The U.S. Military Laydown On Guam:
Progress Amid Challenges

Jeffrey W. Hornung
OVERVIEW OF GUAM

Source: U.S. Marine Corps Forces, Pacific.
THE U.S. MILITARY
LAYDOWN ON GUAM
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PROGRESS AMID CHALLENGES

Jeffrey W. Hornung

SASAKAWA USA
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## Abbreviations

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<th>Abbreviation</th>
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<tr>
<td>AAFB</td>
<td>Andersen Air Force Base</td>
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<td>AF</td>
<td>Air Force</td>
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<td>AMDTF</td>
<td>Air and Missile Defense Task Force</td>
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<td>BRAC</td>
<td>Base Realignment and Closure</td>
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<td>CJMT</td>
<td>CNMI Joint Military Training</td>
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<td>CNMI</td>
<td>Commonwealth of the Northern Mariana Islands</td>
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<td>DECA</td>
<td>Defense Commissary Agency</td>
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<td>DHP</td>
<td>Defense Health Program</td>
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<td>DLA</td>
<td>Defense Logistics Agency</td>
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<td>DOD</td>
<td>Department of Defense</td>
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<td>DODEA</td>
<td>Department of Defense Education Activity</td>
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<td>DON</td>
<td>Department of the Navy</td>
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<td>DPRI</td>
<td>Defense Policy Review Initiative</td>
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<td>EA</td>
<td>Environmental Assessment</td>
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<td>EIS</td>
<td>Environmental Impact Statement</td>
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<td>EPA</td>
<td>Environmental Protection Agency</td>
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<td>F&amp;WS</td>
<td>U.S. Fish and Wildlife Service</td>
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<td>FAA</td>
<td>Federal Aviation Administration</td>
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<tr>
<td>FRF</td>
<td>Futenma Replacement Facility</td>
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<td>GAO</td>
<td>Government Accountability Office</td>
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<td>GovGuam</td>
<td>Government of Guam</td>
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<td>GPA</td>
<td>Guam Power Authority</td>
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<td>GUNG</td>
<td>Guam National Guard</td>
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<td>GWA</td>
<td>Guam Water Authority</td>
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<td>HMU</td>
<td>Habitat Management Unit</td>
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<td>IGPBS</td>
<td>Integrated Global Presence and Basing Strategy</td>
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<td>III MEF</td>
<td>III Marine Expeditionary Force</td>
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<tr>
<td>ISR</td>
<td>Intelligence, Surveillance and Reconnaissance</td>
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<td>JPY</td>
<td>Japanese Yen</td>
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<tr>
<td>LFTRC</td>
<td>Live Fire Training Range Complex</td>
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<td>MAGTF</td>
<td>Marine Air-Ground Task Forces</td>
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<td>MCBH</td>
<td>Marine Corps Base Hawaii</td>
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<tr>
<td>MG</td>
<td>Million gallons</td>
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<tr>
<td>MGd</td>
<td>Million gallons per day</td>
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<tr>
<td>MI</td>
<td>Million liter</td>
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<td>MLA</td>
<td>Military Lease Area</td>
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<td>MW</td>
<td>Megawatts</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>NCTS</td>
<td>Naval Computer Telecommunications Station</td>
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<td>NDAA</td>
<td>National Defense Authorization Act</td>
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<td>NDWWTP</td>
<td>Northern District Wastewater Treatment Plant</td>
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<td>NEPA</td>
<td>National Environmental Policy Act</td>
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<td>NGLA</td>
<td>Northern Guam Lens Aquifer</td>
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<td>NWF</td>
<td>Northwest Field</td>
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<td>NWR</td>
<td>National Wildlife Refuge</td>
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<td>OEIS</td>
<td>Overseas Environmental Impact Statement</td>
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<td>OSD</td>
<td>Office of the Secretary of Defense</td>
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<td>PA</td>
<td>Programmatic Agreement</td>
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<td>PACOM</td>
<td>U.S. Pacific Command</td>
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<td>PAR</td>
<td>Pacific Airpower Resilience</td>
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<tr>
<td>PRTC</td>
<td>Pacific Regional Training Center</td>
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<td>QDR</td>
<td>Quadrennial Defense Review</td>
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<td>ROD</td>
<td>Record of Decision</td>
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<td>SDZ</td>
<td>Surface Danger Zones</td>
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<td>SEIS</td>
<td>Supplementary Environmental Impact Statement</td>
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<tr>
<td>THAAD</td>
<td>Terminal High-Altitude Area Defense</td>
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<td>USD</td>
<td>U.S. Dollar</td>
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<tr>
<td>USMC</td>
<td>U.S. Marine Corps</td>
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The Alliance Transformation and Realignment Agreement and subsequent “2+2” Security Consultative Agreements are critical to modernizing the U.S.-Japan alliance. The implementation of U.S. military force posture is nowhere more evident than with the realignment of Marines to Guam. Although this process has taken over a decade to truly be implemented, we have seen progress with improvements at Navy Base Guam and at Andersen Air Force Base. More importantly, we are on the verge of a historic groundbreaking for the new Marine Corps base at Finegayan, Guam. Arguably the most tremendous undertaking of the Realignment—which in total will move around ten thousand Marines and dependents off Okinawa, Japan and throughout the Pacific—is the construction of a new major military base and live fire training range on American soil. Within this report, Dr. Jeffrey Hornung provides a comprehensive orientation to the myriad complexities involved, including foreign policy considerations, environmental concerns, and military readiness. Additionally, in providing necessary context he clearly outlines the historical and geopolitical origins of the need for the redistributed U.S. posture in the Asia-Pacific and a thorough background on actions sought and taken, as well as the strategic utility of the U.S. territory of Guam and the Mariana Islands within this broader strategy.

As the Congresswoman representing Guam in Washington D.C. since 2003, I have worked diligently to support the Marine Relocation and ensure that it is good for our civilian and military communities. While the people of Guam have committed themselves to the security of the United States over the past century, it has been my ultimate effort to ensure that their contributions, and those of the island, were not taken for granted and their voices continue to be heard in this process. As a result, cultural, historical, and environmental preservation have been and continue to be a priority for the Department of Defense, and numerous revisions to the location and scope of the laydown elements, as well as DOD contributions to the island are testimony to that.

This report comes at a critical stage of the Guam Realignment and Dr. Hornung provides a well-researched, and accessible, document. Though the Realignment’s complexity is only matched by its importance for adapting U.S. posture in the Asia-Pacific for the 21st Century, it is not well understood outside of tuned—in circles. This report bridges that gap and will reach and educate many policymakers for years to come.

Madeleine Z. Bordallo
Member of Congress, Guam
Introduction

Japan hosts approximately fifty-three thousand military personnel, forty-three thousand dependents, and five thousand Department of Defense (DOD) civilian employees. Since 1996, the two countries have been working to relocate personnel and functions at Marine Corps Air Station Futenma (hereafter Futenma) to a replacement facility. This political arrangement originated out of a need to reduce the local community’s concern over issues—such as noise, pollution, and crime—that emerged as the community grew around the military base. Most media and scholarly attention has focused on the challenges associated with Okinawa, including local protests, feasibility, costs, alternative options, and legal actions. While these challenges have overshadowed progress, they have also dramatically diminished attention on Guam, which is set to welcome five thousand troops from Okinawa. This is surprising, given that the Guam portion of the relocation is part of a much larger realignment of forces in the Asia-Pacific. Former U.S. Assistant Secretary for the Navy B.J. Penn has called the action on Guam “the largest project that the Department of Defense has ever attempted.”

To rectify this situation, this report focuses on the activities taking place on Guam over the past decade, including the issues at stake, historical development, challenges, and local community concerns. The report stays at the policy level without delving into questions of U.S. force posture or troop readiness. In light of the many political, economic, and cultural issues regarding the realignment plan, this report’s conclusion argues that while the laydown plan on Guam is not perfect, the DOD has demonstrated its willingness to listen to valid local concerns and adjust the laydown plan substantially. Progress is occurring on Guam, but amid many ongoing challenges.

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Guam’s Significance

Guam, the largest of the fifteen islands that make up the Mariana Island chain, is home to 159,358 residents, 5,374 military personnel, and 6,470 of their dependents. The largest ethnic group is the indigenous Chamorro which, in the 2010 census, formed 37.3 percent of the entire population. The island itself is approximately 209 square miles, 33 miles long, and 12 miles at its widest point. The DOD footprint—which is located primarily at Naval Base Guam and Andersen Air Force Base (AAFB)—constitutes 27.21 percent of the island. This presence has led to Guam’s being referred to as a “permanent aircraft carrier” or a “Pacific spear tip” located in one of the most security-challenged areas in the world.

The island has a history of external rulers. From 1565, Guam was ruled by the Spanish. During this time, the Spaniards’ introduction of their language, customs, and religion had a deleterious effect on the indigenous Chamorro people. Following the Treaty of Paris in 1898, the United States acquired the island as an unincorporated and unorganized territory. On December 8, 1941, Japanese forces invaded and brutally occupied the island—renamed Omiya Jima—until July 21, 1944, when American forces landed on Guam and removed the Japanese rulers after thirteen days of battle. Upon regaining control, the U.S. Navy assumed authority over the island. In 1950, the Organic Act granted Guamanians U.S. citizenship, limited self-governing authority under the administration of the Department of the Interior, and representation by one non-voting delegate in Congress.

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3 For population data, see U.S. Census Bureau, “Guam 2010 Detailed Cross-tabulations Part 1, Volume 3,” August 27, 2013, http://www2.census.gov/census_2010/10-Island_Areas_Detailed_Cross_Tabulations/Guam/. For military personnel and their dependents, 2015 information obtained from U.S. Congresswoman Madeleine Bordallo’s office. If DOD civilians and their dependents are considered, this number increases by approximately 5,000.

4 U.S. Census Bureau, “Guam 2010.” The population composition broken down by size is: Chamorro: 59,381; Filipino: 41,944; Two or More Ethnic Origins or Races: 14,929; White: 11,321; Chuukese: 11,230; Other Native Hawaiian and Other Pacific Islander: 7,971; Other Asian: 6,000; Korean: 3,437; and Other Ethnic Origin or Race: 3,145.


Today, Guam is the westernmost U.S. territory. This fact serves as a point of friction among segments of the population who see Guam’s relationship with the United States as a colonial power and those among the Chamorro population who are concerned about the ramifications of U.S. military activities on the indigenous culture and people.\(^7\) Seen in this light, the U.S. presence constrains Guam’s self-determination and cultural preservation.

As seen from a security perspective, Guam is strategically important. Given its proximity to the Asian mainland, it counters the “tyranny of distance” of U.S. forces in Hawai‘i and on the U.S. mainland by serving as an important forward base in the northwest Pacific and enabling quick power projection into the region. Due to the Korean War and the early days of the Cold War, the U.S. maintained a military presence on Guam as an active deterrent against possible Soviet aggression. During the 1960s and 1970s, Guam played a strategic role in the Vietnam War that included serving as the forward base for American B-52s. After the Cold War ended, the logic of having a large military presence on Guam weakened. This led to a dramatic drawdown of U.S. forces on Guam. During the Base Realignment and Closure (BRAC) process, Guam was hit hard.\(^8\) During BRAC Round 3 in 1993, Naval Air Station Agana closed.\(^9\) This was followed by the closure of Apra Harbor Naval Complex and Naval Facilities Guam during BRAC Round 4 in 1995.\(^10\) Before the BRAC, U.S. military personnel and their dependents on Guam stood at 19,610 in 1990, compared with 11,844 in 2015.\(^11\) At its height in 1950, this number stood at 26,617.

All of these issues are important to understanding the current discussions on the plans to increase the number of U.S. personnel on Guam. These discussions involve issues of federal and territorial relations, cultural identity, and military necessity and questions of how much is too much for an island the size of Guam.

One word of admission is necessary. Some discussions regarding the redistribution of U.S. forces to Guam use the term “buildup” to frame the discussion in terms of Guam’s inability to handle an influx of residents. Used as such, the word becomes a loaded term. While current plans will see an increase in military personnel based on current numbers—and thus a “buildup” from this baseline—it is not that Guam has never hosted a large number of personnel, as seen in the pre-BRAC numbers. Because the term therefore carries an implicit

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\(^7\) Vanessa Warheit, *The Insular Empire: America in the Mariana Islands*, Documentary (2010: New Day Films), DVD.


\(^10\) Ibid.

bias regarding one’s approach to the issue, the author chooses to use the term “laydown” in an attempt to steer a more neutral analysis of the situation.
Laydown Plan I: Mid 2000s–2012

As the peace dividend from the end of the Cold War wore off, it became clear the U.S. faced few potential rivals while the nature of the world’s security challenges had changed. As such, the DOD began to reexamine its overseas basing requirements to convert overseas U.S. military presence from “a posture established on familiar terrain to counter a known threat to one that is intended to be capable of projecting forces from strategic locations into relatively unknown areas in an uncertain threat environment.” The objective was to develop a defense strategy and force structure capable of meeting the changing nature of global threats. Following from this were a number of initiatives, with two of the most important being the September 2001 Quadrennial Defense Review (QDR) and the August 2004 Integrated Global Presence and Basing Strategy (IGPBS). The focus of these was how the United States could maintain its presence in the region in the face of a changing security environment. Their objective was to address, among other issues, a significant reorientation of the U.S. military’s global posture to ensure more flexible, deployable capabilities in strategic locations around the world while reducing the numbers and locations of military bases overseas.

In specific regards to the evolving changing security environment in the Asia-Pacific region, the IGPBS and 2001 QDR called on the United States to redefine its regional defense posture—including a reduction of overseas forces—and its alliance with Japan to fulfill its security policy requirements. The objective was to base U.S. forces in regional locations that supported operational flexibility and rapid response. Based on the recommendations of these changing policies and their associated global repositioning and operational realignments, the DOD began to look for suitable locations in-region. Looking west of the International Date Line, U.S. officials approached Thailand, Singapore, the Philippines, and Australia about the possibility of hosting new U.S. bases. Negative responses from all four left Guam as the most

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13 The QDR sets priorities and identifies goals for the U.S. military to meet future challenges. The military requirements identified in the QDR lay the basis for determining the size and structure of the U.S. military.

14 IGPBS is the culmination of various DOD studies, including the overseas basing and requirements study, the overseas presence study, and the U.S. global posture study. U.S. Government Accountability Office, *DOD’s Overseas Infrastructure Master Plans Continue to Evolve*, 7.

viable alternative. Guam was particularly attractive given its status as a U.S. territory. Thereafter, efforts began to move U.S. assets and service personnel to the island.

By far the largest component was a plan to relocate elements of the Marine Corps based in Okinawa. In tandem with efforts under the 2001 QDR and IGPBS, the United States began a series of sustained security consultations with Japan on the future of the U.S. force structure in Japan. These talks came to be known as the Defense Policy Review Initiative (DPRI), and the objective was to strengthen the alliance by reducing the U.S. force structure in Japan but relocating those forces elsewhere in the Pacific so as to maintain a robust regional force presence.

At the October 2005 U.S.-Japan Security Consultative Committee meeting, the allies approved recommendations for realignment of U.S. forces in Japan and related Japan Self-Defense Forces. In the Joint Statement, the allies listed nineteen areas for transformation, including interoperability, shared use of military and civilian facilities in Japan, and cooperation on ballistic missile defense. Importantly, the Joint Statement also included the realignment of Marines from Okinawa to Guam and the relocation of Futenma operations to a new base in northern Okinawa. Specifically, this involved the relocation of the headquarters of the III Marine Expeditionary Force (III MEF) to Guam and other locations while the remaining units in Okinawa would be realigned and reduced into a Marine Expeditionary Brigade. This realignment included the transfer of approximately seven thousand Marine officers and enlisted personnel, plus dependents, out of Okinawa.

The specific and interrelated initiatives and implementation plans were detailed in the May 2006 document known as the Roadmap for Realignment (hereafter Roadmap). According to the Roadmap, approximately eight thousand III MEF personnel and their approximately nine thousand dependents would move from Okinawa to Guam by 2014. Japan agreed to cover nearly 60 percent of the associated costs. Of the estimated $10.27 billion cost of the facilities and infrastructure development costs for the III MEF relocation, Japan agreed to pay $6.09 billion (U.S. FY2008 dollars), including $2.8 billion (U.S. FY2008 dollars) in direct cash contributions, to develop facilities and infrastructure on Guam, including utilities and site improvements for future facilities, barracks, and health clinics. An additional $3.29 billion was expected to be provided in special-purpose entity loans and equity

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18 Units to relocate included: III MEF Command Element, 3d Marine Division Headquarters, 3d Marine Logistics Group (formerly known as Force Service Support Group) Headquarters, 1st Marine Air Wing Headquarters, and 12th Marine Regiment Headquarters. The U.S. Marine Corps forces remaining on Okinawa were going to consist of Marine Air-Ground Task Force elements, such as command, ground, aviation, and combat service support, as well as a base support capability.
investments for installation support infrastructure for on-base water wells and storage; off-installation power, wastewater, and water systems improvements; and military family housing. The United States agreed to fund the remainder of the costs, estimated at $3.18 billion (U.S. FY2008 dollars) in fiscal spending plus approximately $1 billion for a road. Critical to the entire plan was that Okinawa-related realignment initiatives were intentionally interconnected and directly linked to the situation on Guam. The completion of the Futenma Replacement Facility (FRF) was necessary for the consolidation and land returns south of Kadena Air Force Base, including the closure of Futenma. Only after these were finished could III MEF personnel and dependents relocate to the FRF and from Okinawa to Guam. Progress on the Roadmap was slow, largely due to political difficulties in Okinawa. To reaffirm their commitment to the Roadmap in light of slow going, U.S. Secretary of State Hillary Clinton signed an agreement with Foreign Minister Hirofumi Nakasone on the relocation of the III MEF in February 2009. It was ratified by Japan’s Diet on May 13, 2009.

Although not a part of the DPRI, but occurring in parallel with it, the Air Force (AF) began expanding temporary deployments at AAFB in Guam as a means to strengthen a more flexible regional presence to deal with rising threats. These were so frequent that they have become a persistent presence. These assets included F-22 stealth fighters, 767 tankers, C-17 transports, bombers and Global Hawk unmanned aerial vehicles (2002), B-1 and B-52 bombers (March 2003), B-2 stealth bombers (April 2005), F-15 fighters (April 2005), F-16 fighters (May 2007), F-22 stealth fighters (Summer 2008), and Global Hawk unmanned aerial vehicles (September 2010). Together, these made up two AF initiatives. One was to develop a global hub, known as “Guam Strike,” for intelligence, surveillance, and reconnaissance (ISR); strike; and aerial refueling capabilities. To assist Guam Strike, construction was needed to improve the resiliency of existing hangars and infrastructure. This is expected to continue through at least FY2022. The other initiative was to relocate the U.S. Pacific Air Force’s expeditionary training centers from the Korean peninsula to Guam. This movement supported the U.S. Global Defense Posture Review and the U.S. Forces, Korea-Republic of Korea Security Policy Initiative agreement to reduce the number of troops on the Korean Peninsula by 12,500.

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21 Daniel Leaf, Interview with Author, June 28, 2016
24 Ibid.
The movement of AF assets through AAFB and the relocation of Marines to Guam were proposed to occur in tandem with two other efforts on Guam. Against the backdrop of the 2006 QDR making the case for the U.S. realignment strategy needing greater availability of aircraft carrier strike groups in the Pacific, the DOD looked for suitable locations for a new transient carrier capability in the region. The conditions that a location had to meet were: (1) Treaty and alliance requirements; (2) Response times to potential areas of conflict; and (3) Freedom of action (use of a base without restrictions, including implementation of force protection measures to deter/avoid terrorist attacks). A proposal to create a transient carrier capability in Guam’s Apra Harbor met all of these requirements, particularly because it supported flexibility and speed of response by the United States. In 2008, the Navy planned for this transient berth to support a carrier for up to three times a year. At the same time, because of the rising threats posed by states with long-range missile capabilities, the DOD understood the need to place U.S. assets capable of defending against such threats. This led to a proposal to install a U.S. Army Air and Missile Defense Task Force (AMDTF) in Guam to defend the U.S. homeland from long-range missile attacks.

These proposals, taken together with the AF assets, promised to change Guam in a number of profound ways. Specifically, the changes associated with the proposed laydown included:

- Temporary increase in population related to the construction-related work force.
- Permanent increase in number of military and civilian personnel and dependents on Guam.
- Increase in transient presence on Guam and Tinian.
- Increase in number and type of major equipment assets to support military personnel and operations (e.g., aircraft, ships, and amphibious watercraft).
- Increase in number and type of training activities.

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Construction of new facilities.

Improvements to existing facilities.

Improvements to infrastructure (including roads and utilities).

Acquisition or long-term leasing of additional land (required for three of the Marine Corps Relocation – Guam action alternatives).

Environmental Impact Statement

The three proposed actions—Marine relocation, transient carrier berth, and AMDTF—are together referred to as the Guam and the Commonwealth of the Northern Mariana Islands (CNMI) military relocation. Because these efforts required construction of new, permanent facilities, the Department of the Navy (DON) was required to examine the environmental effects of the proposed activities under the 1969 National Environmental Policy Act (NEPA). As such, the DON prepared a Draft Environmental Impact Statement (Draft EIS) to assess both the alternatives and the potential environmental effects associated with the proposed laydown. This process started in 2007 and the Draft EIS was released on November 20, 2009.

After release of the Draft EIS, the DON continued to revise it. Input came from three different sources: (1) Coordination and discussions between DOD, the Government of Guam (GovGuam), and federal agencies on issues such as infrastructure upgrades associated with the proposed military relocation; (2) Updated information on additional scientific surveys and studies prepared by the DOD that were not available or completed at the time of the Draft EIS; and (3) More discussion of the proposed actions, alternatives, existing conditions, environmental impacts, and proposed mitigation measures to appropriately respond to comments submitted on the published Draft EIS.28 The end result was the Final EIS (hereafter EIS) that the DON released in July 2010.

Although the proposed laydown is composed of discrete elements that will be examined in detail below, when they are combined, the expected population increase is significant. In addition to 9,182 permanent military personnel (8,552 Marines, 630 Army), 9,950 dependents, 9,222 transient military personnel, and 1,836 civilian workers would move to Guam for a total of 30,190 people.29 When construction workers and others were considered, it was expected that Guam would see a total increase in its population of 79,178 at the peak of construction in 2014.30 The timeframe for this was an intense seven-year construction boom.

28 Ibid, ES-55.
A summary of the specific elements of the laydown, drawn from the EIS’s Executive Summary, is outlined below. While these elements are technical, understanding them is critical to understanding the challenges to which they gave rise.

**Marine Corps Relocation**

Action regarding the Marine Corps involved development and construction of facilities and infrastructure to support moving approximately 8,600 Marines (and 9,000 dependents) from Okinawa to Guam as well as their training and operations.\(^{31}\) Broadly speaking, the EIS analyzed the facilities and operational and training requirements of the military elements associated with the relocation. The EIS broke this into four functional components: main cantonment (i.e. a camp) area functions; training functions; airfield functions; and waterfront functions.\(^{32}\)

- The main cantonment military support functions included headquarters and administrative support, bachelor housing, family housing, supply, maintenance, open storage, community support (e.g., retail, education, recreation, medical, and day care), some site-specific training functions, and open space (e.g., parade grounds, open training areas, and open green space in communities), as well as the utilities and infrastructure required to support the cantonment area.
  - Eight alternatives were developed and evaluated, with four of these dismissed from further consideration. The four remaining alternatives were retained for further analysis, with Alternative 2 chosen as the Preferred Alternative, which included land parcels from Naval Computer Telecommunications Station (NCTS) Finegayan (1,610 acres/652 hectares), South Finegayan (290 acres/117 hectares), and acquisition of a former Federal Aviation Administration (FAA) land parcel (680 acres/275 hectares), for a total of 2,580 acres [1,044 hectares]. The FAA land was non-DOD land, necessitating the DOD to take control of the land.\(^{33}\)
  - The training functions were composed of three subclasses of training support functions: (1) Firing ranges for live and inert munitions practice; (2) Non-fire maneuver ranges for vehicle and foot maneuver training, including urban warfare training; and (3) Aviation

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\(^{33}\) See Table ES-3 in U.S. Department of the Navy, “Executive Summary,” *Final Environmental Impact Statement, ES-14*. 
training to practice landing/takeoff and air field support (including loading and unloading of fuel, munitions, cargo, and personnel).

- The DOD found only one geographic alternative for a combined firing and non-firing training range complex. This was located on the east coast of Guam in the Pagat Point area. Andersen South would continue to be used as the non-firing training location but not for new firing ranges. For a new live fire training range complex (LFTRC), the EIS examined two alternatives, both of which would be located east of Andersen South on non-DOD land to the east of Route 15, thus requiring the DOD to take control of that land. Of these two, the DOD chose the alternative (Alternative A) that required the realignment of approximately 1.7 miles of Route 15 to the interior of the existing Andersen South parcel and the relocation of Guam International Raceway. The total area needed was estimated at 5,529 acres: 1,090 acres (441 hectares) of land and 4,439 acres (1,796 hectares) of ocean. As part of this, more than 1,000 acres of non-federal land will need to be acquired.

- The airfield functions include aviation units and aviation support units that require runway and hangar space, maintenance, supply and administrative facilities, and the capability to conduct air embarkation operations.

  - Four sites on Guam were analyzed. These were North Ramp AAFB, Won Pat International Airport, Orote Airfield at Naval Base Guam, and AAFB-Northwest Field (NWF). Based on existing land availability and AF operations, the only reasonable alternative the DOD found for the air combat element airfield functions was North Ramp at AAFB. An area on South Ramp was found to be the only reasonable alternative for an air embarkation facility (co-located with the AF air embarkation facility).

- The waterfront functions included the need to upgrade capabilities to accommodate the increased number of transient vessels that support Marine Corps operations and the transient forces that train on Guam and Tinian.

  - The only option for the waterfront functions was Apra Harbor. Specifically, Inner Apra Harbor’s existing wharf infrastructure would be improved to support the Marine Corps waterfront functions while administrative and operational facilities as well as an embarkation and staging area would need to be constructed.

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Marine Corps Training on Tinian

The Marine Corps required sustainment training for personnel relocated to Guam because this training capability was not available on Guam itself. Tinian was considered ideal because the DOD leases the 15,353 acres (6,213 hectares) Military Lease Area (MLA) in northern Tinian from the CNMI. While non-live fire training areas already exist on the MLA, the DOD concluded the land could be developed to accommodate live-fire ranges.

- Three alternatives were examined, all within the MLA. All three included development of four live-fire training ranges: rifle known distance range, automated combat pistol/military police firearm qualification course, platoon battle course, and the field firing range. They differed over the placement of their Surface Danger Zones (SDZ) and whether they extended over the FAA Mitigation Area. The Preferred Alternative, Alternative 1, did not have an SDZ over the ocean or south of 86th Street and all four range footprints partially overlaid the FAA Mitigation Area.

Transient Aircraft Carrier Berth

The Navy sought to construct a new deep-draft wharf in Apra Harbor with shore side infrastructure improvements to create the capability to support a transient nuclear powered aircraft carrier. The objective was to increase the number of in-port days for a visiting aircraft carrier from approximately sixteen to a cumulative total of up to sixty-three visit days per year.

- There were two alternatives evaluated: Polaris Point (Alternative 1) and the Former Ship Repair Facility (Alternative 2). Polaris Point was the Preferred Alternative. Both of these were located in Outer Apra Harbor and shared the same navigational approach through Outer Apra Harbor; both required a 600-foot (183-meter) widening between the existing Outer Apra Harbor entrance channel and Inner Apra Harbor entrance channel with minor adjustments to centerline and navigational aids and shared the same shore side utility and operational support requirements; both were on Navy submerged lands and affect manmade coastlines; and both met the same security/force protection requirements.

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They differed in terms of location—on different sides of the entrance to the Inner Apra Harbor channel—and the amount of dredging of coral required to satisfy their turning basins (although they shared minimal turning radius to avoid coral reefs). Although a specific number of how much coral would be damaged was not given (largely due to the challenges of quantifying potential coral impact), the DON determined that fifty-three acres (21.4 hectares) of total dredge area would be affected.38

**Air and Missile Defense Task Force**

The Army’s main goal was to develop facilities and infrastructure to support relocating approximately six hundred military personnel and their nine thousand dependents to establish and operate an AMDTF.39

- Three alternatives for the proposed AMDTF facilities and operations: Alternative One focused on Finegayan, Alternative Two on Navy Barrigada, and Alternative Three on a combination of Finegayan, Navy Barrigada, and AF Barrigada. The Preferred Alternative, Alternative 1, sought to co-locate Army AMDTF support facilities with the proposed Marine Corps units at Finegayan; co-locate the administration, headquarters, maintenance operations; and unaccompanied housing at NCTS Finegayan; and locate accompanied family housing facilities within South Finegayan.

- There were also three alternatives for munitions storage that were examined, but all three of these were at Munitions Storage Area 1 at AAFB and included an estimated 6.2 acres (2.5 hectares) of ground disturbance.40 They differed in their location (near the Habitat Management Unit (HMU), north of B Avenue, and northeast of the HMU) and whether they were in contiguous or non-contiguous areas. The Alternative chosen was the option located near the HMU in three non-contiguous areas.

Critical to the plans was the impact the expected surge in population would have on existing utilities and roadway infrastructure. Volume Six of the EIS examines the challenges to power, potable water, wastewater, solid waste, and roadways in detail to present alternatives to reduce the effects of the increased population.41 Specifically, the EIS presents interim

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38 Ibid, 2-55.
alternatives to meet immediate needs; basic alternatives to meet both immediate and long-term needs; and long-term alternatives that would meet needs beyond the temporary surge of the proposed relocation.42

- **Power:** The EIS estimated that 20 megawatts (MW) of power would be required by the laydown plans.43 The Preferred Alternative chosen was Basic Alternative 1. This focused on reconditioning up to five existing combustion turbines for existing Guam Power Authority (GPA)-permitted facilities at Marbo, Yigo, Dededo (two units), and Macheche. These combustion turbines were not currently being used up to permit limits. The Preferred Alternative also focused on upgrading transmission and distribution systems on existing above ground and underground transmission lines. This alternative did not require new construction or enlargement of the existing footprint of the facility and, importantly, supported the Preferred Alternative for the Main Cantonment.

- **Potable water:** The EIS estimated that 5.82 million gallons per day (MGd) of water would be needed.44 In turn, five alternatives were examined (two basic, three long-term) with the Preferred Alternative chosen being Basic Alternative I, which would provide additional water capacity of 11.3 MGd.45 This Preferred Alternative consisted of installing up to 22 new wells at AAFB, rehabilitating existing wells, and interconnecting with the Guam Water Authority (GWA) water system and associated water line transmission and distribution systems. This alternative required construction of two new 2.5 million gallon (MG) (9.5 million liter [Ml]) water storage tanks at ground level at NCTS Finegayan and up to two new elevated 1 MG (3.8 Ml) water storage tanks at Finegayan within the main cantonment footprint.46

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43 U.S. Department of the Navy, “Related Actions—Utilities and Roadway Projects” (Volume Six), Final Environmental Impact Statement, 2-7 (Table 2.1-1). The chart identifies NCTS Finegayan (plus utilities).
44 U.S. Department of the Navy, “Executive Summary,” Final Supplemental Environmental Impact Statement, ES-3. This exact number is not in the 2010 EIS; instead, it is found in the 2015 Supplemental EIS’s review of the 2010 EIS. Because this number was used in the 2015 Supplemental EIS as a point of comparison with the 2010 EIS, the author chose to include it as opposed to the different number used in the 2010 EIS. The calculation in the EIS was 5.95 million gallons. See U.S. Department of the Navy, “Related Actions—Utilities and Roadway Projects” (Volume 6), Final Environmental Impact Statement, 2-31 (Table 2.2-5). The reason for the difference comes down to the fact that in the 2010 EIS, the AMDTF was also housed within the cantonment, which is not part of the 2015 SEIS.
- **Wastewater:** The EIS estimated that 2.6 MGd of wastewater would be generated by the laydown.\(^{47}\) To meet these needs, three alternatives were examined (two basic alternatives, one long-term) with the Preferred Alternative chosen being Basic Alternative IA. This alternative combined an upgrade to the existing primary treatment facilities and expansion to secondary treatment at the Northern District Wastewater Treatment Plant (NDWWTP). The difference with 1B is that 1A supported the Preferred Alternative for the Main Cantonment Preferred Alternative and did not require a new sewer line from Barrigada housing to NDWWTP.

- **Solid Waste:** The EIS estimated that 165,600 pounds of solid waste would be generated each day under the laydown plan.\(^{48}\) To meet this, the only alternative examined was a Basic Alternative for continued use of the Navy Landfill at Apra Harbor until the Layon Landfill is opened, which was scheduled for July 2011. For waste streams not accepted at Layon, the plan was to continue to use the Navy sanitary landfill.

- **Roadways:** The EIS identified fifty-eight projects that covered four geographic regions on Guam: North, Central, Apra Harbor, and South. Not all of these fifty-eight projects were meant to be implemented, however, since only a specific combination of roadway projects supported each cantonment alternative.\(^{49}\) For Main Cantonment Alternative 2, the Preferred Alternative, there was a different combination of forty-nine off-base projects.\(^{50}\)

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\(^{47}\)**U.S. Department of the Navy, "Executive Summary,"** Final Supplemental Environmental Impact Statement, ES-3. This exact number is not in the 2010 EIS; instead, it is found in the 2015 Supplemental EIS’s review of the 2010 EIS. Because this number was used in the 2015 Supplemental EIS as a point of comparison with the 2010 EIS, the author chose to include it as opposed to the different number used in the 2010 EIS. The closest comparable number the author could find in the 2010 EIS was Marine Corps usage at 2.56 MGd. See U.S. Department of the Navy, “Related Actions—Utilities and Roadway Projects” (Volume 6), Final Environmental Impact Statement, 2-86 (Table 2.3-5).

\(^{48}\)**U.S. Department of the Navy, "Executive Summary,"** Final Supplemental Environmental Impact Statement, ES-3. This exact number is not in the 2010 EIS; instead, it is found in the 2015 Supplemental EIS’s review of the 2010 EIS. Because this number was used in the 2015 Supplemental EIS as a point of comparison with the 2010 EIS, the author chose to include it as opposed to the different number used in the 2010 EIS. The reason for the difference is because things changed during the drafting process between the 2010 and 2015 reports and detailed adjustments were found in engineering studies or analysis which were not immediately accessible by the public.

\(^{49}\) The fifty-eight projects consisted of forty-three projects (off-base) and fifteen intersection improvement projects at military access points (e.g., gates). The forty-three projects were composed of six types of roadway improvements: (1) Intersection improvement projects; (2) Bridge replacement projects (involving five bridges); (3) Pavement strengthening (combined with roadway widening at some locations); (4) Route 15 relocation; (5) Roadway widening; and (6) Construction of a new road (Finegayan Connection). U.S. Department of the Navy, “Executive Summary,” Final Environmental Impact Statement, ES-31.

\(^{50}\) These projects include twenty-nine pavement strengthening, eight roadway widening, fourteen intersection improvements (including eight Military Access Points), eight bridge replacements, one road relocation, and one new road. Ibid, ES-40.
Record of Decision

On September 20, 2010, the DON released its record of decision (ROD). The DON chose to implement the Preferred Alternatives for each of the actions described in the EIS with three exceptions.

The Navy deferred a decision on a specific location to construct and operate a transient aircraft carrier berth in Apra Harbor and decided to voluntarily collect additional data on marine resources at the two alternative sites outlined in the EIS. The Navy also deferred a decision on the location for the construction and operation of the live-fire training range for the Marines until the requisite consultation process under the National Historic Preservation Act was completed. This also meant deferment of a selection of the roadway improvement project that would realign Route 15. Finally, although the Army selected the Preferred Alternative for placement of the AMDTF, at the time of signing the ROD, the DOD had made no decision to assign this mission to the Army or to construct and operate an AMDTF on Guam. This meant planning on any AMDTF went no further.

Outstanding Issues

The ROD did not go over well in Guam, even amongst proponents of the laydown. While supporters touted the expected economic benefits that would follow from a larger U.S. presence, such as employment opportunities and millions of federal dollars to repair the island’s crumbling infrastructure and struggling public services, there were many concerns over the speed, scope, and size of the laydown, even among GovGuam. In particular, because the federal government already possessed nearly 30 percent of Guam’s 212 square miles, there was strong opposition to the DOD taking more private or public land, particularly land deemed culturally important to Chamarro people. This sentiment was expressed most clearly in Resolution 275-30, which called for the laydown to be limited to the existing footprint of federal land holdings. This, combined with a number of associated challenges reviewed below, ultimately led the DON to revise the laydown plan (examined after the challenges).

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51 Department of the Navy and Department of the Army, Record of Decision, 6.
52 The decision on whether to assign this mission to the Army was to be made pending the results of the ongoing regional and global Ballistic Missile Defense architectural and capability studies and based in part on the EIS for this proposed action with Guam as one site under consideration for an AMDTF mission. See Ibid, 2.
1. Futenma Replacement Facility

The decision to relocate Marines to Guam was driven largely by events in Okinawa. After all, the agreement was made to reduce the local community’s concerns about the heavy U.S. presence. As noted above, the move of personnel from Okinawa to Guam outlined in the 2006 Roadmap was contingent on the completion of the FRF on Okinawa.

The 2006 agreement was made when political relations between Tokyo and Washington were strong. Progress ground to a halt, however, with the arrival of Japan’s first Democratic Party of Japan administration led by Yukio Hatoyama in September 2009. During the election and after taking office, Prime Minister Hatoyama called for redefining Japan’s relationship with the United States to one more close and equal. This meant suggesting the revision of the Status of Forces of Agreement, the current status of the U.S. military relocation and issues associated with U.S. bases in Japan. Critically, Prime Minister Hatoyama expressed a strong interest in not constructing an FRF in Okinawa; rather, he wanted to move it out of Okinawa altogether (regardless of the fact that a bilateral agreement was ratified by the Diet). This was out of his desire to lighten the burden on the people of Okinawa but also from a naivety and lack of understanding about the issue, its challenges, and possible alternatives. This supercharged an already politically contentious issue and elevated what was otherwise a minor issue in alliance relations to a major point of contention at the highest levels of alliance management.

Consequently, because of the interconnected nature of the FRF and the Guam laydown, Prime Minister Hatoyama’s decision threw the entire relocation process into disarray as completion of the FRF was a necessary prior step for relocation to occur. It also led to frosty ties in the alliance, as the United States wasadamant about implementing the 2006 plan.

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Despite promises to provide an alternative by the end of May 2010, Prime Minister Hatoyama ended up conceding by his self-imposed deadline that there was no alternative.58 In turn, the allies reverted back to implementing the 2006 Roadmap. On May 28, 2010 Secretary of Defense Robert Gates and Secretary of State Hillary Clinton met with their counterparts Minister of Defense Toshimi Kitazawa and Minister of Foreign Affairs Katsuya Okada to issue a “2+2 Statement.”59 Given the chaos the Hatoyama Administration had caused, this Statement was critical to resuming progress because Japan reaffirmed its commitment to implement the 2006 Roadmap and the February 2009 Agreement. This provided a critical, albeit temporary, pause to disruptions in planning for the Guam laydown at the time the EIS was being drafted.

But the 2+2 Statement had little effect because no funds were devoted to the FRF. It was not until March 9, 2011, that a Programmatic Agreement (PA) was signed between GovGuam and the DOD that freed the Navy to start releasing up to $1.2 billion in military construction task orders on Guam. Yet, by this time it had already become clear that ongoing issues on Okinawa meant that movement on the FRF was not going to occur. A March 24, 2011, “pre-decisional” Marines Corps planning document forecasted a completion year of 2021, although it admitted that even this date would likely slide.60 Additionally, on May 5, 2011, Prime Minister Naoto Kan approved the decision to abandon the target date of 2014. And in early June, Commander of U.S. Pacific Command (PACOM) Admiral Robert Willard told a press conference that because of the delays in the FRF, it would be extremely difficult to meet the 2014 deadline.61 On June 21, the two countries finally acknowledged the


2014 deadline was not feasible due to Japan’s inability to move forward on the FRF. Delays on the FRF translated directly into delays on Guam, given the interconnected nature of the two.

Table 1. U.S. Funding for Guam in NDAA (2004-2006). Amounts Given in Thousands of USD.

<table>
<thead>
<tr>
<th>Project</th>
<th>Service</th>
<th>FY04</th>
<th>FY05</th>
<th>FY06</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAFB-Medical/Dental Clinic Replacement</td>
<td>DOD-wide</td>
<td>24,900</td>
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</tr>
<tr>
<td>Special Operations Forces Ground Mobility Support Facility</td>
<td>DOD-wide</td>
<td></td>
<td>2,200</td>
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<tr>
<td>Water Treatment Plant Upgrade</td>
<td>Navy/U.S. Marine Corps (USMC)</td>
<td></td>
<td>20,700</td>
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</tr>
<tr>
<td>Kilo Wharf Improvements</td>
<td>Navy/USMC</td>
<td>12,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AAFB-War Reserve Storage Facility</td>
<td>AF</td>
<td>19,593</td>
<td></td>
<td></td>
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<tr>
<td>Guam High School Replacement-Navy Base Guam</td>
<td>Department of Defense Education Activity (DODEA)</td>
<td></td>
<td>26,964</td>
<td></td>
</tr>
<tr>
<td>Elementary/Middle School Replacement-Navy Base Guam</td>
<td>DODEA</td>
<td></td>
<td></td>
<td>40,578</td>
</tr>
<tr>
<td>Replace Military Working Dog Facility</td>
<td>AF</td>
<td></td>
<td>3,500</td>
<td></td>
</tr>
<tr>
<td>Air and Space Expeditionary Force Forward Operating Location Munitions Storage Igloos</td>
<td>AF</td>
<td></td>
<td>15,000</td>
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<tr>
<td>Family Housing Naval Base Guam (126 units)</td>
<td>Navy/USMC</td>
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<td>40,298</td>
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<tr>
<td>Alpha/Bravo Wharves Improvements (Phase 1)</td>
<td>Navy/USMC</td>
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<td>25,584</td>
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<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>26,600</strong></td>
<td><strong>81,957</strong></td>
<td><strong>129,812</strong></td>
</tr>
</tbody>
</table>

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Table 2. U.S. Funding for Guam in NDAA (2007-2009).\textsuperscript{64}

Amounts Given in Thousands of USD.

<table>
<thead>
<tr>
<th>Project</th>
<th>Service</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Hawk Aircraft Maintenance and Operations Complex</td>
<td>AF</td>
<td>52,800</td>
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<tr>
<td>Upgrade NWF Infrastructure, Phase I</td>
<td>AF</td>
<td>12,500</td>
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</tr>
<tr>
<td>ISR/Special Task Force Large Vehicle Inspection Center/Access Road</td>
<td>AF</td>
<td>0</td>
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<tr>
<td>Alpha/Bravo Wharves Improvements, Increment 2</td>
<td>Navy/USMC</td>
<td>29,972</td>
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<tr>
<td>Family Housing (replace 68 units)</td>
<td>Navy/USMC</td>
<td>48,017</td>
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<tr>
<td>Family Housing (replace 108 units)</td>
<td>Navy/USMC</td>
<td>50,157</td>
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<tr>
<td>Upgrade NWF Infrastructure</td>
<td>AF</td>
<td>10,000</td>
<td></td>
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<tr>
<td>Fitness Center Guam</td>
<td>Navy/USMC</td>
<td>45,250</td>
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<tr>
<td>Harden Base Electrical Systems</td>
<td>Navy/USMC</td>
<td>59,420</td>
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<tr>
<td>Kilo Wharf Extension, Increment 1</td>
<td>Navy/USMC</td>
<td>50,916</td>
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<tr>
<td>Potable Water Distribution</td>
<td>Navy/USMC</td>
<td>31,450</td>
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<tr>
<td>Wastewater Treatment Plant Repairs &amp; Upgrade</td>
<td>Navy/USMC</td>
<td>40,870</td>
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<tr>
<td>Replace Guam Old Apra Phase 2</td>
<td>Navy/USMC</td>
<td>47,167</td>
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<tr>
<td>Combat Communications Maintenance Facility</td>
<td>AF</td>
<td>5,200</td>
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<tr>
<td>Central Utility Plant</td>
<td>DOD Wide</td>
<td>30,000</td>
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<tr>
<td>Bachelor Enlisted Quarters, Main Base</td>
<td>Navy/USMC</td>
<td>62,360</td>
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<tr>
<td>Kilo Wharf Extension, Increment 2</td>
<td>Navy/USMC</td>
<td>50,912</td>
<td></td>
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<tr>
<td>Wastewater Treatment Plant Repairs &amp; Upgrade</td>
<td>Navy/USMC</td>
<td>26,070</td>
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<tr>
<td>Guam National Guard (GUNG) – Shopette</td>
<td>Defense Commissary Agency (DECA)</td>
<td>2,463</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Totals** 193,446 290,889 182,405

\textsuperscript{64} Ibid.
2. Washington

There were challenges on the U.S. side as well, although not initially. When negotiations over DPRI were initiated in the mid-2000s, the DOD was spending money on Guam for all services. As seen in tables 1 and 2, from U.S. FY2004-FY2009, money in the National Defense Authorization Act (NDAA) was devoted to infrastructure upgrades and improvements, new housing and service facilities, and utility-related work. But as the nature of the laydown began to crystalize before the EIS’s release, members of Congress began to express concern over the scale and scope of the plans. Many of these concerns were famously captured by Rep. Hank Johnson (D-GA), who said, “My fear is that the whole island will become so overly populated that it will tip over and capsize.”65 This fear was groundless, but it summed up a growing Congressional concern over the DOD’s plan for Guam.

Starting with U.S. FY2010, to coincide with the expected completion of the EIS and release of the ROD, money began to be devoted to DPRI-related projects. As shown in table 3, for the U.S. FY2010 NDAA, there was money specifically tied to Navy and USMC projects related to the DPRI, but this was not without incident. As part of the deal to get this accepted, Congress required the DOD to submit a Guam Master Plan; designate the Deputy Secretary of Defense to lead a Guam Executive Council and coordinate interagency efforts related to Guam; and issue a report on training, readiness, and movement requirements for Marine Forces Pacific. After the release of the ROD and the challenges associated with the scope and speed of the laydown became widely known, critical voices in Congress began to grow. As seen in table 4, this led to some planned DPRI-related projects being cut from the NDAA, including about $150 million requested for three construction projects involving aircraft parking, site preparation, and utilities.

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Table 3. U.S. Funding for Guam in NDAA (FY2010).\textsuperscript{66} DPRI Projects Included (Highlighted in Gray). Amounts Given in Thousands of USD.

<table>
<thead>
<tr>
<th>Project</th>
<th>Service</th>
<th>FY10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commando Warrior Operations Facility</td>
<td>AF</td>
<td>4,200</td>
</tr>
<tr>
<td>NWF Perimeter Fence and Road</td>
<td>AF</td>
<td>4,752</td>
</tr>
<tr>
<td>NWF Combat Support Vehicle Maintenance Facility</td>
<td>AF</td>
<td>15,500</td>
</tr>
<tr>
<td>Electrical Infrastructure Hardening</td>
<td>AF</td>
<td>33,750</td>
</tr>
<tr>
<td>Gas Storage Facility</td>
<td>Defense Logistics Agency (DLA)-Office of the</td>
<td>4,900</td>
</tr>
<tr>
<td></td>
<td>Secretary of Defense (OSD)</td>
<td></td>
</tr>
<tr>
<td>Barrigada Readiness Center</td>
<td>GUNG</td>
<td>30,000</td>
</tr>
<tr>
<td>Hospital Replacement Phase 1</td>
<td>Defense Health Program (DHP)-OSD</td>
<td>259,156</td>
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<tr>
<td>Family Housing - Replace N. Tipalao Phase 3</td>
<td>Navy/USMC</td>
<td>20,730</td>
</tr>
<tr>
<td>Naval Base Guam - Minimart and Gas Station</td>
<td>DECA</td>
<td>11,084</td>
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<tr>
<td>Marine Aviation - AAFB North Ramp Improvements Phase 1</td>
<td>Navy/USMC</td>
<td>88,797</td>
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<tr>
<td>Marine Aviation - AAFB North Ramp Utilities Phase 1</td>
<td>Navy/USMC</td>
<td>21,500</td>
</tr>
<tr>
<td>Apra Harbor Wharves Improvement Phase 1</td>
<td>Navy/USMC</td>
<td>127,033</td>
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<tr>
<td>Consolidated Training Facility</td>
<td>Navy/USMC</td>
<td>45,309</td>
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<td>Defense Access Road Improvements</td>
<td>Navy/USMC</td>
<td>48,860</td>
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<tr>
<td>Military Working Dog Relocation</td>
<td>Navy/USMC</td>
<td>14,000</td>
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<td>Torpedo Exercise Support Building</td>
<td>Navy/USMC</td>
<td>15,627</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>748,698</td>
</tr>
</tbody>
</table>

Congress did not exert its full powers until U.S. FY2012, when U.S. Senators Carl Levin, John McCain, and James Webb on May 11, 2011, publicly called for a review of the realignment plans in Guam, Japan, and South Korea.\textsuperscript{67} Their reasoning was the current plan was “unworkable and unaffordable.” On May 25, the Government Accountability Office (GAO) released a report on the transformation of U.S. force posture in Asia and found that the DOD’s planning lacked critical cost information and an analysis of alternatives that are essential to assess the projects’ affordability. The report found the realignment initiatives in

\textsuperscript{66} Ibid.

Japan and Guam would cost $29.1 billion combined, primarily in construction-related costs.\textsuperscript{68} Guam-related DPRI costs alone came to $17.4 billion. The $17.4 billion did not include $1.9 billion estimated cost for the Northern Mariana Islands Training Range nor were taken to be the total costs, as these estimates for the initiatives were not available. The Senators used this GAO report as further validation for their opposition.\textsuperscript{69} The following month, the GAO released a separate report about the Guam laydown, estimating that it would cost approximately $23.9 billion.\textsuperscript{70} While the costs differed, they pointed to a fundamental fact: The costs for the Guam laydown appeared to be much higher than expected.

<table>
<thead>
<tr>
<th>Project</th>
<th>Service</th>
<th>FY11</th>
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<tbody>
<tr>
<td>Hospital Replacement Phase 2</td>
<td>DHP-OSD</td>
<td>0</td>
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<tr>
<td>Combat Communications Operations Facility</td>
<td>AF</td>
<td>9,200</td>
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<tr>
<td>Commando Warrior Open Bay Student Barracks</td>
<td>AF</td>
<td>11,800</td>
</tr>
<tr>
<td>Guam Strike Ops Group &amp; Tanker Task Force</td>
<td>AF</td>
<td>9,100</td>
</tr>
<tr>
<td>Guam Strike South Ramp Utilities, Phase 1</td>
<td>AF</td>
<td>12,200</td>
</tr>
<tr>
<td>Red Horse Headquarters/Engineering Facility</td>
<td>AF</td>
<td>8,000</td>
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<tr>
<td>Combined Support Maintenance Shop Phase 1</td>
<td>GUNG</td>
<td>19,000</td>
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<tr>
<td>Andersen AFB North Ramp Parking, Phase 1, Increment 2</td>
<td>Navy/USMC</td>
<td>0</td>
</tr>
<tr>
<td>Andersen AFB North Ramp Utilities, Phase 1, Increment 2</td>
<td>Navy/USMC</td>
<td>0</td>
</tr>
<tr>
<td>Apra Harbor Wharves Improvements, Phase 1</td>
<td>Navy/USMC</td>
<td>40,000</td>
</tr>
<tr>
<td>Defense Access Roads Improvements</td>
<td>Navy/USMC</td>
<td>66,730</td>
</tr>
<tr>
<td>Finegayan Site Prep and Utilities</td>
<td>Navy/USMC</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>176,030</strong></td>
</tr>
</tbody>
</table>


\textsuperscript{70} This does not include, for example, the proposed air and missile defense task force nor the full costs of construction for future facilities for the Air Force Guam Strike Initiative. U.S. Government Accountability Office, *Military Buildup on Guam*.

\textsuperscript{71} Ibid.
Table 5. U.S. Funding for Guam in NDAA (FY2012).  
DPRI Projects Included (Highlighted in Gray).  
Amounts Given in Thousands of USD.

<table>
<thead>
<tr>
<th>Project</th>
<th>Service</th>
<th>FY12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Regional Training Center (PRTC) RED HORSE Cantonment Operations Facility</td>
<td>AF</td>
<td>14,000</td>
</tr>
<tr>
<td>PRTC Combat Communications Transmission System</td>
<td>AF</td>
<td>5,600</td>
</tr>
<tr>
<td>PRTC Combat Communications Combat Support</td>
<td>AF</td>
<td>9,800</td>
</tr>
<tr>
<td>Guam Strike Clear Water Rinse Facility</td>
<td>AF</td>
<td>7,500</td>
</tr>
<tr>
<td>Guam Strike Fuel Systems Maintenance Hangar*</td>
<td>AF</td>
<td>64,000</td>
</tr>
<tr>
<td>Guam Strike Conventional Munitions Maintenance</td>
<td>AF</td>
<td>11,700</td>
</tr>
<tr>
<td>Air Freight Terminal Complex</td>
<td>AF</td>
<td>35,000</td>
</tr>
<tr>
<td>North Ramp Utilities – AAFB</td>
<td>Navy/USMC</td>
<td>0</td>
</tr>
<tr>
<td>Finegayan Water Utilities</td>
<td>Navy/USMC</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>147,600</strong></td>
</tr>
</tbody>
</table>

*Project not authorized until FY2014 NDAA

While the March 9, 2011, PA between GovGuam and DOD enabled the Navy to proceed with construction projects on Guam by releasing $1.2 billion in funding provided by the United States and Japan, increasing alarm about the ballooning costs of the Guam construction led Congress, in the committee stage, to remove $33 million for socioeconomic projects linked to the laydown: fifty new school buses; cultural repository for artifacts unearthed during construction, and the expansion for Guam Memorial Hospital and Centers for Disease Control and Prevention. In the final U.S. FY2012 NDAA, there was a complete rejection of DPRI-related construction funding until specific requirements were fulfilled and submitted to Congress (table 5). These included an explanation of the Marine Corps’ preferred force laydown in the Asia-Pacific region; a Master Plan for the construction of facilities and infrastructure meant to implement this force laydown; a certification by the Secretary of Defense that “tangible progress” is being made on the FRF; the submission of an independent assessment of the laydown (performed by the Center for Strategic and International Studies); and a plan coordinated by all pertinent federal agencies detailing descriptions of work and costs and a schedule for completion of construction, improvements, and repairs to the non-military utilities, facilities, and infrastructure on Guam.  

This meant funds authorized for appropriation, including amounts provided by the Japanese government, were frozen from use until those items were submitted to Congress.

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This had immediate consequences in Japan.\textsuperscript{74} As seen in table 6, based on the Guam International Agreement, Tokyo began providing funds for the relocation in Japan-FY2009. This meant that by 2010, Tokyo spent nearly ¥80 billion. The Congressional freeze of laydown-related funds in the U.S. FY2012 NDAA led Japan to dramatically curtail its direct contributions to Guam. In the Japan-FY2012 budget, Tokyo slashed its spending for Guam to ¥0.5 billion, compared with the ¥9.3 billion in Japan-FY2011. Given that Japan had promised to pay 6.09 billion of the 10.27 billion (U.S. FY2008 dollars) plan, including 2.8 billion in direct cash contributions, to develop facilities and infrastructure on Guam, the considerable reduction in Japanese funds threatened to derail the entire initiative.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|}
\hline
Japan Fiscal Year Budget & Amount in Billions of JPY \\
\hline
2009 & 34.6 \\
2010 & 46.8 \\
2011 & 9.3 \\
2012 & 0.5 \\
\hline
\end{tabular}
\caption{Japan Direct Cash Contributions (2009-2012).\textsuperscript{75}}
\end{table}

3. Guam’s Infrastructure

While GovGuam was supportive of the laydown, officials admit that infrastructure concerns were their biggest worry following the ROD.\textsuperscript{76} The 79,000 new residents proposed at the peak of construction in 2014 represented a 45 percent increase over Guam’s then-current population of 180,000.\textsuperscript{77} This influx of military personnel, their dependents, and the necessary construction workers led to a harshly worded six-page letter and ninety-five-page report by the U.S. Environmental Protection Agency (EPA) on February 17, 2010.\textsuperscript{78} Rating the Draft EIS as Environmentally Unsatisfactory; Inadequate Information (EU-3), the EPA recommended that the laydown plan “should not proceed as proposed and improved analyses are necessary.”\textsuperscript{79} The EPA believed the plan would lead to two primary adverse public health


\textsuperscript{75} Information received from Japan’s Ministry of Defense.

\textsuperscript{76} Government of Guam Officials, Roundtable Interview with Author, April 9, 2014.


\textsuperscript{78} Ibid.

\textsuperscript{79} Ibid, 2.
outcomes due to Guam’s existing substandard drinking water and wastewater infrastructure. The first was a shortfall in the island’s water supply, which in turn would result in low water pressure—which carries direct public health and safety impacts—and a drawdown in the island’s primary sole-source aquifer for drinking water. The second impact was the increase in sewage flow to wastewater plants—already failing to comply with existing Clean Water Act regulations—which would subsequently lead to an increase in raw sewage spills and human exposure to pathogens through drinking water supply, ocean recreation, and shellfish consumption.

The EPA’s rating provided crucial ammunition for Guam’s political leaders who expressed considerable concerns about the impact on the island’s infrastructure. On February 10, 2010, just days before the EPA’s report was released, fourteen of the fifteen legislature members introduced Resolution 275-30, which called the Draft EIS “grossly flawed” and included a list of essential elements that had to be favorably resolved before the Draft could gain the legislators’ acceptance. The Resolution noted that further strains on Guam’s resources caused by population increase would lead “to congested highways, overcrowded schools, overburdened utility infrastructure, and increased public safety concerns.” Citing a June 2009 GAO report on Defense Infrastructure, the Resolution called on the DOD to prepare a comprehensive utility plan that specified the assistance the DOD and/or federal government would provide to Guam to upgrade and improve civilian resources and infrastructure to meet the needs and demands of the increased population. In particular, the Resolution expressed concern with potable water, power, wastewater, highways, education and healthcare facilities, and other capital improvements. Similarly, the Resolution called for any physical and mental healthcare treatment for all laborers or other workers brought to Guam to take place at Naval Hospital, clinics located on military installations, and previously contracted healthcare arrangements.

Taken together, the EPA’s report and the Guam Legislature’s resolution provided crucial input into the DOD’s process of revising the Draft EIS into the EIS, resulting in significant rewrites in order to address the concerns raised. Upon completion, the EPA

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80 The low water pressure safety impacts include increased exposure to waterborne diseases from sewage, storm water infiltration into drinking water, and low water pressure for fire-fighting. Ibid, 3.
81 Ibid, 4.
82 Nine Democrats and five Republicans signed on. Only one Democrat, Matthew Rector, did not. The Thirtieth Guam Legislature, Resolution 275-30 (LS), 1. The six essential elements of compliance that warrant favorable resolution in order to gain acceptance include: (1) land; (2) dredging; (3) physical and mental healthcare; (4) sociocultural impacts of the buildup; (5) infrastructure upgrades; and (6) pollution control.
83 Ibid, 6.
reviewed the document and changed the rating from Environmentally Unsatisfactory-Inadequate Information to Adequate.\(^85\)

An overarching problem remained the fact that GovGuam was largely responsible for obtaining funds for needed off-base infrastructure projects, including things like roads, water, sewer, and electric power. While GovGuam could augment its own resources with other federal agencies’ resources, this meant a dizzying array of intergovernmental grant processes that, in the end, still meant the federal government would pay for off-base improvements. Particularly daunting to GovGuam, however, was the fact that it estimated it needed roughly 3.2 billion for laydown-related projects.\(^86\) This left considerable questions about the status of Guam’s infrastructure under the ROD laydown plan.

4. Live Fire Range Training Complex

The Preferred Alternative for the LFTRC was a strip of land off Route 15 near Pagat Point. The site, called Pagat Village, is ancient Chamorro land that is a federally registered archaeological site on the National Register of Historic Places. For Chamorro people, this site is an important place to pay respects to ancestors as well as host to ancient graves and medicinal plants.\(^87\) Given the significance of the site for Chamorro people, they feel it is important to preserve and protect it.\(^88\) The DOD’s decision to choose Pagat as a firing range rested on the criteria that it met all the requirements for Marine training.\(^89\) The DOD was not completely unaware of Pagat’s cultural significance. Although the proposed range was on a cliff line that overlooked the cultural site at sea level, and therefore promised to have no actual impact on the site itself, the DOD sought an agreement with the State Historic Preservation Office to be able to build the range. It also offered complete access to the site for Guamanians when the ranges were not in use by the military.

Because the proposed live firing ranges were viewed as adversely impacting a culturally/historically significant site for the Chamorro people, in addition to requiring the use

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\(^88\) Judith Won Pat, Interview with Author, April 9, 2014.

\(^89\) Tritten, “Military Says Guam Buildup on Schedule despite New Problems.”
of land not currently held by the federal government, the decision quickly galvanized opposition from all spectrums of Guam’s political landscape. In Resolution 275-30, Guam’s lawmakers expressed their opposition. They also expressed opposition to the prohibition/restriction of civilian access to the site (and other archaeological and recreational areas) that would be necessitated by the planned range. This sentiment was shared by GovGuam as well, which led it to withhold approval of the plan until it could work out an agreement to protect the Pagat area and other historical sites. U.S. Congresswoman Madeleine Bordallo (D-Guam) shared this sentiment, wanting to keep all incoming military activities on DOD-owned lands, opposing any effort by the federal government to acquire additional land by eminent domain. Three private groups (Guam Preservation Trust, We Are Guahan, and National Trust for Historic Preservation) also filed a lawsuit in November 2010 against the DOD to prevent construction on the site. They claimed the DOD did not adequately search for alternatives before choosing the Pagat site.

In March 2011, the DOD and GovGuam reached an agreement and executed a PA on the issue after the Navy guaranteed unimpeded, 24/7 access to Pagat Village and Pagat Cave, to include the existing trail leading to both sites. It was developed in consultation with the Guam and CNMI State Historic Preservation Officers, Advisory Council on Historic Preservation, National Park Services, the federal and Guam and CNMI agencies, and the public. The DOD was able to do so because the DON conducted a more precise modeling of the size of the SDZ associated with the Multi-Purpose Machine Gun Range. As a result, the overall footprint of the range was reduced. In turn, this allowed the DON to re-examine other potential locations on Guam, including locations that had previously been considered.

This did not stop the lawsuit, however, due to the fact that the *proposed* range remained in Pagat. After a judge denied a July 2011 request by the DOD for a stay in the lawsuit since no final decision on a location was made, the DON filed a motion to dismiss for lack of jurisdiction. The court denied the DON’s motion. Still facing court, Joint Guam Program Office Director Joseph Ludivichi filed notice with the court on November 15, 2011, that the DON would conduct a new round of analysis under NEPA. In other words, there

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would be a Supplementary EIS (SEIS) to re-evaluate LFTRC alternatives, which is examined below. This SEIS was expected to take a minimum of two years to complete once the process formally commenced.\(^95\) This was widely seen as a victory for the groups that filed the lawsuit, as it forced the DOD to look at other options. It did not, however, lead to the immediate dismissal of the lawsuit despite the continued push by the Navy for dismissal on the grounds that no selection had been made. It was not until the last week of December 2011 that the federal judge overseeing the case dismissed the lawsuit.\(^96\)

5. Transient Aircraft Carrier Berth

The DON’s Preferred Alternative for the transient carrier berth was Polaris Point in Apra Harbor. The problem, however, was that this location would require dredging a significant amount of healthy coral. The DON did not release any specific number for how much coral would be impacted. While previous Navy studies showed little high-quality coral was likely to be removed, a July 2010 study showed that about seventy-one acres would be dredged under the DON’s Preferred Alternative.\(^97\) This fact was one of the main findings in the EPA report (noted above) dated February 17, 2010. The EPA said the military underestimated the effect the Carrier Vessel Nuclear berth in outer Apra Harbor would have on over seventy-one acres of coral reef.\(^98\) Other federal agencies including the U.S. Fish and Wildlife Service (F&W S) and the National Marine Fisheries Service echoed the EPA’s assessment. All of these agencies requested the Navy to conduct another study of coral, fish, sponges, and protected sea turtles at seventy-two sites in Apra Harbor.\(^99\) Not surprisingly, Resolution 275-30 also highlighted the Guamanian legislature’s rage over this issue. Specifically, the Resolution opposed the destruction of marine ecosystems by the dredging of thirty-nine acres of living coral in Apra Harbor as well as the spread of existing radioactive contamination by this dredging.\(^100\) The Resolution called for the prohibition of dredging.

Facing relentless opposition, the Navy said it would consider an alternative site, with the Lockwood-San Luis Beach alternative rising in priority.\(^101\) The San Luis area is west of


\(^{97}\) Tritten, “Military Says Guam Buildup on Schedule despite New Problems.”


\(^{99}\) Tritten, “Military Says Guam Buildup on Schedule despite New Problems.”

\(^{100}\) The Thirtieth Guam Legislature, Resolution 275-30 (LS), 5-6.

the proposed wharf locations and would require less than one-tenth as much dredging as the current alternative and was therefore favored by Guamanian lawmakers and federal regulators. Yet, despite promising to consider an alternative site, there was no movement on this issue following the ROD. In fact, in a letter written by then-Assistant Secretary of the Navy Jackalyne Pfannenstiel in October 2011, the Navy admitted that such a study could take several years and might require artificial reefs and other protections. No study was conducted. Following 2010, the DOD continued to avoid making an investment decision on the transient carrier berth in favor of “more disciplined use of resources.” With the issue quietly tabled from the Navy’s list of priorities, it effectively led to the quiet demise of the transient carrier berth.

6. Guam’s Agenda of Priority Concerns

Beyond these laydown-related concerns were a host of Guamanian/Chamorro local concerns known as Guam’s Agenda of Priority Concerns. Presented first in Resolution 15, which was adopted on February 27, 2009, these included a list of outstanding federal-territorial issues that existed well before the laydown. These issues included recognition of the right to self-determination of Guam’s native inhabitants, war reparations from the U.S. federal government to officially acknowledge the suffering of Guam residents at the hands of Japanese occupiers during World War Two, dissatisfaction with the Jones Act, and investigation and treatment of serious health problems related to federal activity (such as U.S. nuclear weapons testing in the Pacific). As is evident from these examples, the issues were not directly related to the laydown, per se, but were seen as relevant given the expected sociocultural impact of the laydown. There was also a concern that Chamorro identity would be damaged “once [Guam] get[s] saturated with outsiders. The locals will be a minority in [their] own home.” This view fears that “an expansion in non-Chamorro voting population could eventually affect the proportion of Chamorro office-holders and government workers,” which would have an impact on Guam’s budgets and activities dedicated to cultural issues, cultural practices, and future plebiscites about Guam’s political status. Because of this concern, there was a strong

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102 Since the ROD was released, the Navy has spent $2.3 million researching coral, fish, sponges, and protected sea turtles but still concluded that more research was needed. Travis Tritten, “Environmental Survey, Legal Battle Put Guam Buildup Years Away,” Stars and Stripes, November 7, 2011, http://www.stripes.com/news/environmental-survey-legal-battle-put-guam-buildup-years-away-1.160060.


105 Possible exceptions of those without direct relation to the Buildup include necessary funding to meet capital infrastructure obligations imposed on Guam as a result of the Buildup and the call for exemption from the Jones Act.

106 Judith Won Pat, Interview with Author, April 9, 2014.

107 The Thirtieth Guam Legislature, Resolution 275-30 (LS), 9.
conviction that the long-standing issues identified in Resolution 15 had to be resolved during the planning phase of the laydown because once it was complete, “the opportunity to do so will be lost.”\textsuperscript{108} More fundamentally, however, these concerns tapped into a deeper issue of problems in the Guam-federal government relationship. Many opponents of the laydown believed that past injustices by the federal government needed to be addressed to build trust with Guamanians, who are suspicious of the federal government’s intentions toward Guam.\textsuperscript{109} An even darker sentiment among a smaller segment of laydown opponents viewed the U.S. presence as imperial and simply treating Guam as a colony.\textsuperscript{110}

Supporters of the laydown insisted these were separate discussions that should not be used as leverage in laydown debates.\textsuperscript{111} Taking advantage of the unpopular reception the ROD received, the Agenda of Priority Concerns was seen as an attempt to throw everything at the DOD to “hit the bully back” in an attempt to get these long-standing issues resolved.\textsuperscript{112} It was “a last-straw attempt to hit the EIS.”\textsuperscript{113} The DOD and DON made clear that these were not going to be addressed as they were not relevant to the laydown.\textsuperscript{114} Instead, the DOD facilitated parallel discussions on these concerns with the relevant parties. The result was that few of the Agenda of Priority Concerns were touched in the EIS, much to the chagrin of local opponents to the laydown, who continued to voice these concerns to both GovGuam and federal government representatives. Because the concerns were not addressed, they remained percolating among laydown opponents and revived after the SEIS, reviewed next.

\textsuperscript{108} Ibid, 10.
\textsuperscript{109} Judith Won Pat, Interview with Author, August 3, 2016.
\textsuperscript{111} Anonymous B, Interview with Author, April 9, 2014.
\textsuperscript{112} Anonymous R, Interview with Author, August 2, 2016.
\textsuperscript{113} Joe Aquinata, Interview with Author, August 3, 2016.
\textsuperscript{114} Anonymous Q, Interview with Author, August 1, 2016.
Laydown Plan II: 2012–Current

The challenges outlined above were daunting, particularly for GovGuam. Different from some members of the Guam legislature who spearheaded many of the anti-laydown resolutions, Governor Eddie Calvo largely viewed the buildup as an opportunity for Guam. Lieutenant Governor Ray Tenorio cited retail and hospitality services as benefiting from the military presence as well as the military civilian support personnel and construction and service contracts as means by which jobs would be brought to Guam’s economy.115 Not surprising, GovGuam constantly evaluated how to capitalize on the laydown by looking at economic opportunities and worked hard with the DOD to find ways to make the laydown palatable. At the same time, however, GovGuam was responsive to the associated challenges. In particular, GovGuam was attentive to concerns that involved eminent domain, infrastructure capacity, and socio-economic and environmental impacts. It recognized the local opposition and also shared a concern over the speed, scope, and scale of the plans in the EIS. This tension that GovGuam faced between both support and concern led it to work with the DOD to develop a set of priorities for Guam called the Four Pillars in January 2011.116

The Four Pillars are:

1. “One Guam” initiative commits the DOD to improve the quality of life for the people of Guam and the military personnel by improving Guam’s infrastructure impacted by the laydown (e.g., ports, roads, water, wastewater, and power) as well as DOD advocacy of federal investment in Guam’s socio-economic needs (e.g., school buses, cultural artifacts depository, and a mental health clinic).

2. “Green Guam” initiative commits the DOD to develop and secure funding for the most energy-efficient infrastructure possible that results in “net zero” energy for DOD bases on Guam over time and to support Guam’s efforts to develop sustainable and renewable energy projects.

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3. Commitment to providing 24/7 unimpeded access to Chamorro historical sites and sacred lands by civilians, such as Pagat Village and Pagat Cave;

4. Pursue a Net-Negative or Net-Minus strategy for DOD-owned land, which commits the DOD to having a smaller footprint on Guam—compared with now—after the laydown is finished. This includes better utilization of currently controlled land in order to return underutilized land to GovGuam.

These Four Pillars were integrated into the PA that was signed on March 9, 2011, thereby becoming a formal commitment between the federal government and GovGuam.\footnote{Programmatic Agreement Among the Department of Defense, the Advisory Council on Historic Preservation, the Guam State Historic Preservation Officer, and the Commonwealth of the Northern Mariana Islands State Historic Preservation Officer Regarding the Military Relocation to the Islands of Guam and Tinian, March 9, 2011, https://www.navfac.navy.mil/content/dam/navfac/NAVFAC%20Pacific/PDFs/cultural_resources_info/Programmatic%20Agreement/PAC_Guam%20and%20CNMI%20PA_all%20Signatories.pdf.} This was critical, as it was a recognition by these parties that while they supported the laydown, the plan under the EIS was not workable given that it would negatively affect various aspects of Guam and damage a cultural resource of the Chamorro people. The signing of the PA helped quell some local opposition.

This was finalized in an April 2012 agreement (hereafter: Roadmap Adjustments) that led to significant changes. Issued as a Joint Statement by the U.S.-Japan Security Consultative Committee, the allies adjusted the plans outlined in the May 2006 Roadmap in three ways. First, in an attempt to delink the issues on Okinawa from the Guam laydown, instead of having to wait until the completion of an FRF, relocation to Guam would occur when appropriate facilities were available to receive them. Importantly, the total or partial return of the six facilities and areas in Okinawa remained unchanged from the 2006 Roadmap, with the objective to do so as early as it became possible. Second, the DOD adopted a new force posture in the Pacific that resulted in a materially smaller and reconfigured force on Guam. This led to an agreement to move a total of 9,000 Marines off Okinawa. Of this number, the number that would move to Guam was approximately 5,000 Marines with approximately 1,300 dependents, a 64 percent reduction the relocated Marine Corps population compared with the 2010 EIS. These Marines would form one of four Marine Air-Ground Task Forces (MAGTFs) in the Asia-Pacific region. The remaining approximately 4,000 would move to other locations throughout the Pacific, including 2,700 to Hawaii. Of the five-thousand to live and train on Guam, only one-third of them would be there on permanent orders, which would consist of three-year, family-accompanied tours. The other roughly 3,300 Marines would arrive on six-month unit deployment rotations and use equipment already located in Guam. These troops were originally slated to begin arriving in 2020 and increase each year through 2026 when the Corps reached its goal. The biggest spike would occur between 2019 and 2020, when the total number of Marines would jump from 387 to 2,990. Finally, the preliminary cost estimate for relocating these troops to


122 This includes: Camp Kuwae (Camp Lester): Total return; Camp Zukeran (Camp Foster): Partial return and consolidation of remaining facilities and infrastructure to the extent possible; Marine Corps Air Station (MCAS) Futenma: Total return; Makiminato Service Area (Camp Kinser): Total return; Naha Port: Total return (relocated to the new facilities, including additional staging area, to be constructed at Urasoe); and Army Petroleum, Oil, and Lubricant Depot Kuwae Tank Farm No.1: Total return. Ibid, 3-4.

123 U.S. Department of the Navy, “Executive Summary,” Final Environmental Impact Statement, ES-4. The plan is to establish an operational U.S. Marine Corps presence in Guam consisting of the 3rd Marine Expeditionary Brigade Headquarters; the 4th Marine Regiment; elements of aviation, ground and support units from III MEF, and a base sustainment unit.


125 Ibid.
Guam was 8.6 billion (U.S. FY2012 dollars), of which Japan’s contributions would be up to 2.8 billion (U.S. FY2008 dollars), which translates into 3.1 billion (U.S. FY2012 dollars).\footnote{Media reports often cite $3.1 billion. The two governments "reaffirmed that Japan’s financial commitment is to be the direct cash contribution as stipulated in Article 1 of the 2009 Guam International Agreement." U.S.-Japan Security Consultative Committee, "Joint Statement of the Security Consultative Committee," 3. Article 1 of the Guam International Agreement states: “The Government of Japan shall make cash contributions up to the amount of two billion, eight hundred million United States dollars ($2,800,000,000) (in U.S. Fiscal Year 2008 dollars) to the Government of the United States of America as a part of expenditures for the relocation of approximately 8,000 III MEF personnel and their approximately 9,000 dependents from Okinawa to Guam.” See Agreement Between the Government of Japan and the Government of the United States of America Concerning the Implementation of the Relocation of III Marine Expeditionary Force Personnel and Their Dependents from Okinawa to Guam, February 17, 2009, 3, http://www.mofa.go.jp/region/n-america/us/security/agree0902.pdf.}

The April 2012 agreement meant there was a need to reassess the laydown, thereby necessitating an appraisal of the potential environmental impact of the construction and operations of a cantonment, family housing, and associated infrastructure on Guam to support the relocation of a substantially smaller number of Marines and dependents than was examined in the 2010 EIS. Although an LFTRC SEIS had already been initiated in November 2011, the Roadmap Adjustments meant that it needed to be expanded. This occurred on October 11, 2012, when the DON published a Notification of Intent to prepare an SEIS.

Both governments agreed to a consolidation plan for facilities and areas in Okinawa, signaling their agreement on reducing the U.S. footprint on Okinawa.\footnote{Japan Ministry of Foreign Affairs, Consolidation Plan for Facilities and Areas in Okinawa (April 2013), http://www.mofa.go.jp/mofaj/area/usa/hosho/pdfs/togo_20130405_en.pdf.} Three categories of land returns were designated under this plan. They were:

1. Lands available for immediate return upon completion of the necessary procedures.
2. Areas eligible for return once the replacement facilities in Okinawa were provided.
3. Areas eligible for return as U.S. Marine Corps forces relocate from Okinawa to locations outside of Japan.

This plan was a significant step forward, as it detailed every step needed for consolidating U.S. forces in Okinawa and gave conditions-based dates for land returns. When fully implemented, the plan will result in land returns of about 2,500 acres of land used by U.S. forces. Importantly, the plan called for the return of facilities and land once a sizeable contingent of Marines relocated to Guam and elsewhere. One of these locations was Hawaii, with the plan identifying approximately 2,700 Marines and their 2,000 dependents relocating...
from Okinawa to Oahu. The timeframe for this relocation begins in 2027—after the Guam laydown is complete—and is expected to last until 2031. Prior to that, a NEPA-mandated environmental impact study needs to be conducted, which is currently scheduled to begin no earlier than 2019.

**Supplemental Environmental Impact Statement**

Because of the reduced footprint required for a LFTRC and the DON’s ability to consider other locations for a range on Guam, in February 2012 the DON elected to prepare an SEIS to evaluate the potential impacts of the LFTRC. Because of the April 2012 Joint Statement that resulted in the Roadmap Adjustments, however, this meant a reduced number of personnel relocating to Guam, ergo reduced acreage requirements for the cantonment and family housing facilities. Taken together, along with ongoing public input on the ROD, the DON decided to review the actions approved in the September 2010 ROD since the modified forces expected on Guam would impact the size and location of the cantonment and family housing areas. This meant the DON was able to consider a broad range of alternatives that were not feasible in the 2010 EIS.

The result was a decision to initiate an SEIS beyond the LFTRC. The purpose was to supplement the portions of the 2010 EIS regarding the establishment of a cantonment area, family housing, an LFTRC, and associated infrastructure. Because of the changes in the agreement with Japan, less of Guam’s land was needed. At the same time, the changes promised reduced pressure on Guam’s existing infrastructure, which in turn opened up different options for consideration.

The decision to initiate an SEIS did not mean all of the decisions in the 2010 ROD were open for reexamination. Not subject to further analysis in the SEIS were the decisions regarding Marine Corps and AF aviation assets and facilities at AAFB, Apra Harbor wharf improvements and associated waterfront facilities and utility systems to support sea embarkation, and the non-live fire and maneuver training ranges on Andersen South. This is because none of these decisions were affected by the Roadmap Adjustments. As such, the actions contained in the September 2010 ROD stood. The training ranges on Tinian were also not included; instead, these were to be subject to a separate environmental impact study. Finally, the deferred decisions on the transient aircraft carrier berthing in Apra Harbor and

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128 This includes: 3rd Marine Infantry Division HQ and HQ BN; 3rd Combat Assault BN; 12th Marine Artillery Regiment HQ and HQ Battery; 3rd Combat Logistics Regiment HQ and HQ CO; 2nd Marine Air Support Squadron; 3rd Medical BN; and portions of the 21st Dental CO.

the deployment of the Army’s AMDTF would not be addressed. Decisions on these projects were to be left independent of the proposed SEIS if, and when, the DOD chose to move forward with them.

Based on the Four Pillars, Marine Corps requirements, as well as input from GovGuam and the people of Guam, the DOD scoped out alternatives and their impacts (individual, additive, collective, and cumulative), proposed mitigation, and finally a set of Preferred Alternatives in an April 18, 2014, Draft SEIS. Like the Draft EIS in 2010, after release of the Draft SEIS, the DON continued to revise the Study with input coming from discussions between DOD, GovGuam and federal agencies as well as discussion with the public and their input regarding the proposed actions, alternatives, existing conditions, environmental impacts, and proposed mitigation measures. The Final SEIS (SEIS) was released on July 17, 2015.

Compared with the September 2010 EIS, the SEIS showed a significant change in the speed and scope of the laydown. This is a function of the DOD’s commitment to reduce the adverse impact of the laydown as well as the changes in the population increase and timeframe associated with the proposed laydown. Washington was also sensitive to local concerns of the EIS plan being too big and too fast-paced for Guam. In the 2010 EIS analysis, it was predicted that there would be a rapid spike in population in the first five years of the Marines’ relocation (out of a seven-year total) that would result in an increased population of 30,190 people, with an expected population surge of 79,178 during peak construction. Under the proposed actions in the 2015 SEIS, the construction period was to be a gradual thirteen years and result in a steady-state population increase of about 7,400 people, with an expected population surge of less than 10,000 during peak construction. This is important because, according to the SEIS, the population increase will not likely result in any sustained increase in demand on Guam’s public services and permitting agencies and the estimated increases in GovGuam tax revenues will likely compensate for any increased demand on public services that do occur. A summary of the specific elements of the laydown, drawn from the SEIS’s Executive Summary, is outlined below.

**Cantonment/Family Housing**

The SEIS analyzed five alternatives. Representing an important change from the 2010 EIS, all five alternatives are located on land under the custody and control of the DOD. This differs

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131 Ibid, ES-32.
132 Initially there was a set of four site alternatives for cantonment and five site alternatives for family housing and associated facilities, but these were consolidated into five combined cantonment/family housing preliminary
from the 2010 EIS which called on the DOD to acquire 680 acres (275 hectares) of a former FAA land parcel, thereby stoking opposition to the DOD using eminent domain to further acquire land. The DON chose Alternative E, which specifies the NCTS Finegayan for Cantonment and the AAFB for family housing. This Preferred Alternative consists of approximately 1,723 acres (697 hectares) of federally owned land. This broke down into 1,213 acres (491 hectares) for the cantonment at Finegayan and 510 acres (206 hectares) for family housing at the current AAFB family housing area. Because of the reduced size and adjusted composition of the relocating Marine force, the size and scope of this area are considerably smaller than the 2,580 acres in the 2010 EIS and do not require the use of the adjacent former FAA parcel. The categories and functions of the proposed construction are consistent with those included in the 2010 EIS.

Live-Fire Training Range Complex

In the 2010 ROD, the LFTRC decision was deferred. In the SEIS, five alternatives for the LFTRC were examined, with Alternative 5 being chosen as the Preferred Alternative. For all five alternatives, the location for the twenty-three-acre stand-alone hand grenade range did not change and remains located on federally owned land at Andersen South.

- Alternative 5 consists of approximately 3,957 acres (1,602 hectares) at AAFB-NWF, not including the twenty-three acre hand grenade range. This breaks down into a 3,701-acre (1,498-hectare) SDZ and a construction footprint of approximately 256 acres (104 hectares). This construction footprint will be for the construction of individual ranges, a support building, towers, internal access roads, a perimeter fence, and the potential relocation of the F&WS facilities within the Ritidian Unit of the Guam National Wildlife Refuge (NWR). An additional fifty-nine acres (24 hectares) would be required for construction to improve existing roadways from the intersection of Routes 3, 3A, and


134 This includes construction and operation of essential headquarters and administrative support facilities; base operations; supply, service, maintenance, and other support functions; housing for unaccompanied and accompanied personnel; and on base roadways, utilities and similar infrastructure.


9 to the Ritidian Unit of the Guam NWR. Although this alternative did not require acquisition of non-federal land, access to areas within the Ritidian Unit of the Guam NWR that fall within the SDZs would have access restrictions in place when the ranges are in use.

Like the 2010 EIS, the SEIS evaluated the potential environmental consequences of implementing each of the alternatives that were carried forward for analysis. Below, the SEIS' findings on the consequences stemming from implementation of Preferred Alternative E (cantonment/family housing) and Alternative 5 (LFTRC) on utilities are highlighted, factoring in the reduced Marine Corps population and reduced facilities requirements associated with the 2010 Roadmap Adjustments.

- **Power**: The SEIS estimated that 5.7 MW of power were required for the laydown, which is significantly less than the 20 MW required for the 2010 EIS.\(^{137}\) In regard to Preferred Alternative E, the plan includes the construction of a new electrical substation at Finegayan. In regard to Alternative 5, the plan includes extending existing overhead lines at NWF to the LFTRC. Additionally, tie-ins of electrical lines would be implemented to connect the new on-base infrastructure to existing utility networks.

- **Potable water**: The SEIS estimated that the new plans required 1.7 MGd of water, which is significantly less than the 5.82 MGd estimated in the 2010 EIS.\(^{138}\) To deal with Alternative E, the plan includes the construction of one ground-level water storage tank at Finegayan. In regards to Alternative 5, the plan calls for the installation of a water main at the LFTRC to connect two range building to the existing distribution system off site. Additionally, tie-ins of water lines would be implemented to connect the new on-base infrastructure to existing utility networks. The SEIS found that operation of the cantonment/family housing facilities under Alternative E would result in significant but mitigatable short-term, localized impacts to the affected basin within the Northern Guam Lens Aquifer (NGLA) but less than significant impacts to the overall NGLA.\(^{139}\) For potential mitigation actions, the SEIS laid out a plan that included, among other things, implementation of enhanced water conservation measures for the proposed action, improvement of existing DOD water systems to reduce system leaks, adjustment of pumping rates at DOD wells, an increase in the use of surface water in northern Guam from Fena Reservoir in order to reduce withdrawals from the NGLA, and rehabilitation and expansion of the NGLA monitoring well network.

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\(^{138}\) Ibid, 2-12

Wastewater: The SEIS estimated that 1.2 MGd of wastewater would be generated by the laydown. This is less than the 2010 EIS estimates of 2.6 MGd. Alternative E requires the construction of pump stations at both Finegayan and the AAFB family housing site, along with a solid waste transfer facility at Finegayan. For the issue of wastewater collection requirements at the two range buildings and the relocated F&WS facility at Alternative 5, a combination of gravity sewer line, septic tank, and a self-contained vegetated effluent disposal basin are required. Additionally, tie-ins of wastewater lines would be implemented to connect the new on-base infrastructure to existing utility networks. Because the SEIS found that construction of the cantonment/family housing facilities under Alternative E would result in significant direct impacts on the environment, it suggested potential mitigation measures during the construction phase, including constructing sewers during low-flow periods, by-pass pumping, and having pump trucks on stand-by. Operation of the facilities under this Alternative was found to also result in significant direct impacts that could accelerate the deterioration, and potential failure, of the existing GWA interceptor sewer system from AAFB to the NDWWTP. Suggested potential mitigation options included upgrading the NDWWTP treatment systems and refurbishing the main GWA sewer lines from AAFB to the NDWWTP along Routes 3 and 9.

Solid Waste: The SEIS estimated that solid waste generation at the cantonment/family housing area would be approximately 54,250 pounds per day. This is reduced from the estimated average of 165,600 pounds per day in the 2010 EIS. The SEIS also found that the Layon landfill has sufficient capacity to support solid waste disposal requirements for the SEIS’s Proposed Alternatives and no further improvements would be required. Each cantonment/family housing alternative would require a solid waste transfer station and recycling center to efficiently manage solid waste.

Roadways: The SEIS concluded that there would be a slight increase in traffic on segments and intersections between the cantonment at Finegayan, the family housing at AAFB, and the LFTRC at NWF. This would, in turn, potentially result in significant impact on eight segments of road in at least one direction and ten intersections for weekday a.m. and/or p.m. peak hours. As a potential mitigation effort, the SEIS recommended widening eight roadways and conducting improvement projects on nine intersections to reduce impacts to less than significant levels on these roadway segments and intersections.

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Record of Decision

Thirty days after the release of the SEIS, on August 28, the DON released its ROD, which selected the Preferred Alternatives as described in the SEIS. Specifically, this meant the following. Alternative E was chosen for cantonment and family housing. Cantonment is to be located at NCTS Finegayan and family housing at AAFB. Moreover, Alternative 5 was chosen for the LFTRC, which is to be located at AAFB- NWF. This also includes a standalone hand grenade range at Andersen South. Both alternatives stay within the military’s existing footprint on Guam. Importantly, while staying within DOD-owned land, the ROD provides for a materially smaller force on Guam than was originally proposed in the 2010 EIS. Signed, the ROD began the process of an eight billion investment on Guam as it officially cleared the way for the DOD to award additional construction contracts related to the laydown.

Outstanding Issues

The ROD went over much better in Guam than its 2010 counterpart. Some issues that had been troublesome no longer were. For example, infrastructure concerns dominated discussions in 2010, but the smaller scale of the 2015 SEIS meant that many of these concerns were no longer relevant. Moreover, in keeping with One Guam, the DOD promised to make investments in off-base infrastructure to ensure that infrastructure upgrades benefited all residents on Guam. Three examples of these investments suffice. The Tumon Maui Well, which is Guam’s largest well, was brought back on line by DOD money (after 15 years of being closed) and leased to GWA for use by both the civilian and defense communities. The DOD also proposed 126 million to help GWA upgrade or expand its facilities in the northern part of Guam to handle the anticipated increase in water and wastewater demand

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143 Simon Sanchez, Interview with Author, 7/28/16. He notes that even though he and most utilities-related people believed some of the infrastructure issues could have easily been mitigated with the first laydown plan, they were happy that it did not happen because it was way too big. In that sense, he believes that the 2015 ROD better fits with Guam.
but also benefit the local community. Finally, as part of the LFTRC, the DOD plans to upgrade 3A, a DOD road that leads to the NWR but is leased to GovGuam.

Yet issues remain. Below is a brief explanation of the more prominent ones. Some are continuations of challenges from the 2010 EIS, such as the FRF, Congressional financing, LFTRC, and Guam’s Agenda of Priority Concerns. Others were new, such as challenges pertaining to Marines’ training on Tinian and Pagan and the successor to the Army’s Air Missile Defense Task Force. Finally, although not specifically Guam-related, after the laydown on Guam is complete, U.S. force redistribution efforts will move to Hawaii, where many of these challenges on Guam may be replayed.

1. Futenma Replacement Facility

In December 2013, Okinawa Governor Hirokazu Nakaima approved Tokyo’s request for a permit to construct an offshore landfill at Cape Henoko that was a necessary portion of the FRF at Camp Schwab. This was progress in that it meant all relevant parties agreed to construction of the FRF. It was short-lived, however, as he lost in the November 2014 gubernatorial election to Takeshi Onaga, an FRF opponent. Governor Onaga has since worked to prevent or delay construction of the FRF through a variety of means, including administrative and legal. At first, he attempted to renegotiate a new relocation plan, but this went nowhere. In March 2015, he demanded Japan’s Ministry of Defense stop work on the landfill, but the Shinzo Abe Administration judged the landfill construction was in compliance with regulations and therefore refused to halt survey work. In October 2015, Governor Onaga revoked Governor Nakaima’s original permit after determining the approval was “legally flawed.” This was once again ignored by the Abe Administration. Going one step further, Tokyo took Okinawa to court seeking to overturn Governor Onaga’s action.

In a surprising move, on March 4, 2016, the central government and Okinawa reached a court-mediated agreement by the Naha branch of the Fukuoka High Court. The result was more of a cease-fire than a resolution. Prime Minister Abe ordered a suspension of all work at Henoko and both sides agreed to drop the three lawsuits they filed against each other and consolidate these cases into one in return for starting talks toward an “amicable


The resolution of the issue. The agreement also required them to await a final ruling by an arbitration panel that could be contested in court, if so desired, but both sides agreed they would accept that court’s verdict. After the panel issued its judgement for both sides to hold talks on the issue (without issuing any judgement on legalities of the permit order or revoking the permit), the Abe Administration took Okinawa back to court in July over its failure to cooperate on relocation given that Governor Onaga had failed to retract his revocation of the permission for landfill work at Henoko. Governor Onaga, in turn, filed counterclaims.

The Naha branch handed down its ruling on September 16, 2016, handing Governor Onaga a loss. It ruled that former Governor Nakaima’s approval was “not unreasonable” and that Governor Onaga’s refusal to retract his revocation of the permission was “illegal.” Not happy with the ruling, Governor Onaga appealed to Japan’s Supreme Court. The Supreme Court, however, without hearing the case, issued its ruling on December 20 that upheld the ruling of the Naha branch of the Fukuoka High Court in favor of the central government. Although all legal avenues have been exhausted, Governor Onaga has continuously said he is committed to take “all possible measures” to prevent relocation within Okinawa. While Governor Onaga no longer has any legal recourse to stop the FRF, he retains power over activities necessary to construction at Henoko, such as approval of permits to destroy coral reef or to change designs and construction methods of reclamation work. All this promises to delay completion of the FRF.

2. Washington

While the changes in the proposed laydown altered costs, Congressional concerns over DPRI-related costs did not disappear. This was particularly true after the GAO issued another report in June 2013 that questioned the DOD’s cost estimates. In this report, the GAO harshly criticized the DOD for developing a 12.1 billion “rough order of magnitude” cost estimate for relocating Marines from Okinawa to Hawaii, Guam, and elsewhere. The GAO concluded this estimate “is not reliable because it is missing costs and is based on limited data.” This fed back into Congress where Senator McCain reiterated his concerns about the lack of a clear

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This led to continued restrictions placed on funds in the NDAA for DPRI-related construction for U.S. FY2013 and U.S. FY2014 until specific requirements were met, such as submission of a Guam Master Plan. As table 7 shows, however, despite the restrictions, some exceptions existed for completion of additional analysis and studies required under NEPA, to initiate planning and design of construction projects at AAFB and Andersen South and to carry out any construction project for which specific authorization of appropriations is provided in the NDAA. Critically, however, the restrictions prohibited the use of Japanese government funds to implement DPRI projects, leading to a dramatic curtailment of Japanese contributions in Japan–FY2013, the lowest figure since Japan began providing money in 2009 (table 8).

Table 7. U.S. Funding for Guam in NDAA (FY2013–2016). DPRI Projects Included (Highlighted in Gray). Amounts Given in Thousands of USD.

<table>
<thead>
<tr>
<th>Project</th>
<th>Service</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upgrade Fuel Pipeline</td>
<td>DLA-OSD</td>
<td>61,415</td>
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<tr>
<td>Joint Force Headquarters Phase 4</td>
<td>GUNG</td>
<td>8,500</td>
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<tr>
<td>North Ramp Parking (AAFB) Increment 2</td>
<td>Navy/USMC</td>
<td>25,904</td>
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<td>Broad Area Maritime Surveillance Forward</td>
<td>Navy/USMC</td>
<td>61,702</td>
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</tr>
<tr>
<td>Operational &amp; Maintenance Hangar</td>
<td>Navy/USMC</td>
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<tr>
<td>Dehumidified Supply Storage Facility</td>
<td>Navy/USMC</td>
<td>17,170</td>
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<tr>
<td>Emergent Repair Facility Expansion</td>
<td>Navy/USMC</td>
<td>35,860</td>
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<tr>
<td>Modular Storage Magazines</td>
<td>Navy/USMC</td>
<td>63,382</td>
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<tr>
<td>Sierra Wharf Improvements</td>
<td>Navy/USMC</td>
<td>1,170</td>
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<td>X-Ray Wharf Improvements</td>
<td>Navy/USMC</td>
<td>53,420</td>
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<tr>
<td>Pacific Airpower Resilience (PAR)-Fuel Systems Hardened Buildings</td>
<td>AF</td>
<td>20,000</td>
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</tbody>
</table>


<table>
<thead>
<tr>
<th>Project</th>
<th>Service</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAR-Strike Tactical Missile Maintenance Squadron Facility</td>
<td>AF</td>
<td>10,530</td>
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<tr>
<td>PAR-Tanker Group Maintenance Hangar/AMU/Squadron Operations</td>
<td>AF</td>
<td>132,600</td>
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<tr>
<td>PRTC Red Horse Airfield Ops Facility</td>
<td>AF</td>
<td>8,500</td>
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<td></td>
<td></td>
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<tr>
<td>PRTC SF Fire Rescue &amp; Emergency Management</td>
<td>AF</td>
<td>4,600</td>
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<tr>
<td>Aircraft Maintenance Hangar-North Ramp</td>
<td>Navy/USMC</td>
<td>85,673</td>
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<td>Guam Strike Fuel Systems Hangar Increment 2</td>
<td>AF</td>
<td>64,000</td>
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<tr>
<td>PRTC-Combat Communication Infrastructure Facility</td>
<td>AF</td>
<td>3,750</td>
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<td>PRTC-Red Horse Logistics Facility</td>
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<td>3,150</td>
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<td>PRTC-Satellite Fire Station</td>
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<td>6,500</td>
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<td>GSE Shops at North Ramp</td>
<td>Navy/USMC</td>
<td>21,880</td>
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<td>Marine Wing Support Squadron Facilities at North Ramp</td>
<td>Navy/USMC</td>
<td>28,771</td>
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<td>Sanitary Sewer System Recapitalization</td>
<td>Navy/USMC</td>
<td>45,314</td>
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<tr>
<td>Municipal Solid Waste Landfill Closure</td>
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<td>10,777</td>
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<td>Live-Fire Training Range Complex (NW Field)</td>
<td>Navy/USMC</td>
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<tr>
<td>APR - Dispersed Maintenance Spares &amp; SE Storage Facilities</td>
<td>AF</td>
<td>19,000</td>
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<tr>
<td>APR - Installation Control Center</td>
<td>AF</td>
<td>22,200</td>
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<tr>
<td>APR - South Ramp Utilities Phase 2</td>
<td>AF</td>
<td>7,100</td>
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<tr>
<td>PAR - LO/Corrosion Control/Composite Repair</td>
<td>AF</td>
<td>34,400</td>
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<tr>
<td>PRTC – Roads</td>
<td>AF</td>
<td>2,500</td>
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<tr>
<td>Energy Conservation</td>
<td>OSD/Navy</td>
<td>5,300</td>
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<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>95,819</strong></td>
<td><strong>494,607</strong></td>
<td><strong>128,051</strong></td>
<td><strong>272,268</strong></td>
</tr>
</tbody>
</table>
Things changed at the end of 2014. In an attempt to meet Congressional requests for strategic justification and credible cost estimates on DPRI-related funds, the DOD submitted a Master Plan in August 2014 that described the future laydown of the Marines on Guam as well as the cost and schedule of construction. With its delivery to Congress, the prohibition on DPRI-related expenditures was lifted in the U.S. FY2015 NDAA (December 2014), including the freeze on Japanese funds, thereby allowing Guam construction to proceed with the use of both U.S. and Japanese funds. This enabled the Japanese to begin pouring money back into the construction programs on a continuous basis (table 8) and eventually led Congress to approve a dramatic increase in DPRI-related spending (table 7). The U.S. FY2016 NDAA continued this critical step, as it raised funding for projects in Guam from 272.3 million to 398.6 million, but some of this came in the form of civilian infrastructure spending connected with the relocation (table 9). This included unfreezing of U.S. FY2014 restrictions on 106.4 million in wastewater projects but continuing to retain a prohibition on a Public Health Clinic and refusal to consider spending on a Cultural Repository. While the U.S. FY2017 NDAA also unfroze spending on water infrastructure projects and amended restrictions placed on the Cultural Repository, appropriations for the latter are still unclear.

3. Live Fire Training Range Complex

The movement of the LFTRC out of the Pagat Village/Pagat Cave area was a direct response to local concerns over restricted access and damage to Guamanian ancestral lands and archaeological sites. In staying true to One Guam, an area at AAFB-NWF close to the Guam...
NWR was chosen. This quieted most opposition to the LFTRC, since the proposed training range is wholly within federal land and has proven difficult to get the people on Guam as interested in as they were in Pagat Village/Pagat Cave.\textsuperscript{157} Still, the SDZ overlapped with the adjacent wildlife refuge, which would be closed for more than half of each year when the complex would be in use, so a host of other issues was introduced.

Table 9. Guam Civilian Infrastructure Spending Requested by DOD (2012-2017).\textsuperscript{158}

\begin{tabular}{|l|c|c|}
\hline
\textbf{Project} & \textbf{Fiscal Year} & \textbf{Amount} \\
\hline
School Buses & FY12 & 10.07 \\
Artifact Repository & FY12 & 11.93 \\
Guam Mental Health Facility (Increment 1) & FY12 & 11 \\
Guam Mental Health Facility (Increment 2) & FY13 & 0 \\
Guam Regional Health Lab & FY13 & 0 \\
Guam Water and Wastewater Infra & FY13 & 0 \\
\textit{Rescind Bus/Mental Health from FY12} & \textit{FY13} & \textit{(21)} \\
Guam NDWWTP Improvements & FY14 & 0 \\
Wastewater Collection Systems & FY14 & 0 \\
Technical Support and Project Dev & FY14 & 0 \\
Rephase Wastewater Infrastructure & FY14 & 106.4 \\
Guam Regional Health Lab & FY14 & 13 \\
Guam Civilian Water/Wastewater Program & FY15 & 0 \\
Guam Civilian Water/Wastewater Program & FY16 & 0 \\
Guam Civilian Water/Wastewater Program & FY17 & 67.5 \\
Guam Regional Health Lab & FY17 & 0 \\
\hline
\end{tabular}

One issue was access for the public.\textsuperscript{159} Ritidian’s beach, caves, and hiking trails are popular with the people of Guam. Only the westernmost range – the Multipurpose Machine Gun range – would potentially impact access that local populations are afforded by F&WS, and even that SDZ does not encompass Ritidian beach and trails in their entirety. Still,

\textsuperscript{157} Michael Bevacqua, Interview with Author, August 3, 2016.

\textsuperscript{158} Guam Civilian Infrastructure Spending Data, Information Received from Office of U.S. Congresswoman Madeleine Z. Bordallo.

\textsuperscript{159} Congress passed a law that authorized the LFTRC at NWF adjacent to the Guam NWR and SDZ over the Guam NWR and instructed DOD to work with F&WS on access and management of the facility. Anonymous Q, Email correspondence with author, March 19, 2017.
because a portion of the SDZ would require closure of parts of the Guam NWR, the local community was angered that public access to the beach, caves, and hiking trails would be limited for more than half a year, every year, for safety reasons. The DOD’s Joint Guam Program Office, understanding the concern but seeking compromise, promised that more than 100 acres of the Guam NWR would still be open for public access. In other words, when the ranges are not active, the public would enjoy the same access to the area that they had prior to the ROD, which has been strictly limited by F&WS. When the ranges are live, however, there would be limits tied to the area close to the SDZ. At the time of writing, it appears that no protocols for public access have been established.

A second issue was access for the Ritidian Unit of the Guam NWR. Similar to public access, there is an expectation that construction and use of the LFTRC will impact the Guam NWR’s ability to meet its recovery objectives and goal for several threatened and endangered species on Guam. In particular, the Guam NWR is concerned about both disturbance impacts to habitats and its ability to repatriate native species that include the Mariana crow, Guam Micronesian kingfisher, Mariana fruit bat, Guam rail, and hayun lagu. As of writing, none of the species to be recovered in the Guam NWR have been successfully reintroduced. Still, given the restrictions to access under the planned SDZ’s, the Guam NWR is concerned about being able to manage areas requiring wildlife management actions, including maintenance of the predator fence. To address these issues, the DON pursued an agreement with the F&WS to establish and operate an SDZ that would still allow the F&W to continue to manage and access the Guam NWR consistent with the purpose for which it was established. The ROD adopted all mitigation measures that were identified in the SEIS with the exception of proposals to designate an Ecological Reserve Area on Naval Munition Site and expand the Orote Peninsula ERA, both to mitigate for loss of native habitat for the endangered Guam Micronesian kingfisher. Because of this, the F&WS was unable to sign on to the DOD’s plan since Alternative E would damage the kingfisher’s natural habitat. Eventually the F&WS entered into negotiations with the DOD over the kingfisher, resulting in a memorandum of understanding with the DON on June 11, 2015, that commits the DON to designate approximately 5,234 acres under the custody and control of DOD in northern Guam to a status that will provide durable habitat protection needed to support recovery habitat and land management for the survival and recovery of the species.

162 U.S. Department of the Navy, Record of Decision for the Final Supplemental Environmental Impact Statement, 2.
163 Ibid.
This did not resolve all the issues, however, as the F&WS identified other vulnerable species affected by the proposed LFTRC after the ROD had been signed. The F&WS threatened a “jeopardy opinion” with its Biological Opinion. Because a positive Biological Opinion is needed to proceed with construction, the threat of a jeopardy opinion halted further progress with construction on some areas of the planned LFTRC. The DON completed its Biological Assessment and submitted it to the F&WS on March 3, 2017, in an effort to have the service withdraw those concerns so construction can proceed. The projected issuance of the Biological Opinion is 135 days from the date of submission of the Biological Assessment. As long as the DON and F&WS fail to reach an agreement on how the LFTRC can operate while the Guam NWR can conduct its business, use of the range might be delayed (and there are possible ramifications on construction itself).

Chamorro cultural concerns have not completely disappeared, although they have lost the strong galvanizing force they had during discussions over Pagat. Some local officials and Chamorro groups that oppose the plan point to ancient Chamorro artifacts, including intact latte stones and a village “re-discovered” in November 2014.164 Their opposition stems from the fact that access to these artifacts, located in an area already requiring a special permit for public access (for research purposes) from the F&WS, would be further restricted since this part is needed for an SDZ for more than half of each year when the range complex will be in use. This raised some public anger because it was seen by these groups as once again restricting access to a cultural resource. Although the DON is not directly dealing with this issue, access to this area and other cultural resources impacted by the SDZ will be addressed in the Guam NWR agreement and subsequent planning efforts. Because nothing will be built on this site, and access will largely remain unchanged, even some opponents to the laydown view this as a “non-issue” that the media and anti-federal government groups are trying to make an issue.165

4. Tinian and Pagan

Unit level training on Tinian was included in the 2010 ROD for Guam. However, because of changes in the force configuration for the relocation, and the emergence of a new proposed action to address multi-service training shortfalls in the Pacific theater, construction of range and training areas on Tinian was put on hold. At the time of the 2015 SEIS, USMC-unit level training on Tinian was subsumed under broader training shortfalls identified by PACOM in the Asia-Pacific region to support USMC needs, changes to U.S. force structure and geographic positioning of forces, and U.S. training relationships with allied nations. A

165 Joe Quinata, Interview with Author, August 3, 2016.
2013 DON *Training Needs Assessment* study identified an initial list of sixty-two unfilled training requirements for units/commands in the PACOM area of operation.\(^\text{166}\) Another 2013 study, DON *CNMI Joint Military Training Requirements and Siting Study*, refined the analysis of unfilled training requirements in the Mariana Islands that was identified in *Training Needs Assessment*.\(^\text{167}\) The initial sixty-two requirements were refined, resulting in a reduced number of unfilled training requirements from sixty-two to forty-two.\(^\text{168}\) In turn, these forty-two unfilled training requirements served as the basis for developing a proposed action and alternatives for CNMI Joint Military Training (CJMT).

Official public scoping regarding the proposed actions for a CJMT Environmental Impact Statement (EIS)/Overseas Environmental Impact Statement (OEIS) took place from March 15, 2013, to May 13, 2013.\(^\text{169}\) The purpose of this public scoping period was to consider environmental effects of the proposed actions on social, cultural, economic, and natural resources. Two years later, the Marines released a Draft CJMT EIS on April 3, 2015.

The CJMT EIS proposed increasing joint military training capabilities by developing live-fire ranges and training areas on the islands of Tinian and Pagan, which the USMC considers crucial for the training of Marines relocating to Guam. This was necessary because “existing U.S. military live-fire, unit and combined training ranges, training areas, and support facilities are insufficient to support U.S. Pacific Command Service Components’ training requirements in the Western Pacific, specifically in the Marianas Islands.”\(^\text{170}\) While Guam provides training for individual skills, Tinian is expected to provide training for up to company-level live fire and maneuver and Pagan to provide training for MAGTF-level combined arms live fire from the sea. For Tinian, the proposal would require full use of land the DOD currently owns, which is two-thirds of the thirty-nine square-mile island, for live-fire training for twenty weeks each year. Current training on Tinian is limited to sniper


\(^{169}\) An OEIS is required when a proposed action has the potential to significantly harm the environment of the U.S. Exclusive Economic Zone, the global commons, or a foreign nation’s Exclusive Economic Zone, territorial sea, or land mass. For this particular case, an OEIS was warranted because of proposed changes to international airspace past 12 nautical miles. Ibid, ES-1.

training but would be expanded to provide combined arms training (mechanized ground, artillery, and close air support) with unit-level amphibious beach landings, landing zones, and the required facilities to support a transient base camp that can support up to 1,500 trainees in fifteen permanent open-bay barracks and tent pads and a temporary mess hall to support 1,500 more military personnel. This would include housing four range complexes inclusive of grenade, tank, pistol, and mortar activity. On Pagan, the original proposal required leasing the entire eighteen-square mile island to practice full-scale live-fire amphibious exercises for sixteen weeks a year. This would include amphibious landings, mortars and small arms, close air support, aerial assault, and naval/ship bombardments.

Although the Marines announced on October 3, 2015, that they would revise the Draft CJMT EIS, with a final CJMT EIS expected in 2017 and a ROD sometime in the summer of 2018, the draft stoked heated opposition. Generally speaking, opponents argued that the proposed training would do to these two islands what the U.S. military did to destroy both Kaho’olawe in Hawaii and Farallon de Medinilla in the Northern Marianas (both used as bombing ranges).

The specific concerns regarding Tinian have to do with the local political atmosphere and the environmental impact of the proposed training. Unlike Pagan, which has no permanent population, roughly 2,500 people live on Tinian. Even though the proposed live-fire exercising would be about twenty weeks of the year, the local people are opposed to the mortars and rockets that will be used. Not only will these be loud, they are expected to cause pollution and pose health risks to the local people. Importantly, at a time that there is a budding Chinese-backed tourism-casino industry growing on Tinian, the company behind the casinos—Alter City Group—is hinting it could pull out if the training becomes a reality. There is a fear that increased military activity could curtail such crucial investment for the small island community.

On Pagan, advocacy groups have sought to stop the plans based on two primary arguments. One argument is that, although the island has no permanent population, people who left for Saipan after the eruption of Mount Pagan in 1981 have long wanted to return to the island which they see as their homeland. According to one report, more than fifty families

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in Saipan want to return. If the exercise proposal becomes a reality, these families fear it will forever close off their ability to do so. The other argument is an environmental one. Environmentalists argue that large-scale bombing would disrupt rare flora and fauna, thousands of native and endangered birds, bats, snails, and more than 200 unique insect species. As a compromise, the Marines announced that they would scale back their plans, sometimes using inert bombs or limiting the use of live bombs to the High Hazard Impact Area on Mt. Pagan—which has more lava—to reduce the impact on wildlife.

Both Tinian and Pagan are governed by the CNMI. After the Draft CJMT EIS was released in April 2015, CNMI legislators voted 19-0 in favor of a Joint Resolution urging then-Governor Eloy Inos to oppose the plans. Current CNMI Governor Ralph Torres sides with the opponents and even hired an attorney to fight the DOD plans.

On July 27, 2016, the Tinian Women’s Association, Guardians of Gani, PaganWatch and the Center for Biological Diversity filed a lawsuit in federal court in Saipan against the DON, Ray Mabus (then-Secretary of the Navy), DOD, and Ashton Carter (then-Secretary of Defense). Their complaint was the DON failed to comply with the NEPA by not considering all the impacts associated with the Marines’ relocation to Guam and training on Tinian and Pagan in a single SEIS and not evaluating alternative stationing and training locations outside of the Mariana Islands that could accomplish the Marines’ mission with fewer adverse environmental impacts. By not doing so, the lawsuit claims the defendants are in violation of NEPA and Administrative Procedure Act (APA) by adopting and relying on the legally deficient EIS and SEIS to issue RODs. The lawsuit points out that the plans for Pagan would destroy native forests and coral reefs, kill native wildlife, destroy farmland, and prevent native people from returning to their home island, while the plans for Tinian would destroy cultural and historical sites as well as subject residents to high-decibel noise and restrict access to traditional fishing grounds, cultural sites, and recreational beaches. The plaintiffs request that the court “vacate and set aside the 2010 and 2015 RODs.” The

175 Cloud, “Island of Pagan Opposes Plan to Use It for Marine Invasion Training.”
177 Tinian Women’s Association; Guardians of Gani; Paganwatch and Center for Biological Diversity v. United States Department of the Navy; Ray Mabus, Secretary of the Navy; United States Department of Defense; and Ashton Carter, Secretary of Defense (Civil Complaint No. 16-00022) (July 27, 2016), U.S. District Court for the Northern Mariana Islands, http://earthjustice.org/sites/default/files/files/Complaint.pdf.
defendants have argued that the lawsuit be dismissed because the relocation represents a non-justiciable political question and that, because the decision-making process for the plan is yet to be completed, it is premature to challenge the proposed training activity because related environmental impact studies are ongoing, resulting in uncertainty whether the training will be approved. The lawsuit is ongoing with a status conference set for April 6, 2017.178

With lawsuits and vocal opposition, the plans on Tinian and Pagan will be affected. While the DOD already has land on Tinian to do what the USMC is proposing to do, this is not the case for Pagan. Because at least agreement with CNMI is needed, it means the Marines Corps’ ability to acquire the necessary areas for training is still questionable. If the lawsuits are successful, this will limit some training opportunities for the proposed 5,000 Marines scheduled to relocate to Guam. This is particularly true if both Tinian and Pagan are closed off as options. There is also the possibility that if the lawsuit effectively closes off Tinian and Pagan as training options, the military may reduce its investments in CNMI. Important to note, however, is that the U.S. government could exercise eminent domain under the terms of the 1975 compact between the U.S. and the Marianas. Doing so, however, would be the last resort and have deleterious effects on relations between Washington and the CNMI. At the very least, it is safe to say that the ongoing lawsuit will delay movement on construction of training areas which, in turn, may result in a delay of the movement of Marines from Okinawa to Guam.

5. Air and Missile Defense Task Force/THAAD

Despite the Navy selecting the Preferred Alternative for placement of the AMDTF in the 2010 ROD, the DOD made no decision to assign this mission to the Army or to construct and operate an AMDTF on Guam. As such, there was no movement on an AMDTF on Guam. However, in early 2013 North Korea began to ratchet up its bellicose rhetoric and provocations. This included an announcement that it renounced the 1953 Armistice that ended the Korean War, closed its borders to South Korean workers who wanted to enter the Kaesong Industrial Complex, and severed a diplomatic hotline with Seoul. Most importantly, it began to level threats directly at the U.S regarding its base in Guam and threatened both Hawaii and the West Coast. Prompted by these increasingly specific threats, the DOD announced on April 3, 2013, that it would temporarily deploy—an expeditionary basis—a Terminal High-Altitude Area Defense (THAAD) system as a precautionary measure.179 There was no timeframe specified. Speaking at a briefing, then-U.S. Army Pacific Commander LTG Frank Wiercinski clarified that there would be “no time limit” on the

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Despite an expected six-week deployment cycle, the battalion was moved from its home in Ft. Bliss, Texas, to AAFB in two weeks, arriving on April 13 to begin its mission.

Despite both THAAD and AMDTF being land-based missile defense systems and media reports sometime treating the two as synonymous, THAAD is not synonymous with the AMDTF. The AMDTF is a more robust system that contains three missile components: THAAD, Patriot Missiles, and a Surface-Launched Advanced Medium-Range Air-to-Air Missile. Given that THAAD is but one component of an AMDTF, it is smaller. Other important differences follow from this. First, unlike the AMDTF which is a permanent system that requires buildings and other infrastructure, the THAAD system includes a truck-mounted launcher, a complement of interceptor missiles, an AN/TPY-2 tracking radar, and an integrated fire control system. Because it is a smaller system, it also requires less personnel. Unlike the AMDTF that was estimated to necessitate approximately 630 soldiers and 126 civilian personnel to establish and operate the AMDTF, the THAAD system is maintained by about 110 soldiers deployed from Ft. Bliss to operate the communications, supercomputers, and radar equipment as well as 85 deployed from Hawaii (10 with the signal detachment, 75 act as a security force). Together, they make up Task Force Talon. Finally, because THAAD is more mobile, it requires less construction. Different from the 2010 Preferred Alternative for the AMDTF that required administration/HQ and maintenance facilities, munitions storage, weapons emplacement sites, enlisted barracks, and family housing and associated quality-of-life facilities, the THAAD deployment requires radar and missile launcher requirements, fencing and guard towers, constructing several concrete pads, and establishment of a motor pool.

Almost as soon as the April decision was made, some Guamanian lawmakers began to call for the permanent deployment of THAAD on Guam. This included Congresswoman Bordallo. Despite the temporary deployment, the Army sent signals as early as 2014 that it

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182 American Forces Press Service, “DoD to Deploy Ballistic Missile Defense System to Guam.”
wanted to keep a THAAD capability on Guam for the long term. By mid-2015, the Army announced plans to make this deployment permanent and released a draft Environmental Assessment (EA) about the proposed permanent basing that examines the potential environmental impacts associated with the temporary deployment and operation of the THAAD at AAFB as well as the proposed permanent stationing of the THAAD. The Army identified potential effects on air quality, noise, water resources, biological resources, cultural resources, airspace management, hazardous materials and wastes, human health and safety, socioeconomics, and utilities and transportation infrastructure and concluded that there would be no significant impact. Because of this conclusion, which is an ROD equivalent, an EIS was not initiated.

To date, Task Force Talon has entered into its fourth consecutive year of deployment. Following the completion of the EA, by early 2016 the decision was made to move toward permanent deployment. According to the EA, this would increase total personnel to about 225 and include about 168 military dependents. All or most of the dependents would live in existing or future installation housing on AAFB. Similar to Ritidian, however, is that a favorable Biological Opinion for the proposed permanent deployment needs to be issued by the F&WS. Until then, movement will remain stalled.

6. Guam’s Agenda of Priority Concerns

During the EIS process, local concerns known as Guam’s Agenda of Priority Concerns (hereafter Agenda) were raised. These resonated with some segments of Guam’s population largely because there were many aspects of the laydown that the public—and even officials—opposed. Opponents often argued that the people of Guam did not have a chance to shape negotiations over their future that were essentially conducted by Washington and Tokyo.

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188 Task Force Talon is the combining of THAAD, military police, and communications in a joint working environment with the 36th Wing at AAB and the Joint Region Marianas Headquarters. The 94th Army Air and Missile Defense Command provides its mission command. Karry James, “Historical THAAD Battery in Guam Transfers Authority to its Sister Unit,” *U.S. Army News*, April 2, 2014 https://www.army.mil/article/123108/Historical_THAAD_Battery_in_Guam_Transfers_Authority_to_its_Sister_Unit.
Instead, they felt Guam was being treated as a piece of land for the military. As such, when opponents argued that the federal government was not listening to territorial concerns, the issue set broadened and allowed the Agenda to enter the debate.

While the Agenda still exists, it does not resonate with the people of Guam as it once did. This is largely due to the smaller laydown in the SEIS, combined with the One Guam policy to which both the DOD and GovGuam agreed to adhere. Taken together, the opposition is in a more precarious position because there are not as many issues to latch on to that previously made it easy to push other issues forward.191 Given that the DOD has consistently refused to address these issues, as they are wholly outside of laydown-specific issues, any resolution of these are dependent on local efforts. Fortunately for advocates of the Agenda, elected officials on Guam have done just that. While not all concerns are being addressed, two notable examples show that there are efforts to address some of these concerns.

In her March 2016 Congressional Address to the People of Guam, Congresswomen Bordallo highlighted her effort to resolve the longstanding question of self-determination and Guam’s political status with the federal government as well as war reparations for Guamanians.192 She went so far as to reintroduce the Guam World War Two Loyalty Recognition Act to resolve lingering issues of war claims.193 Included in the U.S. FY2017 NDAA, this stipulated claims available to those who suffered during the Japanese colonization or while Guam was being liberated by the U.S. military. These claims include:194

- Surviving spouse or children of a Guam resident who died can claim 25,000.
- Rape or severe personal injury (e.g., loss of a limb, dismemberment, or paralysis) can claim 15,000.
- Forced labor or a personal injury not specified above (e.g., scarring, disfigurement, or burns) can claim 12,000; and
- Forced march, internment, or hiding to evade internment can claim 10,000

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191 Michael Bevacqua, Interview with Author, August 3, 2016.
With President Obama signing off on the U.S. FY2017 NDAA in December 2016, the bill passed, entitling as many as five thousand residents and estates to war reparations for those who experienced the Japanese occupation of Guam. Payment will be made by diverting tax money—called Section 30 funds—that would otherwise go to GovGuam. According to the bill, if Guam receives more than seventy million a year in Section 30 funds, any amount over that seventy million is used to pay the war reparations, until all payments are made. To supporters, this represented “…recognition by the United States government that there was a population, a group of loyal citizens, individuals who really had no say, as far as the war, and they were basically left to fend for themselves.”

A second example of attempting to address Agenda issues is seen in the question of self-determination. In March 2016, Governor Calvo indicated his willingness to call a vote on Guam’s political status in the November 2016 election. Yet, in August, the Commission on Decolonization determined that in spite of renewed energy regarding Guam’s political status, the timing was not right to hold the vote because of concerns over a shortened timeline to conduct a fair and comprehensive education campaign on options (statehood, independence, or free association). With a 70 percent threshold requirement, most Guamanians not wanting to give up their U.S. passports, and fear of the economic repercussions if the military leaves Guam, the bar for successful passage of any change in Guam’s political status is high.

8. Hawaii

Although not a Guam issue per se, the expected move of Marines to Hawaii over a decade from now is related given that it is tied to progress on Guam. Although no EIS has been conducted and the move of Marines from Okinawa to Oahu is still scant on details, there are three issues that should be expected in the years ahead.

One issue has to do with securing a site with contiguous land area to house the expected 2,700 Marines and their 2,000 dependents, the necessary facilities and equipment, and reasonable access to training areas. Less than 200 acres and approximately 766 housing units are needed, and preliminary studies have indicated that housing requirements can be satisfied by the existing DOD inventory, local market, and existing privatized housing.

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196 Section 30 funds come from income taxes paid by U.S. military personnel and federal employees who work in Guam.

197 Daleno, “Guam War Reparation Bill Moves to White House.”


199 Untitled Document received from U.S. Marine Forces, Pacific.
There have been three studies conducted by U.S. Marine Corps Forces, Pacific and Naval Facilities Engineering Command Pacific looking at possible laydown scenarios. This includes the Marine Corps Base Hawaii Optimization Study that examined the existing infrastructure to accommodate additional personnel with existing and future growth plans for Marine Corps Base Hawaii (MCBH), Pearl City Annex, and the Manana Family Housing Area; an Oahu Land Use Study looking at fifty-five DOD-owned and leased properties on the island; and a Kalaeloa Land Use Study that analyzed the possibility of relocating all personnel to Navy-retained areas in the Kalaeloa area. While these reports were completed and forwarded to the USMC, the U.S. FY2015 NDAA removed the requirement for their submission to Congress, resulting in these reports not being publicly released.

MCBH is the most logical choice, given the existing infrastructure. Yet preliminary results indicate that all incoming personnel would not fit on MCBH without overburdening the infrastructure and reducing flexibility for future planning. If determined to be the best location, one option would be tied to the 2012 Aviation Plan that will see the arrival of two MV-22 squadrons and an Unmanned Aerial Vehicle squadron by 2018. Even though 900 Marines are associated with this move, it is tied to the departure of two squadrons of P-3s, where usable space and facilities will be created once vacated. If it is decided that most of the incoming Marines go to MCBH, another option would be sending the remainder to other DOD locations on Oahu. Until an EIS is conducted, however, the universe of possibilities will not be thoroughly explored.

Without an EIS, it is still too early to judge potential challenges. On the one hand, if the Marine Corps can utilize existing DOD-owned land for all the incoming Marines and their equipment, it removes the issue of eminent domain from becoming a lightning rod with the local population. On the other hand, some of these plans may require off-base infrastructure improvements or conversion of public spaces from recreation to base infrastructure, which could ignite local opposition during the NEPA process like what occurred on Guam. There are already concerns that the influx of Marines will place extra stress on aged utilities on Oahu.

A second issue has to do with cost and time. PACOM Commander Admiral Samuel Locklear III said in March 2013 testimony to the House Armed Services Committee that the Marines’ move to Hawaii would be completed by 2026. Yet, because the move is part of the distributed laydown, the move to Hawaii will follow after the Guam relocation is complete. Currently, the plan is for roughly 2,500 Marines to arrive in Guam by 2024 and complete the

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201 Sherry McNamara, Interview with Author, July 5, 2016.

202 Cole, “DOD Studying Moving 2,700 Marines from Okinawa to Hawaii.”
major moves by 2026.\textsuperscript{203} But the NDAA restrictions constraining construction until U.S. FY2015 slowed progress on Guam. This means that the move to Hawaii probably will not begin until after 2026. Additionally, there are concerns about the final cost. One estimate put the cost of this move at approximately $2.5 billion.\textsuperscript{204} With so many unknowns still unaccounted for in future site conditions, environmental mitigation requirements, and additional infrastructure requirements, the real cost will remain unknown until a final basing plan is created. Moreover, with the DON placing an annual construction budget cap of $500 million on the DPRI program, construction schedules will be restricted, slowing down an already constrained process.

A final issue has to do with cultural concerns of ethnic Hawaiians. There are longstanding tensions with ethnic Hawaiians over the land the Marines use at MCBH and Bellows Beach on Oahu. These are based largely on the feelings of being deprived of traditional fishing grounds, being unable to use or visit historical burial grounds, and waiting to regain familial lands taken by the U.S. military during the “unjust times” of Hawaii’s territorial era.\textsuperscript{205} Because of this, there is “a lot of bad blood” between ethnic Hawaiians and the federal government and military.\textsuperscript{206} Because some ethnic Hawaiians see having more Marines as promising to only make these problems worse, they are preparing themselves to oppose USMC efforts. One focus of these opposition groups is U.S. Army leases of Schofield Barracks and Makua Military Reservation in northwest Oahu. Because these leases are up in 2029, the groups are looking to block renewal of the leases as a way to push for compromises on the number and location of incoming Marines. Supercharging this opposition is the fact that all of this is occurring amidst a “renaissance” or “great awakening” of Hawaiian identity.\textsuperscript{207}

Despite the uncertainties, there is reason to believe that Hawaii will encounter challenges associated with the arrival of Marines. While it is unlikely these will become as severe as they became on Guam, issues of costs, time, placement, and the impact on local communities and cultural lands are likely to arise.

\textsuperscript{203} Originally, these Marines were scheduled to arrive by 2021 and the remaining half by 2026, but because of the Biological Opinion remaining held up by the U.S. Fish and Wildlife Service, this was delayed until 2024. For the original dates, see Gaynor Dumat-ol Daleno, “2,500 Marines to Move to Proposed Base in Guam by 2021,” \textit{Marine Corps Times}, May 18, 2016, https://www.marinecorps-times.com/story/military/2016/05/18/2500-marines-move-2021/84537888/.

\textsuperscript{204} Cole, “DOD Studying Moving 2,700 Marines from Okinawa to Hawaii.”

\textsuperscript{205} William Aila, Interview with Author, July 1, 2016.

\textsuperscript{206} Sherry McNamara, Interview with Author, July 5, 2016.

\textsuperscript{207} Pono Shim, Interview with Author, June 30, 2016; William Aila, Interview with Author, July 1, 2016; Kai Markell, Interview with Author, July 5, 2016.
Conclusions

1. Laydown II Dramatically Different from Laydown I

The differences between the two laydown plans are significant. Fewer Marines and their dependents will come to Guam as the laydown takes place over a longer timeframe to reduce the pressure that an increase in population will have on Guam’s finite resources. Stemming from this is a reduced footprint. The cantonment/housing area shrank by 857 acres, while the LFRTC complex shrank by 1,572 acres. Importantly, in in the 2015 plan, it is not necessary to acquire land not already owned by the DOD. Corresponding with these reductions are reductions in the demand on Guam’s utilities. Whether it be power, potable water, wastewater generation, or solid waste generation, the 2015 Laydown plan places a reduced demand throughout Guam’s island infrastructure. These differences are laid side-by-side in table 10.

Table 10. Differences between 2010 EIS and 2015 SEIS.208

<table>
<thead>
<tr>
<th>2010 EIS</th>
<th>2015 SEIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,600 Marines + 9,000 dependents</td>
<td>5,000 Marines + 1,300 dependents</td>
</tr>
<tr>
<td>5 years</td>
<td>Military Relocation Timeframe</td>
</tr>
<tr>
<td>7-year intense construction boom followed by sharp decline</td>
<td>Construction Period</td>
</tr>
<tr>
<td>79,000</td>
<td>Approx. Peak Population Increase</td>
</tr>
<tr>
<td>33,000</td>
<td>Approx. Steady-State Population Increase</td>
</tr>
<tr>
<td>2,580 acres</td>
<td>Project Area: Cantonment</td>
</tr>
<tr>
<td>688 acres of non-federal land</td>
<td>Land Acquisition: Cantonment</td>
</tr>
<tr>
<td>5,529 acres (4,439 acres of which are SDZs)</td>
<td>Project Area: LFTRC</td>
</tr>
<tr>
<td>More than 1,000 acres of non-federal land</td>
<td>Land Acquisition: LFTRC</td>
</tr>
<tr>
<td>20 MW</td>
<td>Power Demand</td>
</tr>
<tr>
<td>5.82 MGd</td>
<td>Potable Water Demand</td>
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<tr>
<td>2.6 MGd</td>
<td>Wastewater Generation</td>
</tr>
<tr>
<td>165,600 pounds/day</td>
<td>Solid Waste Generation</td>
</tr>
</tbody>
</table>

2. Department of Defense Responsive to Local Concerns

As outlined in table 10 above, the DOD made substantial changes between the EIS and the SEIS. One of the outstanding aspects of Marine Corps presence on Okinawa continues to be local protest against things like noise, accidents, pollution, and crime. Critics of the U.S. presence often claim that the United States rarely, if ever, listens or seeks to address those concerns. In Guam, the same claim cannot be made. While some of the adjustments were a function of changes in the agreement between the United States and Japan, the majority of the adjustments were driven by the critical comments the DOD received from the people and government of Guam. The DOD worked to address the core concerns that were raised by the Guam community. The January 2011 Four Pillars was a recognition of many things not done well in the EIS. Integrating those priorities in the subsequent PA is evidence that the DOD listened to the concerns on Guam and tried to address them. Mark Calvo, then-Director of the Government of Guam Military Buildup Office, acknowledged this, saying, “Our concerns were heard, and they’re adapting.”209 A supporter of the laydown plan, Guam Legislature Minority Leader Senator Tony Ada, shares this perspective, saying the “concerns expressed by our people have been given due consideration.”210 So too does Simon Sanchez, former Chairman of Guam’s Consolidated Commission on Utilities, an elected board that oversees the operations of the GPA and the GWA. Sanchez acknowledges that experts on Guam’s utilities were happy the first laydown did not happen and that the “DOD has kept its word and exceeded expectations” regarding its commitment to not overburden Guam’s utilities.211 And Joe Quinata of the Guam Preservation Trust, who is dedicated to preserving Guam’s historical sites and culture, argues that “the Four Pillars looks like a good attempt to compromise with local and DOD concerns.”212 Even vocal opponents of the laydown, like former Speaker of the Guam Legislature Judith Won Pat, admit that “the Four Pillars is an honest attempt at compromise.”213

Evidence of the DOD listening and accommodating local concerns is in the details. The Preferred Alternatives for the cantonment/housing and the firing range on Guam do not require any additional land. Instead, upgrades and construction are limited to property already owned by the DOD, in order to stay true to the Net Negative Pillar. The DOD also moved away from the shorter, more intense laydown toward one that is longer and less intense to avoid overwhelming the island’s infrastructure and resources. Toward that end, it is also helping to upgrade existing infrastructure, thereby improving the situation for all people on

211 Simon Sanchez, Interview with Author, July 28, 2016.
212 Joe Quinata, Interview with Author, August 3, 2016.
213 Judith Won Pat, Interview with Author, August 3, 2016.
Guam and saving the people of Guam money by having things like water and wastewater treatment included in DOD budgets. Perhaps the best example is the DOD’s decision to abandon the LFTRC location along Route 15 in the Pagat coastal area after an outcry from Chamorro groups and others in Guam that called the plan unacceptable and culturally insensitive. The DOD ultimately changed its plans and developed options to ensure Pagat Village and Cave will remain accessible at all times. This decision was explicitly to avoid local opposition.

It is evident, however, that while the DOD has not addressed every concern, it has tried to compensate in other areas. This is particularly true with trying to compensate for damage to one island or ecosystem by rehabilitating and protecting other natural habitats in the area. Take the case of the LFTRC. Although the choice of Ritidian over Pagat avoided potential destruction and blocked access to ancient Chamorro cultural areas, Ritidian poses a new set of challenges, given the potential impact on indigenous species of plants and animals. The effort to avoid damage to the native habitat is one of the considerations behind the move from Pagat to Ritidian, but Ritidian has proven to pose similar challenges. Although the DOD generally has sought to mitigate damage to natural environments, it is unavoidable that some damage to the environment will occur under its proposals. Understanding the local sentiment, the DOD has sought to compensate in other areas.

This was the case with the Guam Micronesia kingfisher as well as proposals for training areas on Tinian and Pagan. On Tinian, to compensate for 6.3 acres of native limestone forest, the April 2015 CJMT EIS proposed enhancing another forest area of a similar size by establishing native species and removing invasive plants. Likewise, to mitigate the loss of 20.6 acres of marine habitat that would result from the construction of underwater landing areas for amphibious assault vehicles, the DOD proposed transplanting corals. On Pagan, to minimize the effects of operations on Mariana fruit bats, the DOD proposed facilitating native habitat regeneration by removing feral goats and pigs as well as controlling non-native plant, mammal, and insect species. Related, to avoid and minimize impacts to the Mariana fruit bat, Micronesian megapode, and tree snails, the DOD proposed implementing training restrictions within native forests on southern Pagan. This repeats similar efforts elsewhere, such as the Navy funding the rehabilitation of Sarigan as mitigation.

214 Simon Sanchez, Interview with Author, July 28, 2016.
215 Sisk, “Navy Hails Gains in Plan to Move Marines to Guam.”
219 Ibid.
for its use of Farallon de Medinilla, another island in the CNMI, for bombing. While in the eyes of opponents these efforts are attempts to mask the devastation the DOD is causing to critical natural resources, they nevertheless represent attempts by the DOD to compensate for or mitigate loss.

3. Local Concerns Are Not Trivial

Those who opposed the 2010 plans provided numerous reasons behind their opposition that ranged from the scope and speed to environmental and cultural impacts. These concerns were not held by just Chamorro groups or local communities but also by supporters of the plans. Although these groups disagreed on the necessity or desirability of the laydown, they agreed the people of Guam should not have to bear a heavy burden for the sake of the DOD’s plans. It was in this spirit that the GovGuam and DOD agreed on the 2011 Four Pillars. The 2015 ROD stays within the parameters of the Four Pillars. The scale of the laydown is smaller with fewer personnel and dependents, the pace is drawn out over a longer period, all movement will take place within existing fencelines, and even there, less land is necessary.

While military planners and Marines responsible for ensuring the proper training of Marines relocated to Guam are often annoyed by local groups delaying or changing the structure of the current laydown, local concerns have played a vital role in the process of arriving at a laydown more equitable for all. It is difficult to quantify the level of influence that opponents and concerned supporters had on changing Laydown I, given that the issues on Guam coincided with substantial changes in the Japan-U.S. agreement and fiscal concerns in Congress over the DOD’s DPRI-plans. Still, local opposition to Laydown I highlighted concerns over the size, speed, and scope that fed directly into the One Guam agreement that set the parameters for Laydown II. This is a positive development as, according to Governor Calvo, “…the downsize in the buildup numbers and extended time frame of thirteen years, as opposed to the seven years we were looking at before, help to ensure a smoother transition of Marines into our island community.” Importantly, the attention raised by the local groups regarding Pagat Village/Pagat Cave led to popular support for protecting a historical site of the Chamorro people. Looking ahead, ongoing objections by the public and other federal agencies (e.g., National Park Service, EPA, and F&WS) to DOD plans for Tinian and Pagan have the potential to significantly alter the DOD's training plans on these islands in a way to make the training less environmentally damaging and to take into consideration local interests and concerns. This listening, and adjusting alternatives, to local concerns carries dividends in the form of political sustainability. This is important because there is a view among laydown

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220 Tritten and Tourtelot, “US Wants to Expand Training Exercises in Western Pacific.”
opponents that when Chamorros feel they are not respected or listened to by the federal government, antagonism comes out.222

4. Linkages among Islands

Over the past two decades, the people of Okinawa have become more vocal and active in their opposition to numerous aspects of the U.S. presence on their island. This includes pollution, accidents, and crime perpetrated by a small minority of U.S. military personnel. In Guam, as in Okinawa and Hawaii, there are lands which the military is using, or restricting access to, that become pressure points for some members of the community due to the associated restrictions on familial land holdings or traditional fishing grounds.

To what extent linkages between Okinawan, Guamanian, and Hawaiian groups existed over the past decades is not known, but the plan to relocate Marines from Okinawa to Guam and Hawaii has given rise to connectivity among groups who oppose the U.S. military presence in these three island communities (as well as CNMI).223 These connections are driven, in part, by cultural revivals, where native Okinawan, Chamorro, and Hawaiian peoples are keen on reclaiming their traditions, histories, language, literature, and distinct identity. In turn, these groups have actively worked to strengthen networks with each other.224 The connections are also driven simply by what works. Opponents in Guam, for example, often “use the playbook in Okinawa.”225 The strength of these connections should not be overstated. While they do exist, and there are anecdotes of anti-military opponents “sharing” lawyers or coaching people in other island communities on how to push back, there do not appear to be any large-scale attempts to coordinate strategies. Instead, most linkages exist at the level of communication and exchange of information or trying to show commonality of cause across islands to raise awareness and support. DMZ Hawai’i is a good example of such linkages.226

The U.S. government cannot ignore them because the long-term sustainability of bases on these islands is a function of these groups’ success in local communities and in court.

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222 Michael Bevacqua, Interview with Author, August 3, 2016.
223 For example, Guam’s Our Islands are Sacred, Fuetsan Famalao’an, and Nasion Chamoru sent letters to Guam Governor Eddie Calvo drawing linkages between Marines on Okinawa and what will happen on Guam. Maria Hernandez, “Guam Cultural Groups Urge Governor to Question Buildup,” Pacific Islands Report, September 22, 2015. http://www.pireport.org/articles/2015/09/22/guam-cultural-groups-urge-governor-question-buildup. Also, groups opposing the plans on Tinian and Pagan fear that these islands will share a fate similar to the Hawaiian island of Kaho’olawe. See Ashton, “Quietly, Guam is Slated to Become Massive New U.S. Military Base.”
225 Ron McNinch, Interview with Author, August 3, 2016.
While issues specific to each island strike sensitive nerves in these communities that allow opposition groups to increase their numbers, a common element in their advocacy is that of subaltern voices rallying against a colonial relationship with the U.S. Opponents in these island communities lament that they do not have a chance to shape negotiations about their lands taking place between Washington and Tokyo/Guam/Hawaii.

In Guam and Hawaii, in particular, these discussions take on tones of the federal government’s bullying of territorial possessions (Guam) or states (Hawaii). In Guam’s case, it is not uncommon to hear about “a trust issue between the federal government and Guam that started long ago with land taking.”227 Over the years, anger has only increased, given the fact that while Guamanians are American citizens, pay federal taxes, and fight in American wars, they lack voting representation in Congress and cannot vote for a U.S. president. Likewise, for Hawaii, it is not uncommon to hear about a “history of hurt” between Hawaii and the federal government that feeds distrust.228 While this dates back to the overthrow of the Hawaiian monarchy by the U.S. in 1893, much of this anger is based on the environmental damage caused by the U.S. military in Hawaii (e.g., bombing of Kaho'olawe) and the desire to regain familial lands.229 This matters because such anger sows discontent among people whose support is needed to ensure sustainability of island bases. Although these views are those of a vocal minority, they are increasingly finding common cause over the realignment of U.S. bases which, if they synchronize their efforts, could make the realignment of U.S. forces throughout the Asia-Pacific region more challenging.

The as-of-yet unknown factor is how these linkages will affect the move to Hawaii. As noted above, there are many unknowns about the Hawaii portion of the distributed laydown simply because it is over a decade away from implementation and the required NEPA-compliant environmental impact studies have yet to be conducted. Once this process commences, there will be a better understanding of environmental and infrastructure limitations associated with potential sites as well as the elimination of possible locations on Oahu. Given the growing linkages of Hawaiian-based opposition groups with those on Guam and Okinawa, policymakers should anticipate challenges similar to those that were encountered in the Guam buildup and work to avoid them through sufficient planning and appropriate consideration of local concerns.

227 Joe Quinata, Interview with Author, August 3, 2016.
228 Pono Shim, Interview with Author, June 30, 2016.
229 Kai Markell, Interview with Author, July 5, 2016.
5. Guamanian Support for the Laydown is Drowned Out by the Vocal Opposition

Despite the opposition to issues outlined above, there are no public opinion polls that substantiate that a majority of Guamanians oppose the laydown. This is surprising, given that opponents to the laydown often cite strong opposition to the plan.\(^{230}\) One metric cited is the thousands of public comments opposing the laydown submitted during both the EIS and SEIS processes.\(^{231}\) The few polls that do exist actually demonstrate tremendous support for the laydown. To date, the author found only three sources of polling on the Guam laydown: Dr. Ron McNinch of the University of Guam, Guam’s Chamber of Commerce, and Dr. Amy Owen, also of the University of Guam. There are notable methodological issues with these polls, and they are criticized for not all being disseminated in public outlets, but they stand as the only quantifiable sets of data to gauge public views of the laydown. Even with the noted issues, these polls were independently conducted and demonstrate positive views of the laydown, with an important caveat in Owen’s polls indicating that people on Guam are worried about the effect on their culture.

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### Table 11. Polls by Ron McNinch: Support for Laydown.

<table>
<thead>
<tr>
<th>June 2008(^{232})</th>
<th>In the next few years, do you believe that the military buildup will be a good thing for Guam or a bad thing for Guam?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52%: Good</td>
</tr>
<tr>
<td></td>
<td>18%: Bad</td>
</tr>
<tr>
<td></td>
<td>30%: No opinion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>August 2012(^{233})</th>
<th>Which of the following statements do you most agree with:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>56%: Guam leaders should help the military buildup to proceed as quickly as possible</td>
</tr>
<tr>
<td></td>
<td>22%: Guam leaders should delay the military buildup as long as possible</td>
</tr>
<tr>
<td></td>
<td>22%: Guam leaders should try to stop the military buildup.</td>
</tr>
</tbody>
</table>

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\(^{231}\) Judith Won Pat, Interview with Author, August 3, 2016.

\(^{232}\) Ron McNinch, *Unpublished Opinion Poll*, University of Guam, June 2008. Although unpublished, the results of Dr. McNinch’s polls often are discussed in Guam’s media.

\(^{233}\) Ron McNinch, *Unpublished Opinion Poll*, University of Guam, August 2012. Although unpublished, the results of Dr. McNinch’s polls often are discussed in Guam’s media.
### Table 12. Polls by Amy Owen: Support for Laydown.\(^{234}\)

| March–May 2009: Build-up is overall positive | 53%: Yes | 41%: No |
| March–May 2009: Build-up is good for Guam’s culture | 21%: Yes | 74%: No |

### Table 13. Polls by Ron McNinch: Expected Positive Outcomes.

| June 2008\(^{235}\), What type of good things do you think will result from the military buildup? | 88%: Better jobs/Improved Economy | 4%: Infrastructure Improvements | 8%: Other/No Opinion |
| March 2010\(^{236}\), What good things will come out of the military buildup?\(^2\) (real numbers based on 255 voters) | 81%: Better economy | 48%: More jobs | 48%: More money | 8%: Better infrastructure |

While the motivation for support is varied, one prominent reason is due to the expected improvements for people on Guam that come with the influx of federal money. Because of the laydown, Guam receives an extra $55 million to $65 million a year that goes into improvements throughout Guam.\(^{237}\) Polls by McNinch show that people on Guam expect the economy as well as employment opportunities to benefit. There is evidence to support this. For the 2010 plan, a January 2010 Guam Chamber of Commerce report found that Guam would benefit from an increased military presence including, among other things, opportunities to expand the economy, create more jobs, foster business, and entrepreneurship, increase government revenues, and expand tourism.\(^{238}\) Similarly, a report by the First Hawaiian Bank claimed that Guam’s economy would benefit by about $1.5 billion per year.\(^{239}\)

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\(^{236}\) Ron McNinch, *Unpublished Opinion Poll*, University of Guam, March 2010. Although unpublished, the results of Dr. McNinch’s polls often are discussed in Guam’s media.

\(^{237}\) Anonymous B, Interview with Author, April 9, 2014.


### Table 14. Polls by Guam Chamber of Commerce: Community Support for Laydown.240

<table>
<thead>
<tr>
<th>Date</th>
<th>Issue</th>
<th>Support (%)</th>
<th>Oppose (%)</th>
<th>Don’t know (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2007: Military</td>
<td>Increased military presence on Guam</td>
<td>71%</td>
<td>14%</td>
<td>6%</td>
</tr>
<tr>
<td>January/February 2009</td>
<td>Increased military presence on Guam</td>
<td>71%</td>
<td>13%</td>
<td>5%</td>
</tr>
<tr>
<td>March 2007: Additional</td>
<td>Effect of additional Marines on Guam</td>
<td>60%</td>
<td>21%</td>
<td>19%</td>
</tr>
<tr>
<td>January/February 2009</td>
<td>Increased military presence on Guam</td>
<td>59%</td>
<td>19%</td>
<td>22%</td>
</tr>
</tbody>
</table>

It is important to note that both opponents and supporters of the laydown expect to see economic-related challenges accompany the laydown. Opponents stress that the expected construction costs will be borne by the people of Guam.241 Supporters argue that they expect labor shortages and higher wages paid to construction workers will push up the construction costs which, in turn, will slowly drive up inflation on the island.242 Because the laydown is stretched out over thirteen years, however, it is hoped that the economy will have time to adjust to these shocks. Finally, while the SEIS found that there are expected direct and indirect beneficial economic impacts from the laydown, these do not continue in perpetuity. These impacts are expected to reach a maximum in 2021 and then decline to a stable, steady-state level by 2028 (table 15).

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241 Michael Bevacqua, Interview with Author, August 3, 2016.
242 Guam Chamber of Commerce, Roundtable Interview with Author, August 2, 2016; James Martinez, Interview with Author, August 3, 2016.
Table 15. 2014 Summary of Economic Impacts. Maximum and Steady-State Totals.243 Amounts Given in Millions of USD, unless otherwise Noted.

<table>
<thead>
<tr>
<th></th>
<th>Maximum 2021</th>
<th>Steady-State 2028</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment (FTE Jobs)1</td>
<td>7,031 FTE jobs</td>
<td>1,438 FTE jobs</td>
</tr>
<tr>
<td>Income2</td>
<td>296</td>
<td>67</td>
</tr>
<tr>
<td>GovGuam Tax Revenue3</td>
<td>86</td>
<td>40</td>
</tr>
<tr>
<td>GIP4</td>
<td>635</td>
<td>75</td>
</tr>
</tbody>
</table>

1Number of FTE civilian jobs generated by economic activity associated with the proposed action. FTE is equal to 40 hours per week; e.g., two 20-hour-per-week part-time jobs equals one FTE job.

2Wages and salaries earned that are associated with economic activity generated by the proposed action.

3The amount of tax revenue that would be owed to GovGuam as a result of expenditures associated with economic activity that would be generated by the proposed action.

4GIP measures the total value of all final goods and services produced in a particular (island) economy. GIP is the most commonly used benchmark to gauge the overall size of an economy.

6. Guam is an Integral Part of the U.S. Rebalance

Be it a way to overcome the tyranny of distance or to defend against threats to the homeland, the laydown on Guam is designed to maintain America’s strong presence in the region while shifting to be more geographically distributed, operationally resilient, and politically sustainable. Although the importance of Guam in U.S. military planning and strategic thought far predates the Rebalance strategy announced by President Obama, the current laydown plan for Guam has become an inextricable part of that strategy. Regardless of whether President Donald Trump maintains the Rebalance, the Asia-Pacific region will undoubtedly remain a focal point of U.S. defense strategy. This is because an increasingly aggressive China, a provocative North Korea, and the continued need to maintain freedom of navigation throughout the region are unlikely to change any time soon.

Guam’s ability to act as a strategic haven for the United States in the face of these regional threats ensures that the island will continue to be strategically important to U.S. security. This is particularly true because Guam is roughly 4,000 miles closer to the region than Hawaii and a politically sustainable Pacific location for U.S. forward basing. Former

Deputy Defense Secretary William Lynn III in July 2010 noted of Guam, “…from bases here, our forces can ensure the security of our allies, quickly respond to disaster and humanitarian needs, safeguard the sea lanes…and address any military provocation that may occur.” Guam now hosts all three types of U.S. strategic bombers (B-52, B-1, and B-2), hosts the most advanced missile defense system in the THAAD, hosts four nuclear submarines, enjoys a deep harbor capable of taking in every ship in the U.S. Navy for supply and repair, stores a large amount of ordinance, and will see the arrival of 5,000 Marines who may train on nearby islands. Moreover, Guam supports twenty-eight other tenant commands, is home to dozens of units operating in support of PACOM, U.S. Pacific Fleet, U.S. 7th Fleet, and the U.S. 5th Fleet. In addition, the 36th Wing at Andersen has a mission to support all deployed air and space forces of the AF and foreign air forces to Andersen as well as support tenant units assigned to it. Taken together, it is clear that Guam is an enabler for all missions the DOD may consider in the region. Looking ahead, if the DOD still plans on having 60% of the Navy and 60% of U.S. combat air forces in the Pacific arena, Guam’s importance will only increase. Indeed, Deputy Defense Secretary Bob Work said, “We didn’t call it that at the time, but Guam has always been a central part of our plans. Certainly a central part of the Navy’s plans but now a central part of the entire Department of Defense’s plans.”

Guam is therefore critical for U.S. security. In turn, good relations between Washington and Guam are important to ensure the current laydown efforts proceed with community understanding and support. As such, it is difficult to rule out the possibility that more assets will need to be moved to Guam in the near future.

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246 Ibid.
Recommendations

The relocation of Marines within Okinawa is an endeavor that continues twenty years after it began. Given the challenges inherent in these efforts, attention has naturally focused on the challenges of the U.S. presence and the complex relationships between Naha, Tokyo, and Washington. Receiving much less attention has been the situation on Guam, where 5,000 of these Okinawa-based Marines are set to move. As this report has shown, Guam has experienced a number of challenges, much like what has happened on Okinawa. In addition to delays on Okinawa impacting conditions on Guam, the local opposition, Congressional freezes, and lawsuits have stymied movement. And yet, amid these challenges, progress continues. It has been slow, not linear, and often with changes, often for the better. The plan today has taken close to a decade to achieve and is far from complete. As shown in this report, challenges remain, as well as over-the-horizon challenges expected in Hawaii, where the next group of Marines is slated to move. But buoyed by the financial support from both Washington and Tokyo, as well as the support of a majority of people on Guam, the situation on Guam appears closer to completion than that of Okinawa. Understanding Guam’s progress amid challenges, this report will close by offering recommendations for best steps ahead, given that challenges will continue to constrain progress.

Continue to view Guam and Okinawa as linked, albeit indirectly

Despite the 2012 decision to formally delink the FRF and activity on Guam, it is undeniable that continued delays on one island impact the other, albeit indirectly. These impacts are felt in the realms of money and planning. In terms of planning, movement to Guam and the consolidation of bases on Okinawa are linked because land cannot be returned on Okinawa until personnel have moved off Okinawa to Guam. These people need to physically move. As long as delays in Guam occur, the consolidation of bases in Okinawa will be delayed. Likewise, delays on Okinawa stretch out the move to Guam. Delays affect planning and all businesses tied to these projects. For example, the change in the FRF plans altered the plans for Guam, which in turn negatively affected Hawaiian businesses responsible for Guam construction when the original plans were delayed and cancelled, resulting in these companies having to pay for the costs of buying the supplies and other preparations.247 In terms of cost, because of Okinawan delays, some members of Congress have expressed concern about the costs of relocating Okinawa-based Marines to Guam and beyond. As delays grow, so do cost and

overall feasibility of meeting deadlines. These concerns manifest themselves in the blocking of funds needed for the realignment of U.S. forces throughout the Asia-Pacific, including Guam, that were included in the U.S. FY2012, 2013, and 2014 NDAA. While funds have been restored, future delays on the FRF always have the potential to be a reason for freezing funding for the laydown efforts on Guam. Neither of these things will change the overarching trajectory of the plan, but they do have the potential to slow movement along that trajectory. Given all this, it is crucial for policymakers on both sides of the Pacific to be cognizant of the crucial linkage between the two plans to prevent disruptions across plans whenever possible.

Take a more measured approach to Tinian and Pagan

A mistake by the Marines and Navy in the 2010 EIS process was that they did not work together well on developing locations; instead, they conducted their work in a vacuum. This led to locals’ interests and concerns sometimes being forgotten in the overall plan. With this in mind, it would behoove the USMC to consider the challenges on Tinian and Pagan as discrete, yet connected, and take a more measured approach to their proposals. Even though Tinian has a permanent population and Pagan does not, the DOD is in a stronger position with its plans on Tinian compared to Pagan. Not only does the DOD have existing leased land on Tinian, it also has a decades-old Technical Agreement signed by CNMI leadership which fully authorizes what PACOM is proposing to do on Tinian. Also, generally speaking, the people of Tinian have shown they are willing to already accept some level of training on the island. On Pagan, despite the lack of a permanent population, the DOD does not currently lease any lands and faces active opposition that attracts broader sympathy based on environmental concerns and interest in re-establishing homesteading after the current volcanic activity there subsides.

This situation opens up the possibility for negotiated compromise. With about three years remaining before the DOD reaches a ROD on CJMT, there is time to find middle-ground solutions for meeting training requirements while addressing CNMI concerns. Recent adjustments to training plans for Tinian go a long way towards addressing both local Tinian and regulatory agency concerns. Active opposition on Pagan makes it difficult to do the same there. Taken together, there may be a possible compromise about training and exercising on both islands that satisfies the majority of stakeholders involved, understanding that satisfying all stakeholders may be impossible. The DOD was successful in addressing opposition on Guam to the 2010 laydown plan by listening to local concerns and addressing off-base infrastructure improvements to help gain local support. Similar infrastructure requests are often heard on Tinian, such as the port area improvements on the southwest portion of the

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Deeper consideration needed of off-base infrastructure projects indirectly linked to the laydown

Trust issues continue to linger between opponents to the laydown and the federal government. The people of Guam are loyal Americans. Even opponents to the laydown will admit that they are not opposed to hosting U.S. military personnel, but they do not want Guam to be viewed solely through a militarized lens. Co-existence is possible and desirable, but opponents believe the DOD is not genuinely listening to local concerns. Instead, their desire is for the DOD to make concessions that they want, not what the DOD wants.249

The cause of challenges and/or questions regarding island infrastructure stems from the indisputable fact that the DOD wants to move more U.S. forces to Guam. Because the DOD is the cause of this, it behooves the DOD to work to avoid impacting Guam as best it can. Arguably, this is the approach it has taken by funding projects that benefit both the military personnel on Guam and the citizens of Guam.250 This stays true to One Guam. While the U.S. FY2016 NDAA provided a limited exception to the restriction on provision of funds for the development of public infrastructure by allowing off-base civilian water and wastewater projects, it retained a prohibition on the Public Health Clinic and Cultural Repository. This does not sit well with Guamanians and some corners of GovGuam, who strongly oppose the idea that Guam should bear the fiscal burdens to prepare the necessary infrastructure to handle increased health issues or the processing of cultural artifacts that are solely the result of the expected influx of Marines. According to Joe Quinata of the Guam Preservation Trust, the federal government “shouldn’t ask us to build (a cultural repository) to store cultural artifacts they unearth due to their plans.”251

Understanding that not all requests for off-base projects—such as public school buses—are equal, Guamanians appear to have settled on focusing their requests on three items: water/wastewater infrastructure, a Public Health Clinic, and a Cultural Repository. The first one has already been addressed, but the latter two have not. While the FY2017 NDAA amends restrictions placed on the Cultural Repository, as mentioned above, appropriations are unclear. Restrictions on the Public Health Clinic do not appear to have changed. Given that there are real connections between construction needed for the laydown, the influx of people, and the Cultural Repository and Health Clinic, it would behoove Congress to fully relax restrictions and set aside the funding for them. While the financial costs are real, the

249 Judith Won Pat, Interview with Author, August 3, 2016.
250 Simon Sanchez, Interview with Author, July 28, 2016.
251 Joe Quinata, Interview with Author, August 3, 2016.
amount of good will generated by these acts would pay dividends by further strengthening public support of the U.S. laydown on Guam. As one supporter of the laydown plans warned, “If these things don’t happen [referring to the three items mentioned above], it will hurt trust with the DOD.”

The Office of the Secretary of Defense needs to play a stronger leadership role vis-à-vis the U.S. Fish and Wildlife Service

Progress on the issues of the Ritidian LFTRC and a permanent THAAD is essentially stalled because the F&WS has not issued its Biological Opinions for these two elements. Although it was not mentioned above, plans to construct the main base at Finegayan have also stalled due to F&WS concerns over adverse impact on a type of orchid. The F&WS has effectively held up movement on portions of the laydown that all other stakeholders have approved. Seen in this light, the F&WS is largely seen as dragging out the current process. Because funds on both the U.S. and Japanese sides are ready for use for construction and the fact that the current expeditionary THAAD is ready to move to a permanent posture, greater effort is needed to push F&WS to act. Toward this end, it is time for OSD to play a greater leadership role in pushing F&WS to issue its Biological Opinions. With the DON making efforts to ensure public access and address natural resource concerns of the Ritidian Unit of the Guam NWR, fault for slow movement falls squarely on the F&WS. With a new administration in Washington and a new Secretary of the Interior (to which F&WS reports) who has a Naval background, a new effort is needed to get F&WS to do its job. OSD taking the lead on this is warranted.

Start considering Hawaiian challenges

While Hawaii is a U.S. state, there are a number of vocal opposition groups that have emerged as a result of the renaissance in Hawaiian identity over the past decade. There is a growing number of voices in Hawaii that take issue with the U.S. military presence, largely over the effect a large military presence has on Hawaii’s environment and the continued inability to regain and/or access familial lands and practice cultural rites. These groups are not pushing for the military to leave, but they feel a “strong sense of injustice” concerning the military and federal government. There is a view that if the influx of Marines stays within existing fencelines, their arrival will not generate any large domestic opposition. If this is the case, there is unlikely to be any great resistance to the Marines’ arrival, although there will be a

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252 Anonymous B, Interview with author, August 2, 2016.
253 William Aila, Interview with Author, July 1, 2016.
254 Kai Markell, Interview with Author, July 5, 2016.
continued effort to regain and/or access familial lands and practice cultural rights at MCBH and Bellows. Even if they remain within existing DOD-land, if the EIS shows a considerable amount of disturbance to the environment or cultural lands, it will become contentious. Given the uncertainty and time to prepare, local opposition groups are preparing for the expected influx of Marines.

As indicated above, a likely area of battle could be lands held by the U.S. Army with leases expected to end in 2029. Local Hawaiian groups are looking to leverage that issue as a means to gain ground with the DOD in issues related to the incoming Marines. The Office of Hawaiian Affairs already has a record of suing the Army over its plan to introduce a Stryker brigade to Schofield Barracks.255 With the Office of Hawaiian Affairs sympathetic to the local groups’ concerns over incoming Marines, a potential showdown could be in the future. For this reason, the DOD/Marines need to learn the right lessons from Guam of how listening—real listening, not pro forma listening—to local concerns generates buy-in and support from the local community. In other words, instead of conversations driven by DOD needs, they should be driven by local concerns.

255 Ibid.
This research was conducted over a three-year period from February 2014 to March 2017. In addition to speaking to people in Hawaii, Japan, and Washington, D.C., the author made two trips to Guam to conduct interviews with relevant stakeholders, both supporters and opponents of the proposed plans. In total, the author conducted twenty-five interviews with U.S. government officials, military officers, Japanese government officials, Government of Guam officials, Hawaii state government officials, academics, and activists and Chamber of Commerce officials in both Hawaii and Guam. Some of these individuals, due to the nature of their involvement in the issues contained in this report, agreed to an interview only on the condition of anonymity. To meet their request, the author alphabetically coded and referred to some of the quoted sources as Anonymous A, for example. Otherwise, the author made every effort to cite the source name.
About the Author

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Hornung has written about Japanese security and foreign policy issues for numerous media, policy, and academic outlets. He is also co-editor of the forthcoming Routledge book *Chinese-Japanese Competition and the East Asian Security Complex: Vying for Influence* (Spring 2017).

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