrastructure of the Marianas. DoD training ranges in the Marianas are available for use by all branches of the Armed Services, including the Guam Army National Guard and Army Reserves (such ranges are referred to as joint use ranges). Although the Marine Corps does not have a permanent presence in the Marianas, it does train in the MIRC. The Marine Corps presently conducts the following training on a transient basis.

*Guam.* Training is conducted throughout the island at various facilities.

- Assault Support: Assault support comprises those actions required to airlift personnel, supplies, or equipment into or within a battle area. The Marine Corps provides helicopter assault support for command and control, troop lift/logistics, reconnaissance, search and rescue, medical evacuation,

reconnaissance team insert/extraction, and helicopter coordination and control functions. During combat conditions, assault support provides the mobility to focus and sustain combat power at decisive places and times and the capability to take advantage of fleeting battlespace opportunities. There are three levels of assault support: tactical, strategic, and operational. Polaris Point Field, Orote Point airfield, Navy and Air Force Barrigada, NCTS, NMS, Andersen Air Force Base South, Northwest field, Andersen Main Cantonment and Navy main base all provide temporary sites from which assault support training can occur. From these temporary sites, the Marine Expeditionary Unit commander provides assault support to forces training within the MIRC.

- MOUT: MOUT is the use of advanced offensive close quarter battle techniques in an urban terrain. During combat, MOUT includes seizing and securing buildings or areas to neutralize enemy forces for the long-term. MOUT training is accomplished in an area built to resemble a city or town with streets, buildings, and vehicles. The training involves clearing buildings room by room, stairwell by stairwell, and keeping them clear while avoiding impacts to the civilian population. MOUT training is extensive, manpower intensive, and requires close fire maneuver coordination. Limited live and non-live fire MOUT training is conducted at the following locations, all of which are inadequate, abandoned buildings in need of repair:
  - Orote Point Close Quarter Combat facility: a small one story building used to train forces in hand-to-hand combat with an enemy in close range. Weapons use is limited to 9-mm pistol live fire.
  - NMS breacher house: concrete structure used to train forces in maintaining mobility in areas with man-made obstacles. Specifically, Marines are trained in forced entry, including in the use of small explosive charges. A nearby clearing is used for helicopter raid/assault training in conjunction with training in forced entry. No live fire weapons are authorized at this training site.
- Barrigada and Andersen South: These training areas contain former family housing units that are abandoned and used for training in an urban setting with simulated munitions only.
- Direct Fire: Direct fire is the use of small arms weapons for the purpose of defense and security. Direct fire training ranges are strictly controlled and regulated by specific individual weapons qualification standards. Orote Point Known-Distance range, Andersen Combat Arms Training and Maintenance range, and NCTS small arms ranges support small arms and machine gun training up to 7.62-mm and sniper training out to a distance of 500 yards. The Known-Distance range is a long, flat cleared area and occasionally used for training other than marksmanship.
- Exercise Command, Control and Communication: provides primary communications training for command, control, and intelligence and critical interoperability and situation awareness information. Various facilities and infrastructure at Andersen AFB and Naval base are used for this type of training.
- Protect and Secure Area of Operations (Protect the Force): Force protection operations increase physical security of military personnel in the region to reduce their vulnerability to attacks. In combat environments, force protection includes offensive and defensive measures such as moving forces and building barriers, detection and assessment of threats, delay or denial of access of the adversary to their target, appropriate response threats and attack, and mitigation of effects of

attack. In the region, Northwest Field, NMS, Navy Main Base, Andersen South are the sites for these training activities.

- **Amphibious Warfare:** Amphibious warfare is the utilization of naval firepower, logistics, and strategy to project military power ashore. There is limited ability to train for amphibious warfare in the Marianas. Certain warfare activities are accomplished within the region using limited virtual simulated scenarios for naval gunfire and close air support. Simulated opposed landings are also capable in the Marianas. The amphibious vehicles and transient ships involved in amphibious warfare training in the region are Navy assets; they support the Marine Air Ground Task Force (MAGTF) training events. Navy individual and crew training include operating the amphibious vehicles; training on weapon systems; and command, control and logistics training. Small unit training operations lead to certification of a Marine Expeditionary Unit as special operations capable. This training includes non-live fire shore assaults, boat raids, airfield or port seizures, and reconnaissance. Larger-scale, non-live fire exercises are carried out by MAGTF or elements of MAGTFs embarked with Expeditionary Strike Groups. Amphibious training capabilities are a training deficit in the MIRC.

*Tinian.* An island located approximately 100 miles (mi) (160 km) northeast of Guam, Tinian has two airfields (North Field and West Field) (see Figure 1.2-2). North Field is a large abandoned World War II era airfield that is still usable as a contingency landing field and supports short field C-130 airplanes and helicopter operations. Training on Tinian is conducted on two parcels within the Military Lease Area (MLA): the Exclusive Military Use Area (EMUA) encompassing 7,574 ac (3,065 ha) on the northern third of Tinian, and the Leaseback Area (LBA) encompassing 7,779 ac (3,848 ha) and the middle third of Tinian. The MLA supports small unit-level through large field exercises and expeditionary warfare training. There are no active live-fire ranges in the EMUA or LBA, except sniper small arms into bullet traps. Tinian is capable of supporting Marine Expeditionary Unit (MEU) aviation events such as ground element training and air element training, simulated evacuations of noncombatants, airfield seizure training, expeditionary airfield training, and special warfare activities.

*Saipan.* An island located 14 mi (23 km) north of Tinian (see Figure 1.2-2). This is the location of the Saipan Army Reserve Center. The Reserve Center location cannot support field maneuvers. On the east side of northern Saipan, the Army Reserve conducts land navigation training. This training is performed on non-DoD land. Navy-leased land (approximately 100 ac [40.47 ha]) includes a wharf area.

*FDM.* An island 195 mi (314 km) north of Guam, leased from the CNMI with a total land area of 182 ac (73.65 ha). FDM is an un-instrumented range used for live and inert bombing, missile strikes, and strafing. These activities require a Forward Arming and Refueling Point at Tinian for some aircraft. Restricted airspace R-7201 overlies FDM (see Figure 1.1-2 and Figure 1.2-2).

*Rota.* An island located approximately 35 mi (56 km) northeast of Guam (see Figure 1.2-2), Rota has a civilian airfield with a single 6,000 ft by 150 ft (1,828.8 m by 42.67 m) runway that has been used in the past to support military operations. Certain types of special warfare training including hostage rescue, non-combatant evacuation operations, and MOUT are conducted on Rota with local law enforcement, on non-DoD lands. Naval Special Warfare (NSW) boats are re-fueled at the commercial pier. The airfield is lighted and has a beacon and radio navigational aid but no control tower.

#### 1.2.5.1 Training Operations Covered by the MIRC EIS/OEIS

Development of the MIRC EIS/OEIS is an independent effort due to the requirement for periodic programmatic review of ongoing and future training requirements as part of the Navy's tactical theater

assessment and planning program. This program reviews ongoing DoD training contained within the MIRC. The review effort was not triggered by the proposed actions under analysis in this EIS/OEIS.

The MIRC EIS/OEIS is assessing the potential impacts of continuing and proposed military training activities on existing ranges within the complex. The assessment will include increased training frequency and improvements to existing ranges based on all anticipated joint military service training requirements between the years 2010 and 2015. The focus of the MIRC EIS/OEIS is on the achievement of the readiness activities of all the military services. The MIRC EIS/OEIS proposes to:

- Maintain current types of operations
- Increase the frequency of operational training
- Expand warfare missions (subsurface only)
- Accommodate force structure changes (i.e., changes in weapons systems, new classes of homeported ships)
- Implement enhancements to enable each range to meet foreseeable needs

#### 1.2.5.2 Training Operations Covered by the Guam and CNMI Military Relocation EIS/OEIS

The Guam and CNMI Military Relocation EIS/OEIS examines potential impacts from activities associated with the Marine Corps relocation of units to Guam, including training activities and infrastructure changes on and off DoD lands. As discussed above, the Marine Corps already utilizes the MIRC and would continue to do so consistent with any changes and improvements resulting from the MIRC EIS/OEIS. Since the MIRC EIS/OEIS is covering DoD-wide training on existing DoD land and training areas in the region, there will be overlap between the two EIS/OEISs in the area of land usage. As these two documents are being developed on similar schedules, they are being closely coordinated to ensure consistency.

The Guam and CNMI Military Relocation EIS/OEIS training analysis is based on the assumption that the MIRC EIS preferred alternative represents “existing conditions” of training in the MIRC through 2015, the baseline of activity before the proposed relocation. The Guam and CNMI Military Relocation EIS/OEIS then covers the additional, projected training requirements from the relocation that were not anticipated during the development of the MIRC EIS/OEIS preferred alternative. Volumes 2 and 3 analyze these additional requirements and propose changes to the MIRC that would support the readiness of the relocated Marine units.

## 1.3 PURPOSE AND NEED

### 1.3.1 Overarching Purpose and Need

The overarching purpose for the proposed actions is to locate U.S. military forces to meet international agreement and treaty requirements and to fulfill U.S. national security policy requirements to provide mutual defense, deter aggression, and dissuade coercion in the Western Pacific Region. The need for the proposed actions is to meet the following criteria based on U.S. policy, international agreements, and treaties:

- Position U.S. forces to defend the homeland including the U.S. Pacific territories
- Location within a timely response range
- Maintain regional stability, peace and security
- Maintain flexibility to respond to regional threats
- Provide powerful U.S. presence in the Pacific region
- Increase aircraft carrier presence in the Western Pacific
- Defend U.S., Japan, and other allies' interests
- Provide capabilities that enhance global mobility to meet contingencies around the world
- Have a strong local command and control structure

### **Chapter 1:**

#### *1.1 Introduction*

#### *1.2 Existing Military In The Marianas*

#### *1.3 Purpose and Need*

#### *1.4 Global Perspective Background*

#### *1.5 Decisions To Be Made*

#### *1.6 Site Specific Analysis vs. Analysis of Long-term Projects*

#### *1.7 Summary of Action Alternatives*

#### *1.8 National Environmental Policy Act and Executive Order 12114 Compliance*

#### *1.9 Agency Coordination*

#### *1.10 Sustainability*

#### *1.11 Documents Incorporated by Reference*

## 1.4 GLOBAL PERSPECTIVE BACKGROUND

The U.S. maintains military capabilities in the Western Pacific to support U.S. and regional security; economic and political interests; and to fulfill treaty and alliance agreements. These forces must facilitate projection of power to ensure peace and dissuade instability. They must have a strong, local command and control structure; must be readily and rapidly deployable in the face of threats and contingencies; must be manned, equipped, trained, and sustained by a modern logistics infrastructure; and must be capable of operating with allies and other foreign forces throughout the Pacific region. Also, these forces may be called upon to defend Japan and U.S. allies (as outlined in treaties and treaty-like alliances). These international treaties, alliances, and commitments require the U.S. to maintain strategic forces, assets, and infrastructure in the region to respond to threats and contingencies.

In the Western Pacific Region, there are five of the seven worldwide, longstanding U.S. mutual defence treaties that contain alliance requirements. They are:

- U.S.– Philippines (1952)
- ANZUS (Australia, New Zealand, U.S. [1952])
- U.S.– Korea (1954)
- Southeast Asia Collective Defense (U.S., France, Australia, New Zealand, Thailand, Philippines [1955])
- U.S.–Japan (1960)

For instance, the U.S.–Japan (1960) treaty, known as the *Treaty of Mutual Cooperation and Security* (Mutual Security Treaty), contains general provisions on the further development of international cooperation and on improved future economic cooperation. Both parties assumed an obligation to maintain and develop their capacities to resist armed attack and assist each other in the event of an armed attack on either party in territories under Japanese administration. This provision is carefully crafted to be consistent with Japan's Constitution that limits its military capabilities to defensive only capabilities. U.S. treaty commitments with the other nations listed above also require a timely response to incidents and a consistent U.S. presence of force as a deterrent in the Pacific region.

### **Chapter 1:**

- 1.1 Introduction*
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### 1.4.1 Evolving Global Security Environment

#### Integrated Global Presence and Basing Strategy and Quadrennial Defense Review (QDR)

The DoD Global Posture Review published in May 2005, also known as the Integrated Global Presence and Basing Strategy (IGPBS), intended to transform U.S. forces to:

- **Improve Flexibility to Contend with Uncertainty:** The (then) existing U.S. force posture was established during the Cold War, when the U.S. thought threats would come from the European continent. However, current threats require forward deployment in non-European areas. The goal of the realigned forces is to have those forces positioned forward on a continual basis, with access and facilities that enable them to reach any potential crisis quickly.
- **Strengthen Allied Roles and Build New Partnerships:** Changes to the U.S. global posture aim to help our allies and friends modernize their own forces, strategies, and doctrines. The U.S. needs to tailor the military's overseas "footprint" to suit local conditions, reduce friction with host nations, and respect local sensitivities. A critical precept in global posture planning is that the U.S. will place forces only where those forces are wanted and welcomed by the host government.
- **Create the Capacity to Act both within and across the Region:** Security challenges are global in nature and relationships must address those challenges accordingly (e.g., Japan's involvement in Operation ENDURING FREEDOM (Iraq), or the North Atlantic Treaty Organization's involvement through the International Security Assistance Force in Afghanistan). To ensure peace and security in the Western Pacific Region, the U.S. must improve its ability to project power from one region to another and to manage forces on a global basis.
- **Develop Rapidly Deployable Capabilities:** The current state of threats indicates a global fight. Consequently, U.S. forces need to be able to move smoothly into, through, and out of host nations. This puts a premium on establishing flexible legal and support arrangements with our allies and partners. It also strengthens the demand for capabilities that provide an increasingly global reach, the worldwide disposition of key prepositioned materials and equipment, and improvements to global en route infrastructure and strategic lift.
- **Focus on Effective Military Capabilities:** The key to effective capabilities is to push forces forward to be closer to potential conflict areas with smaller permanently stationed forces whose composition is tailored to meet potential threats.

In practice, the IGPBS intends to reduce U.S. overseas forces from the numbers and locations of bases left over from the Cold War to new locations that are optimized to support current allies and confront new potential threats. These locations would be used in the event of a crisis to give U.S. forces access to the region. They would also allow U.S. forces to train with local allies and participate in cooperative activities, such as disaster relief or peacekeeping, which can improve military-to-military ties. U.S. forces would also rely heavily on off-shore prepositioning and sea basing to provide logistical support. Maritime prepositioning uses a fleet of cargo ships preloaded with supplies and equipment located near potential trouble spots. Prepositioning this material reduces the time required for a military unit and its equipment to deploy to a combat area.

The IGPBS and subsequent QDR (DoD 2006) concept strives to base the forces in locations that support flexibility and speed of response to anywhere in an unpredictable environment. In coordination for such a shift of forces and infrastructure, the DoD, during the development of the QDR, consulted with the Department of State, the National Security Council, and had 45 briefings to Congressional staffers and members of Congress. Further, there were visits to the government leadership in over 20 foreign countries that could be affected by the moves. For Asia, the QDR and IGPBS advocate consolidating existing South Korea bases and adjusting troop dispositions in Japan to reduce frictions with local populations. Reliance on air and naval capability would increase in the Pacific given the vast distances between allies in the region.

### **1.4.2 Marine Corps**

Based on the QDR recommendations for global repositioning and operational realignments in the Pacific region, DoD began to identify suitable locations to relocate the Marine Corps from Okinawa that met: 1) treaty and alliance requirements; 2) response times to potential areas of conflict; and 3) freedom of action (use of base without restrictions).

#### **1.4.2.1 Treaty and Alliance Requirements**

The relocation of nearly half of the total Marine Corps units from Okinawa must meet treaty, international cooperative defense agreements, and other alliance requirements with Japan and U.S. allies in the Western Pacific, which include the Philippines, Australia, New Zealand, Korea, Japan, and Thailand.

The Mutual Security Treaty with Japan is the most relevant to the proposed action. Under the Mutual Security Treaty, both parties assumed an obligation to maintain and develop their capacities to resist armed attack and assist each other in the event of an armed attack on either party in territories under Japanese administration. The Agreed Minutes to the Treaty specify that the Japanese government must be consulted prior to major changes in U.S. force deployment in Japan and prior to the use of Japanese bases for combat operations, other than in defense of Japan itself.

#### **Defense Policy Review Initiative (DPRI)**

In a parallel initiative with the development of the IGPBS that began in December 2002, the U.S. was coordinating with Japan changes in positioning force posture in Japan and the options on how best coordinate those changes with other force realignments in the Pacific. Over a three and one-half year period, the U.S. engaged with the Government of Japan in a series of sustained security consultations under the auspices of the U.S.-Japan Security Consultative Committee (SCC), the pre-eminent treaty oversight body, composed of the U.S. Secretary of State and Secretary of Defense and the Japanese Minister of Foreign Affairs and Minister of Defense. These talks, which came to be known as the Defense Policy Review Initiative (DPRI), were aimed at evolving the U.S.-Japan Security Alliance to reflect today's rapidly changing global security environment. The DPRI, which served as the primary venue for accomplishing IGPBS objectives regarding Japan, focused on alliance transformation at the strategic and operational levels, with particular attention to the posture of U.S. and Japanese forces in Japan, as well as transforming capabilities in the Western Pacific around the U.S. and Japanese alliance. The DPRI was also designed to relieve stresses in the relationship with Japan while strengthening deterrence and global flexibility. Both governments prioritized reductions in the U.S. presence in Okinawa that could ameliorate longstanding frustrations among the local population and improve the local political support for the stable and enduring presence of the remaining U.S. forces. The Governments of Japan and the U.S., balancing the need to maintain the deterrent effect of forward-deployed U.S. forces with the recognized the strong desire of Okinawa residents to have the U.S. presence reduced rapidly, examined and identified

appropriate financial and other measures to enable the realization of several interconnected changes to achieve these objectives. These included relocation of Marine aviation capabilities from Marine Corps Air Station Futenma to a new facility, relocation of Marines and dependents from Okinawa to Guam, and consolidation of remaining Marine forces in Okinawa into less land area, enabling the return of valuable real estate. During the DPRI discussions, the U.S. and Japan also developed several other significant initiatives, such as the consolidation of carrier jet aircraft with Marine aircraft in Iwakuni, Japan, deployment of U.S. missile defense capabilities to Japan, and co-location of Japan's Air Defense Headquarters with the U.S. Fifth Air Force Headquarters at Yokota Air Base in Tokyo, Japan.

#### Alliance Transformation and Realignment Agreement (ATARA)

On October 29, 2005, the SCC released a document, *U.S.-Japan Alliance: Transformation and Realignment for the Future*, commonly referred to as the Alliance Transformation and Realignment Agreement (ATARA). In developing the ATARA, the U.S. and Japan confirmed several basic concepts relevant to bilateral defense cooperation, the defense of Japan, and responses to situations in areas surrounding Japan. These concepts include the following: (1) bilateral defense cooperation remains vital to the security of Japan as well as to peace and stability of the region; (2) the U.S. will maintain forward-deployed forces, and augment them as needed for the defense of Japan and to deter and respond to situations in areas surrounding Japan; (3) the U.S. will provide all necessary support for the defense of Japan; (4) U.S. and Japanese operations in the defense of Japan, and responses to situations in areas surrounding Japan, must be consistent to ensure appropriate responses when situations in areas surrounding Japan threaten to develop into armed attacks against Japan, or when an armed attack against Japan may occur; and (5) U.S. strike capabilities and the nuclear deterrence provided by the U.S. remain an essential complement to Japan's defense capabilities and preparedness in ensuring the defense of Japan and contributing to the region's peace and security.

In the ATARA, the SCC also approved the aforementioned recommendations for realignment of U.S. Forces in Japan and the Japan Self-Defense Forces directing their respective staffs "...to finalize these specific and interrelated initiatives and develop plans, including concrete implementation schedules, no later than March 2006." At the May 1, 2006, SCC meeting, the two nations recognized that the realignment initiatives described in the SCC document *U.S.-Japan Roadmap for Realignment Implementation* (the "Roadmap") would lead to a new phase in alliance cooperation. The Roadmap outlined details of different realignment initiatives, including the relocation of the Marines and the cost sharing arrangements with the Japanese government.

The Mutual Security Agreement and follow-on U.S.-Japan agreements require the U.S. to respond quickly to areas of potential conflict in the Asia-Pacific region. Consistent with these obligations, the ATARA and Roadmap initiatives require relocating approximately 8,000 III Marine Expeditionary Force personnel and 9,000 dependents from Okinawa to Guam with a target completion date of 2014. As a result of the proposed action, there would be a work force on Guam of approximately 1,700 personnel supporting the Marines.

Moving these forces to Guam would place them on the furthest forward element of sovereign U.S. territory in the Pacific capable of supporting such a presence, thereby maximizing their freedom of action while minimizing the increase in their response time relative to their previous stationing in Okinawa. Under the ATARA and Roadmap, Japan has agreed to a cost-sharing arrangement with the U.S. that would assist in funding up to \$6.09 billion of the facilities construction costs for the relocation of the Marines from Okinawa to Guam. This cost-sharing agreement acknowledges that the Marine Corps forces on Guam would continue to support U.S. commitments to provide for the defense and security of Japan.

These international commitments for funding, and locations of the repositioned forces were re-affirmed on February 17, 2009 in the document titled: *Agreement Between the Government of the U.S. and the Government of Japan Concerning the Implementation of the Relocation of the III Marine Expeditionary Force Personnel and Their Dependents from Okinawa to Guam* (Guam International Agreement), signed by the U.S. Secretary of State and the Japanese Foreign Minister. The Agreement was approved by the Japanese Diet on May 13, 2009 and transmitted to the U.S. Congress in accordance with each party's respective legal procedures.

#### 1.4.2.2 Response Time

Basing locations in the Pacific region were analyzed to determine those that would provide sufficient response times to potential areas of conflict. As part of its determination on how to meet the requirements to meet U.S. security interest in the Asia-Pacific region, including treaty commitments to Japan and other countries in the region, the U.S. analyzed basing locations in the Pacific region that would provide sufficient response times to potential areas of conflict. The U.S. locations in the Pacific Region considered for the military relocation were Hawaii, Alaska, California, and Guam. Non-U.S. locations considered included Korea, the Philippines, Singapore, Thailand, and Australia, because they are allies to the U.S. and are well situated for strategic force deployment for permanent basing opportunities.

One of DoD's highest priorities, highlighted in the QDR, is maintaining the readiness and sustainability of U.S. forces. In general terms, readiness is the overall ability of forces to arrive on time where needed, and be sufficiently trained, equipped, and supported to effectively carry out assigned missions. Forces must be placed and maintained so that they can be utilized in a timely fashion. The desired distance from the potential threat can vary based on unit type and need, as well as mode of transport. Traditionally, forces were deployed in a slow steady buildup over time. This planning methodology was known as the time-phased force deployment process. Now, however, crises manifest themselves quickly in a variety of locations. Forces must be placed and maintained such that they can provide a rapid and timely response. Therefore, it is critical to locate forces so that the amount of time required to reach a crisis location is kept to a minimum. Figure 1.4-1 illustrates the distances that must be spanned to deploy forces to various locations in the Pacific region.

Table 1.4-1 shows representative response times for deploying forces by air and sea from Hawaii, Alaska, California, and Guam to Okinawa, and Taiwan. As the table shows, forward-positioned forces on Guam provide significantly reduced response times to Pacific locations compared to forces positioned in Hawaii, Alaska, or California.

**Table 1.4-1. Representative Response Times to Southeast Asia by Air and Sea**

	<i>Hawaii</i>	<i>Alaska</i>	<i>California</i>	<i>Guam</i>
<b>Air Deployment<sup>1</sup></b>				
Okinawa	9 hours	8.5 hours	12.6 hours	2.5 hours
Taiwan	9.7 hours	9 hours	13 hours	3.3 hours
<b>Sea Deployment<sup>2</sup></b>				
Okinawa	8.5 days	N/A <sup>3</sup>	15 days	3.8 days
Taiwan	9.6 days	N/A <sup>3</sup>	16 days	5 days

Notes:<sup>1</sup> Air deployment times are based on C-17 speed of 450 knots (517.8 miles per hour [mph]).

<sup>2</sup> Sea deployment times are based on ship speed of 20 knots (23 mph).

<sup>3</sup> There are no seaports in Alaska currently capable of carrier strike group deployment.

Table 1.4-2 shows representative response times for deploying forces by air and sea from the Philippines, Korea, Thailand, and Australia to Okinawa and Taiwan, respectively. As the table shows, forward-positioned forces in Korea would provide the lowest representative response times to Okinawa and

Taiwan when compared with the Philippines, Australia, and Thailand. However, when compared to the U.S. locations, response times from Guam are similar to the response times from Korea and the other Pacific region countries. Although forward-positioned forces in Korea have the lowest response times in the region, their mission is to maintain stability on the Korean peninsula and they have historically have not been available to provide a readily deployable force to other locations in the region. Moreover, at the time of the DPRI negotiations, the U.S. was in separate negotiations to reduce presence in Korea.

**Table 1.4-2. Representative Response Times to Okinawa and Taiwan within the Western Pacific Region by Air and Sea**

	<i>Philippines</i>	<i>Korea</i>	<i>Thailand</i>	<i>Australia</i>
Air Deployment <sup>1</sup>				
Okinawa	1.9 hours	1.7 hours	3.6 hours	5.8 hours
Taiwan	1.6 hours	2.0 hours	2.7 hours	5.8 hours
Sea Deployment <sup>2</sup>				
Okinawa	1.8 days	1.6 days	3.4 days	5.5 days
Taiwan	1.1 days	1.9 days	2.5 days	5.4 days

Notes: <sup>1</sup> Air deployment times are based on C-17 speed of 450 knots (517.8 mph).

<sup>2</sup> Sea deployment times are based on ship speed of 20 knots (23 mph).

#### 1.4.2.3 Freedom of Action

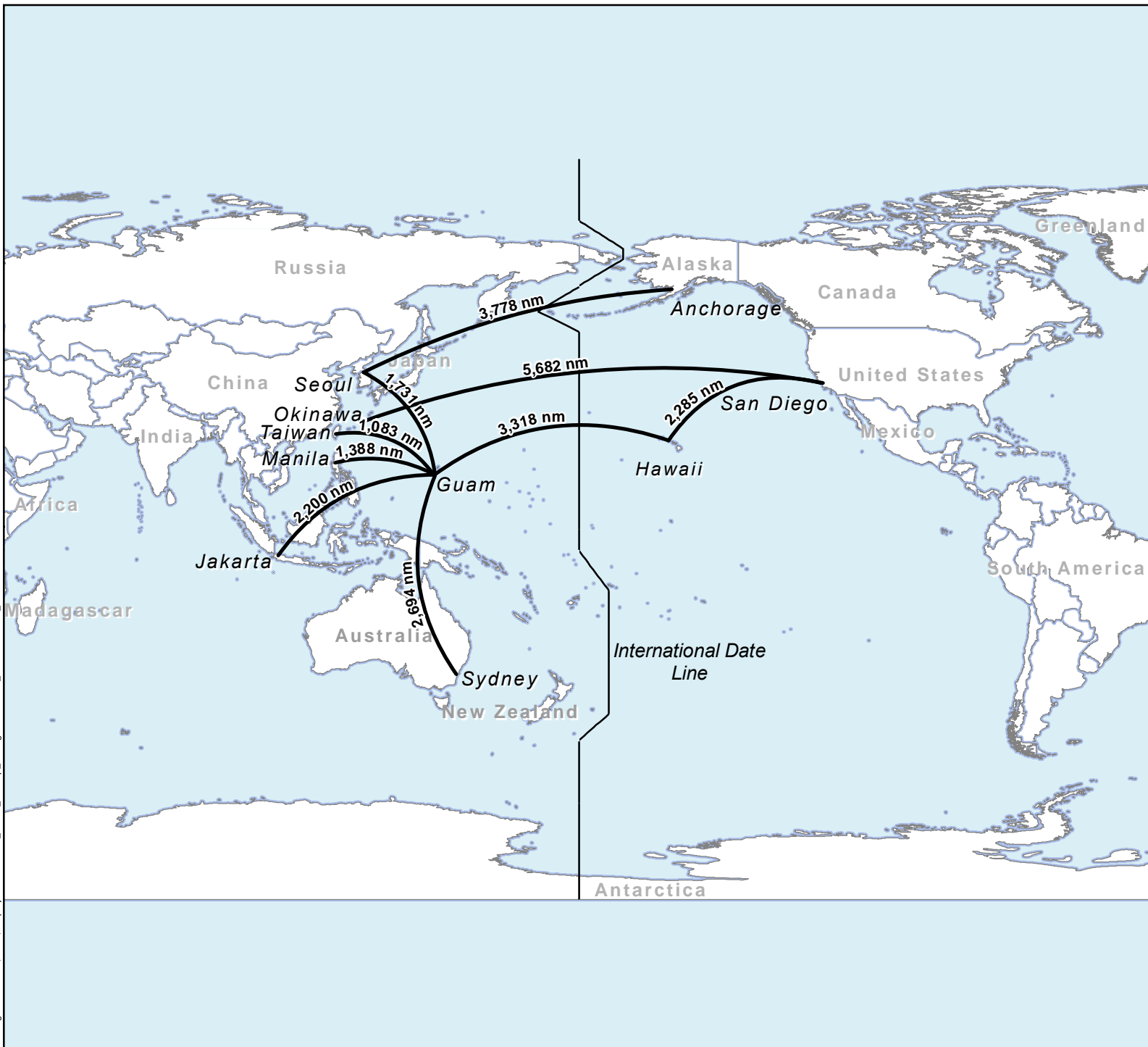
Freedom of action is the ability of the U.S. to use bases and training facilities freely and without restriction at a particular locale, as well as affording the U.S. the ability to engage in rapid force posture movements and contingency response from those locations. Freedom of action is variable based upon the location of the action, with the most flexibility being available at facilities and bases located on sovereign U.S. soil. Guam, Hawaii, Alaska, and California are preferred over foreign countries because they provide the most flexibility for the troops during times of maximum threat.

However, to ensure the most strategic location for basing, during the IGPBS process, U.S. representatives consulted with representatives of the Philippines, Thailand, Australia, Korea, and Singapore, which are allies to the U.S. in the Pacific region and are well situated for strategic force deployment, to ascertain their willingness to host U.S. forces. Additionally, a permanent basing, rather than a temporary basing, location was sought because it would provide the greatest regional stability for the placement of military assets. Further, permanent basing, consistent with the host nation laws and policies, is much more likely to be developed to support the U.S. military's specific operational requirements.

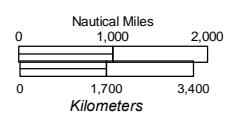
These countries, while amenable to various degrees of temporary basing or cooperative security agreements, were unwilling to allow permanent basing of U.S. forces on their soil. For instance, the Philippines and Thailand had only recently divested their countries of U.S. forces and were unwilling to allow the U.S. forces to return permanently. The Australian government was also unwilling to permit an increase of U.S. forces within its borders, with the exception of forces assigned to the Joint Combined Training Center. Singapore also declined additional military presence.

A critical precept in the QDR was to tailor the military's overseas "footprint" to increase freedom of action, reduce friction with host nations, and respect local sensitivities. The military's goal is to locate forces where those forces are wanted and welcomed by the host country. Because these countries within the region have indicated their unwillingness and inability to host more U.S. forces on their lands, the U.S. military shifted its focus to basing on U.S. sovereign soil.

**Figure 1.4-1**  
Travel Distances within  
the Pacific Region



Source: Navy 2009



Printing Date: Jul 14, 2009, M:\projects\GIS\8806\_Guam\_Buildup\_EIS\figures\Current\_Deliverable\Vol\_1\1.4-1.mxd

#### 1.4.2.4 Summary of Global Background for Proposed Marine Relocation

Table 1.4-Table 1.4-3 summarizes the alternatives analysis, and shows that Guam is the only location ranked favorably under the three criteria. Overall, Guam, Hawaii, Alaska, and California pose no limitation on freedom of action and have available infrastructure. However, California, Alaska, and Hawaii all create significant strains on rapid response time, interoperability, and the U.S. ability to uphold treaties and protect other interests in the Asia-Pacific region. Commitments under those treaties require that certain forces be within range to project power, to deter aggression, and dissuade coercion in the Western Pacific. In addition, Japan's clear willingness to fund the development of facilities to support the relocation of the Marines to Guam, as reaffirmed by the Japanese Diet in its recent ratification of the Guam International Agreement, reflected Japan's recognition of the continuing linkages between those forces and U.S. commitments to Japan under the Mutual Security Treaty. Also, Guam's distance to many of the likely contingency areas in the region is comparable to distances from the other potential allied countries in the Pacific region considered for permanent basing, and is close enough to threats to employ rapid response capabilities and to implement the requirements of treaties. Finally, in contrast to Guam, which is U.S. sovereign soil that meets the freedom of action operational requirement for permanent basing, no consulted allied countries in the Pacific region were willing to host a large additional contingent of U.S. forces on a permanent basis. In sum, the fundamental requirement to support the treaties and alliances that ensure peace and stability in the region, and the pressing need to reduce friction on Okinawa make Guam the only location for the realignment of forces that meets all criteria.

**Table 1.4-3. Global Alternatives Analysis Summary**

<i>Alternative Site</i>	<i>Criteria</i>		
	<i>Alliance and Treaty Requirements</i>	<i>Response Time to Southeast Asia</i>	<i>Freedom of Action</i>
Okinawa (current) <sup>1</sup>		+	-
Hawaii	-	-	+
West Coast U.S (including Alaska)	-	-	+
Marianas (Guam)	+	+	+
Philippines	-	+	-
Thailand	-	+	-
Australia	-	+	-
Singapore	-	+	-
Korea	-	+	-

Notes: + = positive response to criteria; - = negative response to criteria

<sup>1</sup>Scoring is specific to the Marine Corps relocation and is based upon the host nation's international agreements with the U.S. expressing the desire for this action.

#### 1.4.2.5 Potential Locations for Marine Corps Basing and Training in the CNMI

The CNMI was also reviewed as a potential location for the Marine Corps basing in response to comments received during public scoping. The following considerations were taken into account during that review. Direct access to a deep water port for Navy ships is crucial to logistics and operational support of the Marine Corps. The relocation would also require significant utilities infrastructure, an airfield with aviation maintenance support facilities, and access to medical and quality of life facilities. Tinian possesses the most available DoD property for exclusive military use within the CNMI. It has been used for training and construction of a base would reduce existing training capabilities, requiring replication of these capabilities elsewhere in the region. Tinian also only has limited infrastructure to support basing and no deep water port. Therefore, Tinian remained a focal point for training but was

eliminated as a basing site. Saipan has some infrastructure but its deep water port capacity was not sufficient to meet the Navy's needs. It also has no existing DoD property to support basing. The remaining islands within the CNMI have even less infrastructure and capability to support relocation and training. Therefore, none of the locations within the CNMI were considered suitable for basing; and accordingly they were not considered reasonable alternatives.

In contrast, DoD has many facilities on Guam and owns 40,000 (ac) (16,187 ha); approximately 29% of the land mass. The DoD maintains global mobility capabilities at Andersen AFB with Air Force Air Mobility Command capabilities to support onward deployments for Marines and other forces proposed to be relocated to Guam. The runway at Andersen AFB can accommodate tactical or strategic aircraft, including all strategic lift and strategic bomber/strike aircraft. Similarly, the Naval Base on Guam is capable of accommodating the embarkation and deployment of Marines and other forces by naval shipping. Medical and quality of life (QOL) facilities are also available on Guam.

Although inadequate for basing, Tinian provided the best opportunities for training groups of 200 Marines or larger due to greater land availability. It provides reliable access and maximum opportunity to realistically train with their weapons and equipment while minimizing "down time" lost when travelling to training locations. It is about 100 mi (160 km) away from Guam. The northern two-thirds of Tinian are leased to the DoD. Company and battalion level non-live fire training areas already exist and are utilized on these lease parcels. The land, however, could be developed to accommodate live fire ranges.

### 1.4.3 Navy

The employment of aircraft carriers and their associated escort ships, collectively referred to as a carrier strike group (CSG), are integral to supporting U.S. interests and meeting treaty and alliance requirements, both globally and regionally. The aircraft carrier's mission is to:

- Provide a credible, sustainable, independent presence and conventional deterrence in peacetime
- Operate as the cornerstone of joint/allied maritime expeditionary forces in times of a crisis
- Operate and support aircraft attacks on enemies, protect friendly forces, and engage in sustained independent operations in war (Navy 2009b)

The Navy's proposed action is based upon treaty and alliance requirements, such as those noted below in Section 1.4.3.1 and the QDR. One of the QDR conceptual policy initiatives is that the U.S. should strive to position strike forces, which include aircraft carrier and air wing capabilities, in forward locations that support flexibility and speed of response to anywhere in an unpredictable environment. The Pentagon's strategic QDR of 2006 stated the following:

*"The Fleet will have a greater presence in the Pacific Ocean consistent with the global shift of trade and transport. Accordingly, the Navy plans to adjust its force posture and basing to provide at least six operationally available and sustainable carriers and 60% of its submarines in the Pacific to support engagement presence and deterrence".*

This guidance reflected a need to supplement current ship deployments and the aircraft carrier base (homeport) in the Pacific. The policy initiative of the QDR was to provide a near continuous presence of multiple CSGs in the Western Pacific and/or Indian Ocean. Accordingly, the Navy began to identify how to meet: 1) treaty and alliance requirements, as well as the QDR; 2) freedom of action (use of a base without restrictions, including implementation of force protection measures to deter/avoid terrorist attacks); and 3) response times to potential areas of conflict. Starting in 2005, the Navy began exercising

this concept of operations by developing a series of multi-CSG exercises commonly known as “Valiant Shield” in the Mariana Islands. Traditional thinking had been, in order to assure continuous military presence in an area, a ship or forces needed to have a forward homeport or base from which to operate. The Navy, however, validated the concept of continuous rotation of strike groups to increase presence in the region as desired by the QDR. To support the continual rotational presence, a new concept was developed, a transient capable port that would provide maintenance and logistics support for aircraft carriers close to the area of responsibility (AOR). The proposed transient port capability in Guam, as discussed below, fulfills the operational requirement for continuous strike capability without the financial, political, and environmental issues associated with a forward homeport.

The Navy currently bases (homeports) six aircraft carriers in the Pacific AOR: three in San Diego, California; two in Washington State; and one in Yokosuka, Japan. A homeport provides the full suite of support services to the ship and air wing and the dependent families of personnel assigned to the CSG. These services include full depot-level maintenance, QOL support services for dependents, and other related services. When ships are deployed they visit other harbors. The length of stay, reasons for stay, and other factors determine whether the visit is characterized as a “port” visit or “transient” visit. The length of stay and purpose of a visit are dictated by military mission requirements. Port visits are brief and may be determined by international political concerns, operational requirements, and other factors. Port visits require minimal or no shoreside support and do not necessarily require a berth. When port visits are made to locations without an available berth (anchorage), this further limits time and capability for ship maintenance and crew rest. Because a port visit is brief and independent of shoreside utility support, the aircraft carrier has the ability to get underway with minimal delay. This ability to mobilize quickly is an important force protection consideration, allowing CSG port visits to take place in foreign locations.

In contrast to port visits, the Navy proposes to develop a transient berthing capability which provides the ship and carrier air wing operational support requirements, including emergent repair and maintenance capabilities, and crew QOL. There would be no dependent QOL support nor full depot maintenance as this support is provided at the ship’s homeport. To accomplish a transient capability, a berth is required with full “hotel services” for the ship and the ability to ensure QOL and safety for the crew and ship for a duration of stay longer than is normal for a port visit. These longer stays with a ship relying on shoreside utilities increase force protection concerns; however, the advantage of a transient port capability is that a ship can be re-supplied or maintained without returning to its homeport. Development of a transient capable port close to the AOR increases aircraft carrier presence, as required by the QDR, by reducing the non-availability that occurs when a carrier must perform a long transit to its homeport. The creation of a transient capable port comes without the expense, political or environmental concerns raised by creation of a forward homeport. It also maintains adequate response times to potential conflicts.

#### 1.4.3.1 Treaty and Alliance Requirements

Five of the seven U.S. Mutual Defense Treaties are with countries in the Western Pacific: Philippines, Australia/New Zealand (joint treaty), Korea, Japan, and Thailand. The Pacific Fleet’s AOR extends from the west coast of the contiguous U.S. to the eastern shore of Africa. The AOR includes the world’s five largest foreign armed forces: People’s Republic of China, Russia, India, North Korea and Korea. More than half of the world’s population lives within the AOR. In addition, more than 80% of the population within the Fleet’s AOR lives within 500 mi (805 km) of the oceans and more than 70% of the world’s natural disasters occur in this region.

When the Navy examined potential locations to support a greater carrier presence in the Pacific, it was mindful of the critical precept of the IGPBS to place visiting U.S. forces only where those U.S. forces are

wanted and welcomed by the host government. Accordingly, as discussed in Section 1.4.2.3 above, because these countries within the region have indicated their hesitancy and inability to host more U.S. forces on their lands, the U.S. military shifted its focus to basing on U.S. sovereign soil.

#### 1.4.3.2 Freedom of Action and Force Protection

In the context of creating a transient-capable port, as discussed above, a crucial factor is freedom of action. Freedom of action is the ability of the U.S. to use ports, training facilities, and bases (including the ability to re-supply and conduct mid-level maintenance) freely and without restriction at a particular locale, as well as affording the U.S. the ability to engage in force protection, rapid force posture movements, and contingency response. U.S. relations in the Pacific and Indian Ocean regions are based upon multiple bilateral treaties and international law. Within this legal framework, U.S. forces and its Pacific allies have mutual defense commitments, however, access and level of support varies for like operations throughout the region. In short, U.S. forces responding to contingencies still have greater freedom of action when responding from U.S. territory.

The reliance on shoreside utility support for a transient-capable port reduces the aircraft carrier's ability to get underway quickly. Compared to port visits, the longer berthing times and the delay in getting underway are important considerations for force protection. The CSG concentrates a large contingent of military personnel (greater than 7,000) along with hundreds of millions of dollars of military assets when it is in a transient port, so force protection is critical. In assessing possible locations for transient capable ports, the unique requirements for emergent repairs, full shoreside utility support, and the increased force protection and security requirements that accompany the longer duration of visits make U.S. sovereign locations for the transient capable port preferable.

Force protection concerns increase with length of stay. Given the criticality of the CSG, the Navy determined that it must have maximum flexibility to protect the CSG. While force protection concerns are met in foreign ports, accomplishment of this requirement is more feasible in U.S. territory. Using these criteria, force protection can be more easily met in Guam, Hawaii, Washington, and California and are, therefore, preferred over sites in other countries because they provide the most flexibility in the combined requirements of force protection and freedom of action.

#### 1.4.3.3 Response Times

To meet the QDR's stated policy initiatives, a comparative analysis of the potential response times from existing homeports and traditional port visit locations was conducted. The response times in Tables 1.4-1 and 1.4-2 show the challenge of siting a transient-capable port to ensure that aircraft carriers can still rapidly respond to a crisis in the Western Pacific while providing for the critical freedom of action and force protection requirements this asset requires. Ports in the region that were a home port or have previously accommodated U.S. aircraft carriers for port visits were considered as potential locations for a transient port. U.S. port locations considered were Hawaii, Guam, Washington, and California. Hawaii is located approximately 3,300 nm (6,160 km) northeast of Guam in the opposite direction of Western Pacific/Indian Ocean AOR. Hawaii is also outside of the AOR for Western Pacific operations. Transit times from the AOR to the West Coast are even longer. The transit time nearly doubles from Guam to Hawaii and again from Hawaii to California. Hawaii and California would significantly strain the capability to rapidly respond to a crisis in the Western Pacific or Indian Ocean. Accordingly, these locations were eliminated from further consideration. Non-U.S. ports in the Western Pacific that have had port visits are located in Australia, Singapore, Hong Kong, and Japan. Australia, Singapore, Hong Kong, Japan, and Guam are much closer to potential crises areas and the response times would be significantly

shorter. Therefore, they were retained as potential locations for extended aircraft carrier transient capabilities.

Utilization of a location in the Western Pacific would satisfy the QDR given that maintenance and supplies would be obtained closer to the site of operations, in effect, increasing the availability and presence of carriers in the Pacific due to the reduction in transits to other locations outside of the Western Pacific AOR. The greater availability and presence enable quick responses to potential crises due to shorter travel times and distances to U.S. allies and potential hot spots within the region.

#### 1.4.3.4 Summary of Global Background for Proposed Transient-Capable Port

Overall, Guam, Hawaii, California, and Washington pose no limitation on freedom of action, and all have some available infrastructure to support an aircraft carrier visit. None however, except for California and Washington, which are presently aircraft carrier homeport locations, have an aircraft carrier transient-capable pier. California, Washington, and Hawaii all create significant strains on rapid response time and the U.S. ability to uphold treaty obligations. Those treaty obligations require that certain forces be within range to project power, to deter aggression, and dissuade coercion in the Western Pacific. The aircraft carrier homeport in Japan is within the desired range; however, this pier is a dedicated homeported nuclear powered aircraft carrier pier and there is no additional capability to meet the needs of a transient nuclear powered aircraft carrier berth as specified by the QDR. Guam is close enough to many of the likely contingency areas in the region and potential threats to ensure rapid response, comply with treaty obligations, and assure the deterrent presence that U.S. forces bring to a region. Development of transient port capability on Guam, because of its proximity to the Western Pacific/Indian Ocean AOR, enables multiple CSGs to remain in the Western Pacific/Indian Ocean AOR for as long as possible. This transient port capability meets the defense and national security policy initiatives of the QDR. Finally, because Guam is a U.S. sovereign territory, the combined requirements of freedom of action and force protection can be met while meeting the required operational flexibility.

Guam is a suitable base for the following additional reasons:

- Guam maintains adequate infrastructure for shoreside utilities.
- Naval Base Guam already possesses emergent nuclear repair, radiation response, and radioactive waste management capability.
- Guam has an existing logistics support network through the Defense Logistics Agency that is co-located on Naval Base Guam. While in port, the aircraft carrier continues to support the on-board military personnel while continuing its daily operations and maintenance of the ship and its aircraft. Food and other supplies need to be reliably available for the ship.
- Guam provides adequate quality of life amenities. One of the primary reasons for the extended transient port visits is to provide for QOL for sailors and airmen deployed for extended periods of time to the Western Pacific associated with enhanced rotational presence. Studies have shown that extended deployments at sea may have detrimental effects on individual readiness unless adequate shoreside QOL amenities are available for rest and relaxation when the ship is in port. Morale and QOL of individual Sailors is important to maintain a combat ready unit and Guam provides adequate QOL amenities.
- Guam provides existing transient aircraft capabilities at Andersen AFB for visiting air wings.

In sum, the fundamental requirements to support the treaties and alliances, which ensure peace and stability in the region, and Guam's unique geography and port infrastructure, make it the only location to

create a transient-capable aircraft carrier port in order to increase aircraft carrier presence in the Western Pacific.

#### **1.4.4 Army**

On December 16, 2002, National Security Presidential Directive-23 directed the DoD to establish a capability to protect the U.S. homeland, forces, and its allies from ballistic missile attacks starting in 2004. The ballistic missile defense program develops the capability to defend territories and forces of the U.S. and its allies against all classes and ranges of ballistic missile threats. To protect the territory of Guam and the U.S. forces on Guam from such threats from nations not supportive of the U.S., an AMDTF is proposed to be sited on Guam. Weapons emplacement siting criteria, such as operational threats and requirements, and the analysis of siting alternatives are classified. This information is in a Classified Appendix to this public EIS/OEIS.

## 1.5 DECISIONS TO BE MADE

The Navy will issue a Record of Decision (ROD) explaining whether and how to implement the proposed action regarding:

### 1. Marines Relocation:

- Location of the administrative buildings, training areas, housing, aircraft and maintenance facilities, and air/sea embarkation areas
- Construction and operation of facilities
- Proposed training and operation of training ranges
- Development of QOL facilities, such as military exchanges and commissaries, and athletic facilities
- Acquisition of land for the proposed actions
- Location, construction and operation of utilities and roads related to the proposed actions

### 2. Aircraft Carrier Transient Capable Wharf:

- Location of the transient capable, deep-draft aircraft carrier wharf
- Construction and operation of new and refurbished infrastructure and facilities

A summary of environmental impact mitigation measures will also be included in the ROD.

Similarly, the Army will issue a ROD also based on the NEPA process documents. The ROD will state the decision as to whether and how to implement the proposed action regarding:

### 1. Army AMDTF

- Location of the housing, administrative buildings, and facilities to support operations for the Army AMDTF
- Construction and operation of the facilities
- Training of military personnel

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## 1.6 SITE SPECIFIC ANALYSIS VS. ANALYSIS OF LONG-TERM PROJECTS

This EIS/OEIS addresses the potential direct, indirect, and cumulative short-term and long-term impacts of the proposed guidance that recommends integration of the environmental process at the earliest possible time to ensure that planning and decisions reflect environmental stewardship. In accordance with CEQ 1501.1(a), the Navy is integrating the NEPA process into early planning to ensure appropriate consideration of NEPA's policies and to eliminate delay.

The majority of activities analyzed are site specific; however, some activities, such as the utilities section, contain long-term plans for actions that would be implemented at a point in the future. Some long-term plans have not been finalized since it is anticipated that they would be implemented through Special Purpose Entities (SPE) in coordination with the U.S. and the Government of Japan. Pursuant to the Realignment Roadmap Agreement, the Government of Japan has agreed to provide up to \$740 million in loans for a SPE to provide utilities support for the 3<sup>rd</sup> Marine Expeditionary Force (III MEF) forces that would be realigning from Okinawa to Guam. For example, an SPE utility entity or entities would be private ventures that provide long term solutions to the underlying utility needs to support the realignment efforts. Private entities might develop, construct, and manage a power plant or a wastewater treatment plant. The U.S. government would then agree to purchase utilities from that plant as a fee that provides payback to the SPE on its investment. Given that these SPEs have yet to be formed, these long-term solutions are not currently defined in detail; therefore, they are presented as “conceptual” alternatives and are addressed as long-term alternatives in this EIS/OEIS.

Certain long-term alternatives, such as of power generation, are analyzed programmatically. The potential environmental effects associated with the long-term programmatic projects have been analyzed based on available information, and presented here to adequately describe the scope of the entire project. Additional NEPA documentation and resource surveys would be completed, as required, in the future when project specifics and funding become available for these long-term projects. The short-term utilities projects are site specific, and have been identified to meet the immediate utilities demands estimated for the proposed actions on Guam. These are identified as “interim” alternatives and basic alternatives (those which would satisfy near term and long-term needs) are evaluated completely in Volume 6 of this EIS/OEIS (Related Actions).

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## 1.7 SUMMARY OF ACTION ALTERNATIVES

Chapter 3 of this volume provides a more detailed summary of the alternatives and contains figures that depict where projects and training ranges would be located.

### 1.7.1 Marine Corps

The facilities and operational and training requirements of the Marine Corps units relocating to Guam were analyzed. The requirements were grouped into components that represent core capabilities and support functions of the overall Marine Corps mission. The functions have distinct facility and operational requirements and were used to develop the range of potential alternatives. After analyzing potential alternatives, four alternatives for development of the Main Cantonment (Alternatives 1, 2, 3, and 8) were retained and carried forward for consideration. These alternatives involve various configurations of the Main Cantonment at NCTS Finegayan and development of housing and QOL functions at Finegayan, Navy Barrigada, and/or Air Force Barrigada.

Independent of the alternatives for the Main Cantonment, the proposed action also includes waterfront alternatives in Apra Harbor and airfield alternatives at Andersen AFB (including ammunition storage). There are also proposed alternatives for a training range complex and for an access road to the NMS.

Guam cannot support all live-fire ranges needed for the training of the relocated Marines. Accordingly, the Marine Corps Relocation proposed action includes the development of some live fire ranges on Tinian in CNMI. Volume 3 analyzes the environmental effects of this portion of the proposed actions and alternatives.

### 1.7.2 Navy

The analysis and selection of reasonable alternatives for a new deep-draft wharf for transient carrier visits were based on consideration of the following criteria:

- Practicability (with subcriteria)
  - Meets security/force protection requirements
  - Meets operational/navigational characteristics
  - Available and capable of being implemented after taking into consideration cost, existing technology, and logistics in light of the overall project purpose
- Avoids environmental impacts to the extent practicable
- Minimizes unavoidable environmental impacts

Volume 4 contains the full analysis of the alternatives and their environmental effects. The two alternatives carried forward are Polaris Point (Preferred) and former SRF. They are geographically very similar (see Figure 3.4-1). The existing Outer Apra Harbor Channel would be widened to 600 ft (183 m) with minor adjustments to centerline and navigational aids. A new ship turning basin would be

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established that would require dredging to -49.5 ft (-15.1 m) Mean Lower Low Water plus 2 ft (.6 m) over dredge. The turning basin would be located near the wharf and north of the Inner Apra Harbor entrance channel. The turning basins are largely, but not exactly the same. The proposed wharf designs, dredge depths, dredge methods, and dredged material management would be the same; however, there are differences in the volume of dredged material. The shoreside utility and operational support requirements would be the same. Shoreside facilities include utilities to meet 100% of aircraft carrier requirements. A new Port Operations support building and various utility buildings would be constructed on a staging area at the wharf. There would be an area established for Morale, Welfare, and Recreation activities and vehicle parking.

### **1.7.3 Army**

The siting options and analyses, including the alternatives considered and dismissed, for headquarters (HQ), operations, bachelor quarters, and family housing would be as described for the Marine Corps portion of the proposed action (see Volume 2). Requirements for these facilities are addressed in the Marine Corps Main Cantonment component as the Army and Marine Corps would be sharing these facilities. The alternatives are co-location of support facilities with the Marine Corps facilities at NCTS Finegayan; locating the Army AMDTF support facilities at Navy Barrigada; and a combination of co-location of HQ facilities with the Marine Corps facilities at NCTS Finegayan and placement of housing facilities at Navy Barrigada and Air Force Barrigada.

Eight new climate-controlled, earth-covered magazines (ECMs) are also proposed within MSA 1 at Andersen AFB to store Army missiles and provide safe stowage of the system launchers during inclement weather. An important operational component of ammunition storage is the associated explosive safety hazard arcs, called the Explosive Safety Quantity Distance (ESQD) arcs. These arcs define safety areas that surround explosive hazard sites and establish the minimum permissible distance between the hazard of the explosive and any inhabited building, public assembly area, and/or the boundary of DoD lands. Existing munitions storage facilities at the MSA generate ESQD arcs that encompass much of the land in central Andersen AFB. The new ECMs would not require expansion of the existing ESQD arcs around MSA 1.

The weapons emplacement sites would include approximately 16 ac (6.5 ha) of developed land that would accommodate Terminal High Altitude Area Defense, Patriot Missile, and Surface-Launched Advanced Medium-Range Air-to-Air Missile operations. The missile system components are mobile, but the emplacement sites would be fixed. Weapons emplacement sites would include bermed fuel storage areas and crew billeting for shift use.

Weapons platform siting is classified and is assessed in a Classified Appendix to this public EIS/OEIS.

## 1.8 NATIONAL ENVIRONMENTAL POLICY ACT AND EXECUTIVE ORDER 12114 COMPLIANCE

The proposed federal actions are subject to NEPA. This document was prepared (1) to inform the Navy and the Army of the anticipated environmental consequences of the proposed actions and alternatives (including the no-action alternative); (2) to inform the public of potential environmental impacts associated with the proposed actions and alternatives; and (3) to help the Navy and the Army decide whether or not to approve the proposed development and construction of facilities and infrastructure, and the implementation of the training operations as proposed. A description of the NEPA process and timeline is summarized in Figure 1.8-1 and described below.

### 1.8.1 Scope of NEPA and EO 12114

Proposed actions or impacts occurring within 12 nm (22.2 km) are subject to compliance with NEPA. Actions with the potential to significantly harm the environment beyond U.S. territorial waters (i.e., beyond 12 nm [22.2 km]) must be analyzed using the procedures set forth in EO 12114 and associated implementing regulations. An impact statement prepared under EO 12114 is identified as Overseas Environmental Impact Statement (OEIS).

### 1.8.2 Scope of NEPA and EO 12114

At the initiation of the environmental planning process, the action proponent chose to ensure that alternatives, whether inside and outside the territorial seas, would be analyzed in the same document. This inclusive approach required compliance with both EO 12114 and NEPA regulations. The Federal Register "Notice of Intent" identified this document as an EIS/OEIS and it was similarly identified at the public scoping meetings.

The proposed actions were more fully developed through public scoping and subsequent refinement of requirements by the action proponent. Ultimately, as discussed in Volume 3, only routine vessel and aircraft transits activities between Guam and Tinian are proposed to occur outside the geographic scope of NEPA. The character of these activities has been studied and determined not to have the potential to significantly harm the global commons. Therefore, only NEPA requirements are applicable to the proposed actions since no activities trigger coverage by EO 12114. The document through this draft remains labeled as an EIS/OEIS. It will, however re-titled as an EIS and developed solely under NEPA, if no additional information to the contrary is revealed during the public comment process.

### 1.8.3 Notice of Intent (NOI) and Public Scoping Period

NEPA regulations require an early and open process for determining the scope of issues that will be addressed prior to implementation of proposed actions. The Notice of Intent (NOI) to prepare an EIS/OEIS was published in the *Federal Register* on March 7, 2007 (72 Federal Register 10186) (Navy 2007a), and public scoping meetings were held on April 17 and 18, 2007 on Guam, and April 19 and 20, 2007 on Saipan and Tinian, respectively. Approximately 130 notices regarding the public scoping period

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were mailed on March 24, 2007 to elected officials, federal, state, and local government agencies, non-governmental organization representatives, and other entities possibly interested in the EIS/OEIS.

During the scoping period, the public provided comments on a variety of important topics such as access to DoD facilities, social and environmental effects, economics, Chamorro interests, safety, infrastructure, and transportation. All topics identified during the scoping period were considered in the development of the scope of the environmental impact analyses. Specific topics that were identified in the 990 comments received are addressed in the specific resource impact sections of this EIS/OEIS. Table 1.8-1 shows which chapters of the Draft EIS/OEIS address the public comments.

**Table 1.8-1. Public Comments Received during the Scoping Process  
Grouped by Subject Matter and Chapter**

<i>Topics</i>	
<p>1. Access (Ch. 8, 9)</p> <ul style="list-style-type: none"> <li>• DoD facilities</li> <li>• Recreation areas</li> <li>• Apra Harbor</li> </ul> <p>2. Social (Ch. 16, 18)</p> <ul style="list-style-type: none"> <li>• Population increase and associated effects</li> <li>• Effects on educational facilities</li> <li>• Effects on public health and social services</li> <li>• Respect for local values/people</li> <li>• Socioeconomics/QOL</li> <li>• Mental health and substance abuse</li> <li>• Income levels and welfare system</li> <li>• Libraries</li> </ul> <p>3. Economics (Ch. 16)</p> <ul style="list-style-type: none"> <li>• Labor-related issues</li> <li>• Small business opportunities</li> <li>• Effects on tourism</li> <li>• Military purchasing of goods locally</li> <li>• Competitive pricing (on base vs. off base)</li> <li>• Availability and cost of civilian housing</li> <li>• Improve economy</li> <li>• Use of local labor vs. bringing in off-island laborers/companies</li> </ul> <p>4. Chamorro Interests (Ch. 12, 16)</p> <ul style="list-style-type: none"> <li>• Self government</li> <li>• Cultural, historical, and archaeological</li> <li>• Ancestral lands and access</li> <li>• Cultural, historic, and transition education</li> <li>• Historic properties</li> <li>• Minoritization of Chamorros/ demographic changes</li> </ul> <p>5. Law Enforcement (Ch. 16, 18)</p> <ul style="list-style-type: none"> <li>• Crime/prostitution</li> <li>• Violence against women and children</li> <li>• Overloading local police/law enforcement resources</li> <li>• Overloading local emergency response/paramedic resources</li> <li>• Overall safety</li> </ul>	<p>6. Infrastructure/Transportation (Ch. 3, 4 in Volume 6)</p> <ul style="list-style-type: none"> <li>• Increase in traffic/roads/highways</li> <li>• Utility requirements</li> <li>• Potable water/groundwater recharge</li> <li>• Solid waste/recycling</li> <li>• Sanitary sewer system</li> </ul> <p>7. Noise (Ch. 6, 7)</p> <ul style="list-style-type: none"> <li>• Airspace management</li> <li>• Training (artillery ranges, helicopters)</li> </ul> <p>8. Land Use Planning (Ch. 8)</p> <p>9. Marine Resources (Ch. 11)</p> <ul style="list-style-type: none"> <li>• Fish habitat, coral reefs, and marine mammals</li> <li>• Effects on local fisherman and the fishing industry</li> </ul> <p>10. Ecological (Ch. 10, 11)</p> <ul style="list-style-type: none"> <li>• Endangered species</li> <li>• Invasive species</li> <li>• Native species</li> <li>• Natural resources</li> </ul> <p>11. Air Quality (5)</p> <p>12. Surface Water (Ch. 4, 11)</p> <ul style="list-style-type: none"> <li>• Dredging and disposal requirements for Apra Harbor</li> <li>• Sewer outfalls</li> </ul> <p>13. Cumulative Impacts (Ch. 4 in Volume 7)</p> <p>14. Hazardous materials/hazardous wastes (Ch. 17)</p> <p>15. Proposed actions – not enough information disclosed (Ch. 2 in Volumes 2-6)</p> <p>16. International safety (N/A)</p> <p>17. Support for relocation (N/A)</p> <p>18. NEPA process (Ch. 1 in Volume 1)</p> <p>19. Radiation (Ch. 18)</p> <p>20. Overloading of regulating agencies (Ch. 16)</p> <ul style="list-style-type: none"> <li>• Construction (All Resources)</li> </ul>

*Note:* Topics are addressed in various chapters of the EIS, as noted in the parentheses. Resource-specific chapter numbers in Volume 6 are different than those in Volumes 2-5.

*Source:* NAVFAC Pacific 2007.

#### **1.8.4 Draft and Final EIS/OEIS**

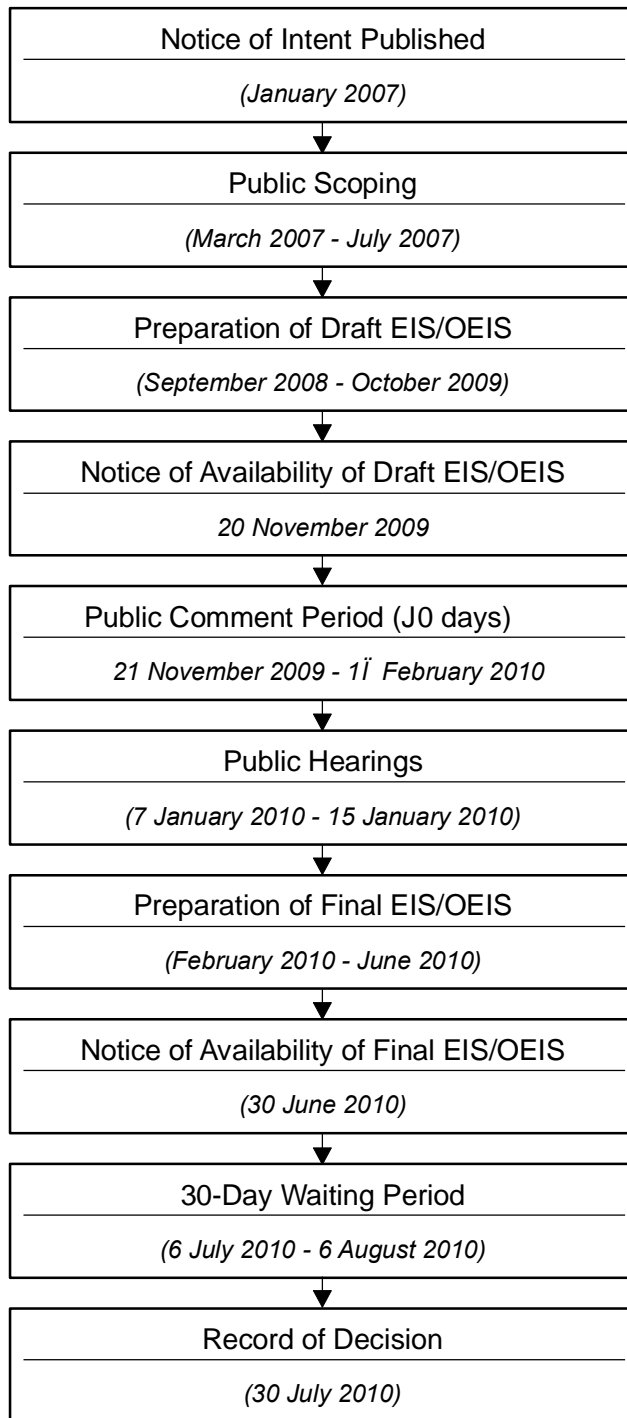
The notice of availability of the Draft EIS/OEIS for public review and the Notice of Public Hearing was published in the Federal Register on November 20, 2009 and in local newspapers. It was also made available on the EIS/OEIS website ([www.guambuildupeis.us](http://www.guambuildupeis.us)). The Draft EIS/OEIS was provided via compact discs to regulatory agencies and other stakeholders, and individuals who requested a copy during the scoping period. A minimum 45-day public comment period will immediately follow Federal Register publication of the notice of availability for the Draft EIS/OEIS. The projected schedule is in Figure 1.8-1.

Public hearings will be scheduled to occur a few weeks after the Draft EIS is released. Public hearings will provide an opportunity for interested parties to comment on the content of the Draft EIS/OEIS. All comments received during the review period and at the public hearings will be considered and appropriate changes incorporated into the Final EIS/OEIS.

A Final EIS/OEIS will be prepared incorporating responses to comments and any additional evaluations that may be warranted. The Final EIS/OEIS will identify the preferred alternatives and will be circulated in the same manner as the Draft EIS/OEIS, but to an expanded list of recipients based on requests received during the Draft EIS/OEIS comment period.

#### **1.8.5 Record of Decision (ROD)**

After issuance of the Final EIS/OEIS, a minimum of 30 days must pass before the lead agency can make a decision on its proposed actions. This provides time for the agency decision-maker to consider the purpose and need, weigh the alternatives, balance their objectives, and make a decision. The ROD can then be signed reflecting the DoD Executive Agent's final decision on the proposed actions, the rationale behind that decision, and commitments to monitoring and mitigation. The ROD will be published in the Federal Register, distributed to agencies and interested parties, and posted on the EIS/OEIS website.



**Figure 1.8-1**  
**EIS/OEIS Process and Projected Schedule**

## 1.9 AGENCY COORDINATION

### 1.9.1 Lead Agency

The Navy is the lead agency (40 CFR 1501.5) for preparation of this EIS/OEIS. The Office of the Secretary of Defense directed the Navy to establish a Joint Guam Program Office (JGPO) (Deputy Secretary of Defense 2006), that serves as the NEPA proponent of the proposed actions. JGPO responsibilities are as follows:

- Ensure the most efficient use of resources consistent with critical timelines
- Provide program oversight and management
- Develop strategic policy
- Synchronize and coordinate efforts
- Serve as liaison to internal and external organizations

### 1.9.2 Cooperating Agencies

A number of federal agencies were invited to be cooperating agencies (40 CFR 1501.6) in the preparation of this EIS/OEIS. These agencies have either jurisdiction or technical expertise for any component of the proposed actions or potentially affected resource. A list of agencies invited to participate as cooperating agencies and the associated correspondence is included in Appendix B. The list of cooperating agencies is shown below:

- Federal Aviation Administration
- Federal Highways Administration
- Department of Agriculture
- U.S. Air Force
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency (USEPA) Region 9
- U.S. Fish and Wildlife Service
- U.S. Office of Insular Affairs

Federal Highways Administration has prepared the transportation modeling, analysis for non-military proposed road projects and environmental impact analysis that appears and has been integrated into Volumes 2 and 6 of this Draft EIS/OEIS. Federal Highways Administration is using this Draft EIS/OEIS in compliance with the required evaluation, pursuant to NEPA, of their proposed roadway improvements on Guam. Federal Highways Administration will continue this collaborative effort with the Navy through the Final EIS/OEIS and will subsequently issue their own ROD to conclude their NEPA process.

### 1.9.3 Agency Consultations

To ensure avoidance, minimization, and mitigation of potential conflict with the objectives and requirements of federal, state, regional, or local plans, policies, or legal requirements from the proposed actions, the Navy has had and continues to conduct extensive dialogs with the regulatory agencies. In

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addition, the Navy has been holding meetings with the CEQ to provide regular updates and receive inputs on the EIS/OEIS. A summary of these efforts and the environmental compliance requirements are presented in Volume 8.

#### **1.9.4 Agency Partnering**

In addition to consultations with federal cooperating agencies, the Navy has held a number of regulatory agency briefings and meetings, including those held between June and August 2007 with local, federal, regional, and territorial (Guam and CNMI) agency partners. In February 2008, the Navy initiated a partnering strategy to continue the integration among military and civilian, federal, regional, and territorial agencies throughout the EIS/OEIS process.

The distribution list for the on-going partnering meetings now contains approximately 260 contacts. Due to the size and varied interests of the participants, the following working groups were established to focus on narrow ranges of issues: natural resources, cultural resources, regulatory compliance, and NEPA. The working groups formulate and address issues related to public scoping comments, baseline data for EIS/OEIS resource areas, working impact analysis findings, and potential mitigation measures. This effort has supplemented the traditional NEPA process and has resulted in identification and coordination of issues and concerns much earlier than usually occurs in the NEPA process.

The Navy has also engaged in a collaborative effort in preparing this Draft EIS/OEIS with the federal cooperating agencies and territorial agency partners. An early version of this document was shared with the management and technical staffs of these agencies in July 2009. Review comments were received by the Navy and appropriate sections were augmented based upon the advice of these agency partners. Subsequent meetings between these agencies and the Navy occurred in September and October 2009 to ensure understanding of the agency partners concerns and to continue to focus the information provided in this Draft EIS/OEIS.

#### **1.9.5 Guam and CNMI Local Government and Public Outreach and Involvement**

The Guam Civilian Military Task Force (CMTF) was established in 2006 to develop an integrated comprehensive master plan that would accommodate the expansion of military personnel, operations, assets and missions, and to maximize opportunities resulting from this expansion for the benefit of all the people of Guam. The Guam CMTF is comprised of the following subcommittees: health and social services, public safety, education, labor, ports and customs, economic development, infrastructure, housing, social and cultural, natural resources, and environment. Although subcommittee membership is limited to Guam agencies, JGPO and other DoD representatives participate in the subcommittees' monthly meetings. This has been an effective mechanism to develop mutually beneficial and agreeable solutions to issues.

Within the CNMI, the Tinian Mayor's office has also set up a CMTF. The Tinian CMTF is comprised of The Mayor's Office of Tinian, Department of Land and Natural Resources, Department of Environmental Quality, Historic Preservation Office, Department of Public Works, and Chamber of Commerce. Approximately monthly, JGPO meets with the Tinian CMTF to address issues of concern, provide updated information on the relocation, and assist in maximizing opportunities for the people of the CNMI.

To ensure local leaders are kept apprised of planning and decision making, recurrent meetings have been held between JGPO (forward) leadership and the Office of the Guam Governor, Guam legislature, and village mayors. JGPO's subject matter experts participate and meet with representatives of Guam's Consolidated Commission on Utilities, Department of Public Works, Land Use Commission, and University of Guam on a variety of issues of local concern and interest to ensure local involvement in

decision-making. A series of village meetings between May 2008 and January 2009 have also been conducted to allow the public an opportunity to better understand the relocation planning.

As the logistics hub of Micronesia, Guam's development has created Micronesian regional interest and concern. To address this and to ensure Micronesian leadership is apprised of planning and decision making, JGPO (forward) has participated in the Micronesian Chief Executive Summits which bring together the Governors and Presidents of Guam, CNMI, Palau, Federated States of Micronesia, and the Marshall Islands. Environmental issues are a priority for the Micronesian Islands and JGPO environmental representation at the summits has been well received. Other Micronesian forums have afforded an opportunity for JGPO to provide outreach, such as the Micronesian Port Users meeting in Palau.

In order to ensure that the best and most innovative solutions are used for the build-up, JGPO hosted three "Industry Forums". The Guam Industry Forum brought together industry from over 15 countries with over 3,300 participants along with participants from the Governments of Guam, Japan and the U.S. Some of the issues discussed and presented were acquisition integrity, acquisition strategy, small business opportunities, bio-security, workforce housing and logistics solutions, ports, roads and utilities, leadership in energy and environmental design, and information technology.

As health and public safety issues are at the forefront of local concerns, JGPO took it upon itself to host a Public Safety Forum in June 2008. This forum brought together representatives from the local and federal governments to discuss a wide range of public health and safety issues such as military justice issues, H2-B visa process, workforce support to include worker protection, housing and security, and healthcare. Breakout sessions for future resources covered the areas of fire, courts, police, and criminal investigations. This forum was the first opportunity that local agencies had to express their concerns to their federal counterparts.

## 1.10 SUSTAINABILITY

### 1.10.1 Overview

A significant consideration of the master planning for the Guam and CNMI military relocation is the sustainability achieved by the siting, design, systems, and operational functions of the program. The need for pursuing sustainable features and practices is based on federal laws, regulations, and Navy policies. One widely used definition of sustainability is meeting the needs of the present without compromising the ability of future generations to meet their own needs. There are at least three elements of sustainability: environmental, social, and economic. A successful sustainability approach would include a plan that identifies target goals for each of these elements that are considered and also implemented during the siting, design, construction, procurement, and operational phases of the program.

For the proposed actions, a separate and parallel master planning process is underway that would address the sustainability program elements. Sustainability would be initially addressed at a master plan concept level with the major effort focusing on water, power, and transportation resource areas. To assess and quantify the results of potential sustainability design guidelines and practices, the project planners would utilize the Sustainable Systems Integration Model, a proprietary, multisystem planning, environmental, and economic evaluation tool. This model would be used in conjunction with the stated goal of achieving the U.S. Green Building Council's Leadership in Energy and Environmental Design Silver certification, as established by the Navy. In addition, the operations and design of the proposed actions would consider the recommendations of the EO 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*. A sustainability charrette was conducted on Guam in January 2009. A charrette brings together a group of people who are led through a short, focused study to intensively brainstorm on specific issues. It produces a highly charged and creative atmosphere that harnesses the talents and energies of all participants. Their diverse ideas and viewpoints contribute to developing creative results that explore a wide range of possibilities. As a broad stakeholders' effort, this charrette included the project planners from the Navy, including the JGPO, Naval Facilities Engineering Command, and the Marine Corps; Government of Guam agencies including Guam Environmental Protection Agency (GEPA), Department of Land Management and Bureau of Statistics and Planning; and the Guam Contractors Association (Makio and Architects, and Kobet Architects). Participants identified specific elements to be included in the conceptual sustainability effort for this program. Their efforts focused on water, power, and transportation.

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## 1.10.2 Sustainability Focus Areas and Strategies

### 1.10.2.1 Potable Water

Sustainability goals for potable water include:

- *Water Conservation.* Identify and specify appropriate minimum water demand fixtures and devices.
- *Irrigation.* Minimize use of irrigation systems and water. Identify areas requiring irrigation such as recreation fields and other special use areas.
- *Grey Water Use.* Evaluate options for use of grey water for irrigation.
- *Rainwater Harvesting.* Investigate harvesting, storage and distribution systems.
- *Stormwater Quality, Infiltration and Groundwater Recharge.* Prepare a Low Impact Development manual for the program.

### 1.10.2.2 Power

The Navy has developed a 5-year energy plan that can be used by Naval Facilities Engineering Command Marianas when managing the Navy's utilities to attain compliance with the Navy's energy goals. These goals include energy conservation, measured as the decrease in the energy use intensity (million British thermal units per square foot) for buildings, and a percentage of energy that is expected to be produced from renewable energy sources in the future. The Navy Energy Program Goals outlined in USEPA 2005, National Defense Authorization Act 2007, Energy and Independence Security Act of 2007, and EO 13423 requires:

- *Energy Intensity.* Reduce energy usage by 3% annually or 30% by 2015 relative to 2003.
- *Renewable Energy.* Increase renewable electricity use 1.5% per year for a total of 25% of consumption from renewable sources by 2025 with 50% of the required renewable energy coming from new renewable sources that were acquired after January 1, 1999.
- *Water.* Reduce water consumption 2% per year (16% by 2015) relative to 2007.
- *Sustainable Buildings.* About 2% per year of existing facilities (15% by 2015) are expected to meet the Federal Leadership in High Performance and Sustainable Buildings Memorandum of Understanding. The Memorandum of Understanding includes reducing the energy demand 20% below 2003 standards, reducing indoor water use by at least 20% below the baseline for the facility, and reducing outdoor water use for landscaping by 50% with respect to conventional vegetation.
- *New Facility Design.* Design all new facilities with 30% more energy efficiency than American Society of Heating, Refrigerating and Air-Conditioning Engineers Standard 90.1-2004.
- *New Facility Construction.* Construct new facilities to Leadership in Energy and Environmental Design Silver.
- *Metering.* Install remote readable electricity meters on 25% per year (all by 2012) of facilities consuming more than \$35,000 per year of electricity. Meter additional facilities and utilities as practical based on business case analysis.
- *Energy Efficient Products.* Purchase energy efficient products (USEPA ENERGY STAR, and Federal Energy Management Program).
- *Leases and Services Contracts.* Include energy and water program requirements in leases and services contracts.

- *Minimizing Energy Demand.* Identify and evaluate systems and elements that would minimize energy demand.
- *Onsite Energy Generation.* Evaluate options such as photovoltaic and solar water heating systems.

#### 1.10.2.3 Transportation

Sustainability goals for transportation include:

- *Bicycle and Pedestrian Oriented Site Planning.* Design the site to encourage non-motor vehicle traffic.
- *Intra-site Shuttle.* Include a low energy usage shuttle system for the site, addressing location- and time-based transportation requirements.
- *Integrate Site Transportation (Military Facility) with Off-site (Community or Public) Transportation.* Design transportation on military facilities to conveniently connect with off-site high-capacity (non-individual motor vehicle) systems such as an off-site shuttle.

#### 1.10.2.4 Solid Waste

Consistent with DoD policy and legal requirements, the Guam construction projects would reduce construction waste by 50%. The new base facilities would produce a comprehensive recycling program that includes the procurement of materials and products with recycled content.

## 1.11 DOCUMENTS INCORPORATED BY REFERENCE

Several concomitant actions are related to the proposed actions. These actions are covered in separate NEPA documents being prepared while this EIS/OEIS is being developed. Table 1.11-1 clarifies the subjects of these documents. In addition, there are a number of planning and environmental studies that provide important information directly related to the preparation of this EIS/OEIS that are incorporated by reference, per CEQ regulations (40 CFR 1502.21). These studies are cited, as appropriate, in later sections of this EIS/OEIS and are included in the references section of each volume of this EIS/OEIS.

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**Table 1.11-1. Documents to Be Incorporated by Reference**

<i>Proposed Action Proponent</i>	<i>Proposed Action</i>	<i>Relevance to Military Relocation EIS/OEIS</i>
MIRC/DoD	<ul style="list-style-type: none"> <li>• Periodic update of EIS/OEIS for joint training and Marianas training range activities/facilities.</li> <li>• Does not propose new ranges, but may propose improvements to ranges and increased use.</li> </ul>	<ul style="list-style-type: none"> <li>• MIRC EIS/OEIS establishes baseline “existing conditions” of training ranges/facilities for the military relocation EIS/OEIS.</li> <li>• This EIS/OEIS covers new training requirements and proposes new ranges and facilities not covered by the MIRC EIS/OEIS because either: 1) the need for improvements to existing ranges was not identified in time, or 2) the proposed training activity requires changes to MIRC facilities, operations, training capacities or expansion of MIRC property.</li> <li>• The MIRC would incorporate the added training capabilities in the next periodic update of the MIRC.</li> <li>• Where portions of the MIRC EIS/OEIS are incorporated, they will be specifically identified and referenced to assist the reader.</li> </ul>
Ocean Dredged Material Disposal Site Designation (ODMDS) EIS/EPA	<ul style="list-style-type: none"> <li>• EPA proposes to designate an ODMDS more than 9 nm from Apra Harbor.</li> </ul>	<ul style="list-style-type: none"> <li>• ODMDS designation provides an additional dredged material management option for all dredging projects on Guam, including the proposed military relocation projects and Port Authority of Guam projects.</li> <li>• Dredged material must meet strict laboratory testing standards to qualify as suitable for ocean disposal.</li> <li>• Beneficial reuse of dredged material will continue to be the preferred management option.</li> </ul>

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