Audit of Cost Increases and Schedule Delays for Military Construction Projects at Joint Region Marianas
Objective

The objective of this audit was to determine why select military construction (MILCON) projects at Joint Region Marianas (JRM) were over budget and delayed.

Background

Federal law defines MILCON as construction, development, conversion, or extension of any kind carried out with respect to a military installation, whether to satisfy temporary or permanent requirements, or any acquisition of land or construction of a defense access road.

We reviewed nine MILCON projects that Naval Facilities Engineering Command (NAVFAC) managed at JRM, with a programmed amount of $574 million.

Findings

Deputy Assistant Secretary of Defense for Facilities Management, NAVFAC, Air Force, and Defense Logistics Agency (DLA) officials experienced schedule delays and cost increases for nine MILCON projects valued at $574.4 million at JRM; however, Guam’s unique characteristics and environment present challenges in planning and managing MILCON in the region. Specifically, the DoD has experienced—and continues to experience—schedule delays and cost increases for:

- 6 of 9 projects because DoD officials did not plan for the technical specifications of Munitions and Explosives of Concern (MEC) clearance requirements as implemented by the MEC Quality Assurance representatives; (MEC are unexploded ordnance, discarded military munitions, and munitions constituents present in high enough concentrations to pose an explosive hazard.)
- 4 of 9 projects because contractors had a shortage of available laborers for MILCON projects when Department of Homeland Security personnel decreased the approval and renewal of H-2B visas, which allow U.S. employers to bring foreign nationals to the United States, including Guam, to fill temporary nonagricultural positions;
- 4 of 9 projects because NAVFAC Pacific personnel encountered extensive environmental concerns such as U.S. Fish and Wildlife Services listing 23 new species as endangered or threatened requiring the biological opinion to be updated before the contract could be awarded;
- 2 of 9 projects because personnel at the Office of the Assistant Secretary of Defense for Sustainment and Commander, Navy Installations Command used an accelerated programming process and not the normal programming process, which typically is a 3 year process to develop and finalize the DD Form 1391, “FY____ Military Construction Project Data;”
- 1 of 9 projects because NAVFAC Marianas personnel experienced challenges working with the U.S. Army Corps of Engineers and the contractor to obtain a dredging permit that incorporated increased environmental requirements not anticipated at the time of the contract award;
- 1 of 9 projects because contractors identified archaeological items on site once MEC clearance began, which required the contractor to stop work in the area of the discovery and protect the artifact;
- 1 of 9 projects because NAVFAC personnel made post-award changes to the construction contract when security and aviation requirements changed; and
- 1 of 9 projects because a contractor protested the award of the contract.
Findings (cont’d)

Additionally, NAVFAC Marianas personnel stated that schedule delays also occurred, in part, because they are experiencing personnel resourcing shortages. NAVFAC Marianas officials stated that they have ongoing challenges recruiting personnel with experience and the required qualifications for many positions, leaving NAVFAC Marianas personnel short-handed and limited in the level of support they can provide as construction contract agents.

As a result, the DoD had a total of 13 years and 5 months in schedule delays and $37.5 million in increased costs over the programmed budgets for the nine projects we reviewed. The DoD’s inability to complete MILCON projects at JRM on time and within the programmed budget is indirectly affecting our National Defense Strategy and DoD priorities and resulting in:

- inability to restore readiness to build a more lethal force,
- negative impacts to our relationship with allies, and
- impediments to facility modernization needed to meet the changing environment.

Delays in MILCON projects, such as the construction of maintenance hangars and upgrading of the fuel pipeline, hinder readiness in the region and DoD officials’ ability to build a more lethal force capable of protecting our assets and meeting the goals of the National Defense Strategy.

Furthermore, NAVFAC Marianas did not always complete Contractor Performance Assessment Reporting System evaluations in a timely manner, as required by the Federal Acquisition Regulation. NAVFAC Marianas personnel stated that this occurred because they have had trouble hiring and retaining staff. Although NAVFAC Marianas officials stated that they have resource shortages, contracting officials are required by the Federal Acquisition Regulation to complete past performance evaluations in a timely manner. Because NAVFAC Marianas officials did not always complete Contractor Performance Assessment Reporting System evaluations in a timely manner, contracting personnel could award additional contracts to poor performing contractors and the DoD or other Federal Agencies may not receive the best value for goods and services.

Recommendations

We recommend that the NAVFAC Commander perform a review to determine resource requirements at NAVFAC Marianas and identify potential solutions to address vacant positions as well as issue a memorandum directing contracting personnel to issue annual past performance evaluations for contractors in the Contractor Performance Assessment Reporting System within 120 days following the end of the period of performance.

We recommend that the NAVFAC Commander, the Pacific Air Forces Commander, and the Defense Logistics Agency Director issue a memorandum emphasizing to personnel the importance of identifying all costs related to MEC clearance when completing the DD Form 1391, “FY___ Military Construction Project Data,” for all future MILCON projects.

We recommend that the NAVFAC Marianas Commander coordinate with U.S. Army Corps of Engineers officials to develop processes and best practices for obtaining permits for underwater construction and coordinate with JRM Environmental and MEC personnel and the Guam Historic Preservation Office to develop processes and best practices for archaeological preservation at MILCON sites when MEC clearance is also required.
Recommendations (cont’d)

We further recommend that the Chief of Naval Operations revise and reissue Office of the Chief of Naval Operations Instruction 11010.20H, "Navy Facilities Projects," to ensure that all Navy MILCON projects, including housing projects, follow the same planning and programming process.

Management Comments and Our Response

The DLA Chief of Staff, responding for the DLA Director, agreed with the recommendation to issue a memorandum, stating that the DLA Director issued a memorandum to facilities personnel on October 30, 2019, emphasizing the importance of identifying all costs related to MEC clearance when completing the DD Form 1391 “FY____ Military Construction Project Data,” for all future MILCON projects. The Chief of Staff’s comments and associated actions addressed the recommendation and we consider it closed.

The Deputy Commander of the Pacific Air Forces, responding for the Commander, agreed with the recommendation to issue a memorandum, and stated that the Pacific Air Forces will emphasize the importance of identifying all costs related to MEC clearance when completing DD Form 1391 “FY____ Military Construction Project Data,” for all future MILCON projects in a memorandum. The comments from the Deputy Commander addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we review the memorandum emphasizing the importance of identifying MEC clearance costs.

The Director of the Shore Readiness Division in the Office of the Chief of Naval Operations, responding for the Chief of Naval Operations, partially agreed with the recommendation to revise and reissue Chief of Naval Operations Instruction 11010.20H, “Naval Facilities Projects,” and stated that the Office is revising the Instruction to ensure that all Navy MILCON projects, including family housing projects, follow the same planning and programming process. Comments from the Director addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation once we review the revised Instruction to ensure it contains language directing all Navy MILCON projects to use the same planning and programming process.

The NAVFAC Commander and the NAVFAC Marianas Commander did not respond to the recommendations in the report. Therefore, the recommendations are unresolved. We request that the NAVFAC Commander and the NAVFAC Marianas Commander provide comments on the final report.

Please see the Recommendations Table on the next page for the status of the recommendations.
### Recommendations Table

<table>
<thead>
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<td>A.4.a, A.4.b</td>
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<td>Chief, Naval Operations</td>
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<td>A.5</td>
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</tbody>
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Please provide Management Comments by January 10, 2020.

**Note:** The following categories are used to describe agency management’s comments to individual recommendations.

- **Unresolved** – Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **Resolved** – Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** – OIG verified that the agreed upon corrective actions were implemented.
MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND SUSTAINMENT
COMMANDER, U.S. INDO-PACIFIC COMMAND
AUDITOR GENERAL, DEPARTMENT OF THE NAVY
AUDITOR GENERAL, DEPARTMENT OF THE AIR FORCE
DIRECTOR, DEFENSE LOGISTICS AGENCY

SUBJECT: Audit of Cost Increases and Schedule Delays for Military Construction Projects at Joint Region Marianas (Report No. DODIG-2020-040)

This final report provides the results of the DoD Office of Inspector General audit. We previously provided copies of the draft report and requested written comments on the recommendations. We considered management’s comments on the draft report when preparing the final report. These comments are included in the report. Comments and associated actions from the Defense Logistics Agency Chief of Staff addressed Recommendation A.2 in this report and we consider the recommendation closed.

The Deputy Commander of Pacific Air Forces and the Director of the Shore Readiness Division, Office of the Chief of Naval Operations, agreed to address Recommendations A.3 and A.5; therefore, the recommendations are considered resolved and open. As described in the Recommendations, Management Comments, and Our Response section of this report, the recommendations may be closed when we receive adequate documentation showing that all agreed-upon actions to implement the recommendations have been completed. Therefore, we request that the Commander of the Pacific Air Forces and the Chief of Naval Operations provide us within 90 days a response concerning specific actions in process or completed on these recommendations. The response should be sent to audacs@dodig.mil.

This report contains recommendations that are considered unresolved because the Commander of the Naval Facilities Engineering Command and the Commander of the Naval Facilities Engineering Command Marianas did not provide a response to the report.

Therefore, as discussed in the Recommendations, Management Comments, and Our Response section of this report, Recommendations A.1.a, A.1.b, A.4.a, A.4.b, and B.1 remain open. We will track these recommendations until an agreement is reached on the actions to be taken to address the recommendations, and adequate documentation has been submitted showing that the agreed upon action has been completed. DoD Instruction 7650.03 requires that recommendations be resolved promptly. Therefore, we request that the Commander of the Naval Facilities Engineering Command and the Commander of the Naval Facilities Engineering Command Marianas provide a response to the report.
Command Marianas provide us within 30 days a response concerning specific actions in process or alternative actions proposed on the recommendations. The response should be sent to audacs@dodig.mil.

If you have any questions, please contact me at [redacted] by [redacted].

Theresa S. Hull
Assistant Inspector General for Audit
Acquisition, Contracting, and Sustainment
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Introduction

Objective

The objective of this audit was to determine why select military construction projects at Joint Region Marianas were over budget and delayed. See Appendix A for scope and methodology and prior coverage.

Background

Joint Region Marianas (JRM) is a joint U.S. military command located on Guam. JRM was established in accordance with congressional legislation implementing the recommendations of the 2005 Base Realignment and Closure Commission. The legislation ordered the consolidation of adjoining, but separate, military installations into a single joint base. JRM began initial operational capability on January 31, 2009, and reached full operational capability on October 1, 2009. Under JRM, U.S. Naval Base Guam and Andersen Air Force Base each maintain commanding officers, who oversee their respective mission requirements and operations and JRM officials oversee support services, policies, and resources for the joint base.

In October 2005, the United States and the Government of Japan reached an agreement to move approximately 8,000 Marines and 9,000 dependents from Okinawa, Japan to a new installation in Guam as a part of the Defense Policy Review Initiative. The United States subsequently determined that some of the personnel would move to other locations rather than moving all 17,000 personnel to Guam. As of January 2019, Marine Corps officials planned to station about 1,700 active duty personnel to Guam on a permanent basis, assign another 3,100 active duty Marines to Guam on a rotational basis, and support about 1,700 dependents. Congress set the maximum threshold for the MILCON budget for the new installation at $8.7 billion with the Government of Japan funding up to $3.1 billion. Marine Corps officials determined that the new installation will be named Camp Blaz and Marines will start to transition to the island in FY 2024.

Military Construction Process

Federal law defines military construction (MILCON) as construction, development, conversion, or extension of any kind carried out with respect to a military installation, whether to satisfy temporary or permanent requirements, or any acquisition of land or construction of a defense access road.¹

¹ Section 2801, title 10, United States Code (10 U.S.C. § 2801 [2018]).
The DoD uses DD Form 1391, “FY ____ Military Construction Project Data,” to submit requirements and justification to Congress to support authorization and funding requests for construction projects that must be funded by MILCON appropriations. The Services prepare a DD Form 1391 for each proposed construction project, which includes the project’s cost estimate, description of proposed construction, project requirements, current facility or site conditions, the impact on operations if the project is not approved, and any useful supplemental data.

Public works personnel at the military installation where the construction will occur draft the DD Form 1391 for the installation commander to review and prioritize with other potential MILCON projects and then, depending on the Service, forward it to the regional commands or major commands. Once approved by the commands, the DD Form 1391 is forwarded to the Component headquarters for final review, prioritization, and decision on funding. Those projects selected for funding are included with the Components budget request and submitted to the Office of the Secretary of Defense (OSD), which reviews and consolidates MILCON projects across the DoD for inclusion in the defense portion of the President’s Budget. The Office of Management and Budget and the President make final revisions to the President’s Budget and submit it to Congress, which reviews the budget and authorizes and appropriates funds. Finally, the OSD allocates funds to the Military Services for congressionally approved construction projects.

Once approved, if a MILCON project’s costs increase more than 25 percent of the amount appropriated or $12 million, whichever is less, the DoD Component must notify Congress of the reasons for the increase and the funds proposed to finance the increase. Additionally, if a DoD Component desires to realign funding from projects with excess funding to projects with shortfalls, the Component must request approval from Congress if the amount needed is more than 25 percent of the amount appropriated for the MILCON project, or $2 million, whichever is less. In addition, the DoD Component must identify the source of the additional funding in the justification. This is referred to as an above threshold reprogramming (ATR) request. For cost increases of less than 25 percent of the amount appropriated for the MILCON project or $2 million, whichever is less, DoD Components can realign congressionally approved funding, through a below threshold reprogramming (BTR) to satisfy unforeseen, higher priority requirements. DoD Components are not required to obtain congressional approval before executing a BTR.
Key Guidance Related to DoD Military Construction Projects

**DoD Financial Management Regulation 7000.14-R, Volume 2B, Chapter 6**

DoD Financial Management Regulation (FMR) 7000.14-R, volume 2B, chapter 6, provides instructions related to congressional justification for MILCON appropriations and requires the DoD to complete DD Forms 1391 to justify all construction projects. In addition, DoD FMR 7000.14-R states that DD Form 1391 content requirements must include primary and supporting facilities, total contract cost, project requirements, explanation of the need for the MILCON requirement, and the impact if the project is not approved.

**Unified Facilities Criteria**

The Unified Facilities Criteria provides planning, design, construction, sustainment, restoration, and modernization criteria. DoD Directive 4270.5 requires DoD Components to use the Unified Facilities Criteria and Unified Facilities Guide Specifications to the greatest extent possible for planning, design, and construction of facilities. The Unified Facilities Criteria comprises documents that provide guidance for planning, design, construction, sustainment, restoration, and modernization. For example, Unified Facilities Criteria 3-701-01, “DoD Facilities Pricing Guide,” provides guidance for facility planning, investment, and analysis needs. Another example, Unified Facilities Criteria 3-730-01, “Programming Cost Estimates for Military Construction,” provides guidance for development and preparation of programming cost estimates for constructing military facilities.

**Office of the Chief of Naval Operations Instruction 11010.20H**

Office of the Chief of Naval Operations (OPNAV) Instruction 11010.20H provides policy, guidance, and command responsibilities for the classification, preparation, submission, review, programming, approval, and reporting of real property facilities work at Navy shore installations and sites. In addition, the instruction describes the responsibilities of the various Navy components as they relate to facilities management.

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Naval Sea Systems Command Ordnance Pamphlet 5 Volume 1, Seventh Revision

Naval Sea Systems Command Ordnance Pamphlet (NAVSEA OP) 5 provides explosives safety information and regulations. Safety regulations are intended to control the hazards associated with munitions response by emphasizing safe and efficient operating procedures while providing the maximum possible protection to personnel and property. NAVSEA OP 5 describes the responsibilities of the DoD Explosives Safety Board (DDESB) to establish and recommend safety standards. The DDESB establishes and recommends safety standards designed to prevent or correct hazardous conditions associated with ammunition and explosives operations.

Additional key applicable Federal and DoD Guidance related to MILCON projects at JRM is established in the following regulations and documents. See Appendix B for further information on each regulation and document.

- Federal Acquisition Regulation (FAR) Part 36, “Construction and Architect-Engineer Contracts”
- Naval Facilities Engineering Command (NAVFAC) Engineering and Construction Bulletins

Key DoD Organizations Involved With MILCON at JRM

The key DoD organizations involved in the planning, design, and construction of the MILCON projects on JRM include the Office of the Assistant Secretary of Defense for Sustainment and NAVFAC (including NAVFAC Pacific and NAVFAC Marianas).

Office of the Assistant Secretary of Defense for Sustainment

The Assistant Secretary of Defense for Sustainment serves as the principal staff assistant and adviser to the Under Secretary of Defense for Acquisition and Sustainment, Deputy Secretary of Defense, and Secretary of Defense on logistics and materiel readiness in the DoD and is the principal logistics official within the senior management of the DoD.5

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5 In February 2018, the DoD reorganized the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics into the Office of the Under Secretary of Defense for Acquisition and Sustainment and the Office of the Under Secretary of Defense for Research and Engineering.
As a component of the Office of the Assistant Secretary of Defense for Sustainment, the office of Facilities Management is responsible for the stewardship of DoD installations on behalf of the Secretary of Defense. The office of Facilities Management monitors the DoD’s MILCON program to ensure that DoD construction agents execute MILCON projects in the most efficient and cost-effective manner possible. The office of Facilities Management’s responsibilities include:

• overseeing the DoD’s execution of statutory authorities for MILCON;
• reviewing Component requests for MILCON projects in the annual budget process;
• generating the annual draft MILCON authorization bill for submission to Congress;
• overseeing MILCON project execution and status reporting; and
• submitting congressionally mandated reports regarding the status of the MILCON projects.

**Naval Facilities Engineering Command**

NAVFAC plans, builds, and maintains sustainable facilities; delivers environmental services, utilities, and other base services; and acquires and manages expeditionary combat force systems and equipment. NAVFAC has 13 component commands, 9 of which are Facilities Engineering Commands that report to either NAVFAC Atlantic or NAVFAC Pacific. NAVFAC Pacific provides engineering and acquisition expertise to the U.S. Pacific Fleet by serving as the Navy’s facilities, installation, and contingency engineers in the Pacific area of responsibility. NAVFAC Pacific’s area of responsibility includes NAVFAC Hawaii, NAVFAC Marianas in Guam, NAVFAC Southwest, NAVFAC Northwest, and NAVFAC Far East in Japan. The NAVFAC Marianas mission includes engineering services and a variety of contracting capabilities for services and construction, and environmental assistance to Navy, Marine Corps, Air Force, and other DoD-supported commands.

**Guam’s Environment and History**

Guam’s unique environment and history requires NAVFAC personnel to perform substantial environmental, cultural, and explosive ordinance planning before awarding and administering MILCON projects contributing to cost increases and schedule delays.
Guam’s Environment

Guam is a U.S. island territory in the North Pacific Ocean. The island of Guam is about 30 miles long with a width that ranges from 12 miles to 4 miles at its narrowest point. Guam has a total land mass of 212 square miles and two basic geological compositions. Two-thirds of Guam, the central and northern features, are primarily raised limestone with several volcanic formations and the northern cliff lines drop into the sea with an elevation ranging from 300 to 600 feet. The U.S. Fish and Wildlife Services (FWS), the principal Federal partner responsible for administering the Endangered Species Act in the terrestrial environment, identified 13 plants and animals on Guam as endangered or threatened within areas slated for MILCON projects. DoD officials work closely with FWS officials to ensure that planned and ongoing MILCON projects do not jeopardize the continued existence of the species.

Guam’s History

Guam has 128 sites listed on the National Register of Historic Places. Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effects of their actions on historic properties and to provide the Advisory Council on Historic Preservation and State Historic Preservation Officer with a reasonable opportunity to comment on their actions. The Advisory Council on Historic Preservation comments to the head of the Federal agency and the comments are considered when the final agency decision on the undertaking is made. The Federal agency head decides if a project moves forward, stops pursuant to mitigation, or goes back through the Section 106 process.

Guam’s World War II History

According to the book, *Campaign in the Marianas*, on December 8, 1941, Japanese aircraft bombed Guam and, after 2 days, the Japanese came ashore and assumed control of the island. On June 16, 1944, the cruiser *Honolulu*, the battleships *Pennsylvania* and *Idaho*, and several destroyers, all supported by planes from accompanying aircraft carriers, bombarded the west coast of Guam. On July 8, 1944, the U.S. Navy conducted a naval bombardment that struck the island of Guam for 13 days. The battle of Guam during World War II resulted in an estimated 11,000 items of Munitions and Explosives of Concern (MEC) being scattered across the island. As a result, hazardous munitions found range from 25-millimeter projectiles to 1,000-pound bombs and include both U.S. and Japanese ordnance.

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7 MEC are unexploded ordnance, discarded military munitions, and munitions constituents present in high enough concentrations to pose an explosive hazard.
Because MEC are known or suspected to be present at various sites on Guam due to World War II battles and subsequent military activities, the DoD requires a MEC clearance process for construction sites, which often complicates MILCON projects. In some cases, soil was relocated to a new site without being cleared for MEC or without proper documentation, creating an unknown construction footprint for the island of Guam. In addition, the locations of buried burn pits and past discoveries of MEC have not been properly documented. Furthermore, civilians around the island who have encountered MEC have improperly disposed of the ordnance or failed to inform the proper authorities, further complicating the logistics for the MEC clearance process for ongoing and future MILCON projects.

**Joint Region Marianas Military Construction Projects Reviewed**

NAVFAC Headquarters officials provided a list of NAVFAC’s 533 ongoing MILCON projects valued at $14.1 billion as of November 26, 2018. Of the 533 MILCON projects, we identified 60 ongoing MILCON projects at JRM with a total value of $2.4 billion. We then identified MILCON projects with known schedule delays that were also valued at more than $10 million. In addition, we identified projects that had exceeded the planned beneficial occupancy date as of November 26, 2018. Furthermore, we excluded projects that did not have an actual contract award date. We identified 19 MILCON projects with a total project amount of $1.02 billion that met the selection criteria.

From the 19 MILCON projects, we selected 9 to review, valued at $574 million, taking into consideration the following information NAVFAC officials provided: the fiscal year the contract was awarded, the project dollar amount, the projected completion date, the requiring activity, reason for the delay, completion status, and whether an ATR was required. One of the nine projects, the Defense Policy Review Initiative Live-Fire Training Range project is part of the Marine Corps move from Okinawa, Japan, to Guam; therefore, this project directly affects the agreement between the United States and the Government of Japan. Table 1 provides the nine project numbers, project titles, the requiring activities, and amount obligated for the respective projects.

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8 We excluded ongoing projects funded by the Government of Japan.
Table 1. Nine MILCON Projects Reviewed

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Description</th>
<th>Requiring Activity</th>
<th>Programmed Amount</th>
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<tr>
<td>1</td>
<td>Pacific Airpower Resiliency–Tanker Group Maintenance Hangar</td>
<td>Air Force</td>
<td>$132,600,000</td>
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<tr>
<td>2</td>
<td>Guam Strike Fuel Systems Maintenance Hangar</td>
<td>Air Force</td>
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<td>3</td>
<td>Defense Policy Review Initiative Live-Fire Training Range</td>
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<td>4</td>
<td>Upgrade Fuel Pipeline</td>
<td>Defense Logistics Agency</td>
<td>$67,400,000</td>
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<tr>
<td>5</td>
<td>Broad Area Maritime Surveillance Forward Operational and Maintenance Hangar</td>
<td>Navy</td>
<td>$61,702,000</td>
</tr>
<tr>
<td>6</td>
<td>X-Ray Wharf Improvements</td>
<td>Navy</td>
<td>$53,420,000</td>
</tr>
<tr>
<td>7</td>
<td>Hardening of Guam Petroleum Oil Lubricant Infrastructure</td>
<td>Navy</td>
<td>$26,975,000</td>
</tr>
<tr>
<td>8</td>
<td>Whole House Revitalization, Phase 2 at Lockwood Terrace</td>
<td>Navy</td>
<td>$23,100,000</td>
</tr>
<tr>
<td>9</td>
<td>Petroleum Oil Lubricant Fuel System Hardened Structures</td>
<td>Air Force</td>
<td>$20,000,000</td>
</tr>
</tbody>
</table>

1 Project 3010 was incrementally funded in 2 separate fiscal years for $64 million each.
2 Project 715 supports the Marine Corps relocation to Guam from Okinawa, Japan.
3 The obligated amount was reduced by $5,204,000 because of sequestration bringing the total obligated after sequestration to $62,206,000.

Source: The DoD OIG.

See Appendix C for descriptions of the nine projects. See Appendix D for additional information for each construction project, including contract number, current value, and the number of days the project was delayed as of April 2019.

Review of Internal Controls

DoD Instruction 5010.40 requires the DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls.9 We identified internal control weakness in NAVFAC related to project planning and Contractor Performance Assessment Reporting System evaluations, as well as within the Commander, Naval Installations Command (CNIC) related to

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programming procedures. Specifically, NAVFAC officials did not have adequate controls in place to ensure that contracting officers properly planned for MEC clearance in MILCON projects or completed Contractor Performance Assessment Reporting System evaluations within the required timeframes. Furthermore, CNIC personnel did not follow the normal MILCON process when programming for a housing revitalization project. We will provide a copy of the report to the senior officials responsible for internal controls in NAVFAC and CNIC.
Deputy Assistant Secretary of Defense for Facilities Management, NAVFAC, Air Force, and Defense Logistics Agency (DLA) officials experienced schedule delays and cost increases for nine MILCON projects valued at $574.4 million at JRM; however, Guam’s unique characteristics and environment presented challenges in planning and managing MILCON in the region. Specifically, the DoD has experienced—and continues to experience—schedule delays and cost increases for:

- 6 of 9 projects because DoD officials did not plan for the technical specifications of MEC clearance requirements as implemented by MEC Quality Assurance representatives;
- 4 of 9 projects because contractors had a shortage of available laborers for MILCON projects when Department of Homeland Security personnel decreased the approval and renewal of H-2B visas, which allow U.S. employers to bring foreign nationals to the United States, including Guam, to fill temporary nonagricultural positions;
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- 2 of 9 projects because personnel at the Office of the Assistant Secretary of Defense for Sustainment and CNIC used an accelerated programming process and not the normal programming process, which typically is a 3 year process to develop and finalize the DD Form 1391, “FY _____ Military Construction Project Data;”
- 1 of 9 projects because NAVFAC Marianas personnel experienced challenges working with the U.S. Army Corps of Engineers and the contractor to obtain a dredging permit that incorporated increased environmental requirements not anticipated at the time of the contract award;
- 1 of 9 projects because contractors identified archaeological items on site once MEC clearance began, which required the contractor to stop work in the area of the discovery and protect the artifact;

We reviewed nine projects, the projects may have experienced schedule delays and cost increase for multiple reasons.
• 1 of 9 projects because NAVFAC personnel made post-award changes to the construction contract when security and aviation requirements changed; and
• 1 of 9 projects because a contractor protested the award of the contract.

Additionally, NAVFAC Marianas personnel stated that, schedule delays also occurred in part, because they were experiencing personnel resourcing shortages. NAVFAC Marianas officials stated that they have ongoing challenges recruiting personnel with experience and the required qualifications for many positions, leaving NAVFAC Marianas personnel shorthanded and limited in the level of support they can provide as construction agents.

As a result, the DoD had a total of 13 years and 5 months in schedule delays and $37.5 million in increased costs over the programmed budget on the nine projects we reviewed.\textsuperscript{11} The DoD's inability to complete MILCON projects at JRM on time and within the programmed budget is indirectly affecting the National Defense Strategy and DoD priorities and resulting in:

• inability to restore readiness to build a more lethal force,
• negative impacts to our relationship with allies, and
• impediments to facility modernization needed to meet the changing environment.

Delays in MILCON projects, such as the construction of maintenance hangars and upgrading of the fuel pipeline, hinder readiness in the region and DoD officials’ ability to build a more lethal force capable of protecting our assets and meeting the goals of the National Defense Strategy.

**DoD Officials Experienced Cost Increases and Schedule Delays on MILCON Projects**

DoD officials experienced schedule delays of 13 years and 5 months and cost increases of $37.5 million for nine MILCON projects, valued at $574 million, at JRM; however, Guam’s unique characteristics and environment presented challenges in planning and managing MILCON in the region. Specifically, the DoD has and continues to experience schedule delays and cost increases because of MEC clearance; expired visas and changes to the H-2B Visa program; project programming that did not follow normal NAVFAC programming processes; environmental concerns; challenges obtaining a dredging permit; cultural and archaeological items on project sites; post-award changes to the construction

\textsuperscript{11} Cost increases and schedule delays are calculated as of April 2019.
contract; contract award protest; and resource shortages. Table 2 shows the delays and cost increases for each project and the reasons for those delays and cost increases.

**Table 2. Reasons for Project Delays and Cost Increases**

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Time Delays</th>
<th>Cost Increase Over Programmed Amount ($)</th>
<th>Reasons For Delays and Cost Increases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>MEC</td>
</tr>
<tr>
<td>3027</td>
<td>1 year, 6 months</td>
<td>-</td>
<td>✓</td>
</tr>
<tr>
<td>3010</td>
<td>1 year, 1 month</td>
<td>-</td>
<td>✓</td>
</tr>
<tr>
<td>715</td>
<td>1 year</td>
<td>-</td>
<td>✓</td>
</tr>
<tr>
<td>1303</td>
<td>2 years, 1 month</td>
<td>$25,421,994</td>
<td>✓</td>
</tr>
<tr>
<td>625</td>
<td>2 years, 5 months</td>
<td>-</td>
<td>✓</td>
</tr>
<tr>
<td>518</td>
<td>1 year, 1 month</td>
<td>2,000,000</td>
<td>✓</td>
</tr>
<tr>
<td>652</td>
<td>-</td>
<td>2,000,000</td>
<td>✓</td>
</tr>
<tr>
<td>1403</td>
<td>7 months</td>
<td>2,993,420</td>
<td>✓</td>
</tr>
<tr>
<td>3760</td>
<td>3 years, 10 months</td>
<td>5,422,000</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>13 years, 5 months</strong></td>
<td><strong>$37,837,414</strong></td>
<td>6</td>
</tr>
</tbody>
</table>

1 Time delays are as of April 2019, and are rounded to the nearest month.
2 Amount includes Operation and Maintenance (O&M) funds used for MEC clearance.
3 Totals do not equal the actual sum because of rounding.

Source: The DoD OIG.
MILCON Projects Affected by MEC Clearance

DoD officials did not adequately plan for the increased costs and scheduling of MEC clearance requirements as implemented by NAVFAC MEC Quality Assurance personnel, causing delays and cost increases for the following six projects.

- Pacific Airpower Resiliency - Tanker Group Maintenance Hangar (Project Number 3027)
- Guam Strike Fuel Systems Maintenance Hangar (Project Number 3010)
- Upgrade Fuel Pipeline (Project Number 1303)
- Hardening of Guam Petroleum Oil Lubricant (POL) Infrastructure (Project Number 652)
- Whole House Revitalization, Phase 2 at Lockwood Terrace (Project Number 1403)
- POL Fuel System Hardened Structures (Project Number 3760)

DoD officials did not provide documentation identifying a specific number of days delayed or cost increases related specifically to MEC for some projects because projects were impacted by more than one issue that caused delays or increases. In the following sections, we explain the MEC clearance process on Guam and provide examples of how the MEC clearance process affected the Upgrade Fuel Pipeline and POL Fuel System Hardened Structures.

MEC Clearance on Guam

MEC are unexploded ordnance, discarded military munitions, and munitions constituents present in high enough concentrations to pose an explosive hazard. Unexploded ordnance include military munitions that (1) have been primed, fused, armed, or otherwise prepared for action; (2) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and (3) remain unexploded, whether by malfunction, design, or any other cause. Discarded military munitions are military munitions abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. Federal law defines munitions constituents as any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.12

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12 As defined in 10 U.S.C. § 2710 (e)(3).
In 2004, a joint working group co-chaired by the Army and the DDESBJ comprising representatives from the Air Force, Navy, and Marine Corps, developed the current standards for clearing MEC in DoD Manual 6055.09. The DDESBJ approved the manual to establish standards to protect personnel and property from explosives and chemical agent hazards associated with unexploded ordnance.

In 2010, Naval Ordnance Safety and Security Activity personnel submitted an Explosives Safety Submittal for Guam to the DDESBJ for munitions response sites for construction support in areas that may contain MEC. On October 18, 2010, the DDESBJ reviewed and approved the Explosives Safety Submittal for construction support at munitions response sites. In May 2015, Naval Ordnance Safety and Security Activity and JRM officials increased enforcement efforts related to the Explosives Safety Submittal. As a result, a number of MILCON projects experienced delays and cost increases related to MEC clearance because more extensive MEC clearance was required than was expected at the time the project was planned and awarded.

**Upgrade Fuel Pipeline MEC Delays and Cost Increases**

DoD officials experienced schedule delays of 1 year and 8 months, and cost increases of $25.4 million, related to MEC clearance for the Upgrade Fuel Pipeline Project (upgrading of the existing fuel transfer pipeline from Sasa Valley Fuel Farm to Andersen Air Force Base, Guam) because DLA personnel did not account for completing MEC clearance for a portion of the pipeline that is located on non-DoD land. In the DD Form 1391 for the project, DLA personnel included only $400,000 for environmental and archaeological mitigation. In 2012, when the DD Form 1391 was prepared and approved, DoD personnel routinely used environmental and archaeological mitigation as the line item to identify MEC clearance on DD Forms 1391. Figure 1 shows the fuel pipeline on Guam.
According to a DLA official, DLA personnel did not factor off-base MEC clearance into the costs of the pipeline project during the programming and awarding of the contract because Naval Ordnance Safety and Security Activity personnel told them that off-base MEC clearance was not required. However, DLA personnel stated that, after NAVFAC Marianas contracting personnel awarded the contract, Naval Ordnance Safety and Security Activity personnel informed DLA that, although there had been no change in explosive safety policy, there had been a change in the interpretation of the policy and off-base MEC clearance was now required.

**Schedule Delays**

NAVFAC Marianas contracting personnel issued three contract modifications related to MEC clearance that extended the contract completion date by 1 year and 8 months. NAVFAC Marianas contracting personnel issued the modifications to allow the contractor additional time to complete off-base MEC clearance that DLA and NAVFAC officials did not plan for at the time they awarded the contract.

**Cost Increases**

DoD officials experienced cost increases of $25.4 million for the Upgrade Fuel Pipeline Project related to performing MEC clearance off base. Of the $25.4 million, $5 million was funded through an ATR and the other $20.4 million was funding using Operation and Maintenance (O&M) funds.
On July 10, 2017, the Under Secretary of Defense (Comptroller)/Chief Financial Officer, DoD (USD[C]/CFO), asked Congress to approve an ATR for the Upgrade Fuel Pipeline Project. In the justification, the USD(C)/CFO explained that, based on an updated working estimate, an additional $5 million, which essentially restored the sequestration reduction taken from the project in FY 2013, was needed to complete the project. The USD(C)/CFO further explained that the funds were required to cover costs for post-award changes and contract modifications needed to address unforeseen site conditions, and delays associated with unexploded ordnance surveys, investigations, and removal. Congress approved the $5 million ATR request for the Upgrade Fuel Pipeline project. After the approval of the ATR, the programmed cost increased from $62.4 million to $67.2 million to accommodate the unforeseen increases.

In addition to the $5 million ATR, NAVFAC Marianas used $20.4 million in O&M funds to pay for the off-base MEC clearance. NAVFAC Marianas contracting officers issued seven modifications using O&M funds for off-base MEC clearance.

When DLA officials developed the DD Form 1391 for the Upgrade Fuel Pipeline Project in February 2012, the DoD FMR did not specifically state that environmental remediation costs were part of the “Funded Project Costs” of MILCON. However, in February 2016, the USD(C)/CFO revised DoD FMR, volume 3, chapter 17, to state that major costs incurred during the design and construction phases of MILCON projects must be funded from applicable military construction appropriations—including the “cost of remediating unknown environmental contamination within the footprint of a military construction project.” However according to NAVFAC Marianas officials, MEC clearance cannot be wholly categorized as either investigation or remediation. NAVFAC personnel included requirements in MILCON contracts for construction contractors to complete investigations to determine whether MEC exists on MILCON sites. If MEC is found, the appropriate explosive ordnance disposal team is contacted to execute remediation.

The FMR in 2016, did not clearly state that environmental remediation should be funded as a part of MILCON; however, the FMR has since been revised to state environmental remediation should be funded as a part of MILCON. Therefore, we are not making a recommendation regarding NAVFAC Marianas personnel using O&M funds, and not MILCON funds, to fund off-base MEC clearance.
Petroleum Oil Lubricant Fuel Systems Hardened Structures Project

Air Force and NAVFAC Marianas personnel experienced schedule delays of 3 years and 9 months and cost increases of $2.2 million, related to MEC clearance on the POL–Fuel Systems Hardened Structures project (construction of reinforced concrete hardened structures around three existing and new POL structures) because Air Force personnel did not include MEC clearance in the scope of work in the DD Form 1391. NAVFAC Marianas personnel did not comply with JRM OP 5 or Operations Explosives Safety Exception E1-16A and E1-16B in the scope of work for the POL–Fuel Systems Hardened Structures project, resulting in schedule delays and cost increases. NAVFAC Marianas contracting personnel did not include MEC clearance in the contract and, as a result, construction was suspended and contracting personnel were required to issue three time-extension modifications to provide the contractor additional time to complete the construction contract by including MEC clearance.

NAVFAC Marianas contracting personnel issued the first modification on March 23, 2016, suspending the contract for 3 months to add MEC requirements to the contract. NAVFAC Marianas contracting personnel issued the second modification on April 19, 2017, to extend the suspension for another 13 months because reprogramming was needed once MEC clearance proposals were accepted. NAVFAC Marianas contracting personnel issued a third MEC-related modification on June 19, 2017, for the actual performance of the MEC clearance, which increased the cost by $2.2 million and added an additional 2 years and 5 months of schedule delays. According to NAVFAC Marianas contracting personnel, they will issue a final MEC-related modification that will incur a $340,475 cost increase and add an additional 3-month schedule delay. As of January 22, 2019, the contractor had completed MEC clearance at three of the four locations included in the project.

On January 19, 2017, the USD(C)/CFO asked Congress to approve an ATR request for the POL–Fuel Systems Hardened Buildings project. In the justification, the USD(C)/CFO explained that an additional $5.4 million was needed to complete the project. Furthermore, the USD(C)/CFO explained that, because of the lack of MEC in the scope of work, the ATR was needed to fund the additional costs to the contract and the suspensions that occurred, as well as an increase in labor costs because H2B workers were being sent home. Congress approved the $5.4 million ATR
request for the POL–Fuel Systems Hardened Structures project. After the approval of the ATR, the programmed cost increased from $20 million to $25.4 million to accommodate the unforeseen increases.

The NAVFAC Commander should issue a memorandum emphasizing to personnel the importance of identifying all costs related to MEC clearance when completing the DD Form 1391 for all future MILCON projects. The DLA Director should issue a memorandum emphasizing to facilities personnel the importance of identifying all costs related to MEC clearance when completing the DD Form 1391 for all future MILCON projects. In addition, the Pacific Forces Commander should issue a memorandum emphasizing to personnel the importance of identifying all costs related to MEC clearance when completing the DD Form 1391 for all future MILCON projects.

We did not review the MEC clearance process as a part of this audit; however, we will discuss the MEC clearance process in a separate DoD OIG report and make any MEC related recommendations in that report.\(^\text{13}\)

**MILCON Projects Affected by H-2B Visas**

Contractors experienced a shortage of available laborers for MILCON projects when Department of Homeland Security personnel decreased the approval and renewal of H-2B visas resulting in the population of H-2B workers on Guam decreasing from the FY 2011-2016 average of 1,280 workers to 318 in December 2016. As a result, the following four projects reviewed experienced delays and cost increases.

- Pacific Airpower Resiliency–Tanker Group Maintenance Hangar (Project Number 3027)
- Guam Strike Fuel Systems Maintenance Hangar (Project Number 3010)
- Hardening of Guam POL Infrastructure (Project Number 652)
- POL–Fuel System Hardened Structures (Project Number 3760)

NAVFAC Marianas personnel stated that the H2-B visa program substantially affects the schedules of MILCON projects because a large proportion of the skilled workers on Guam are obtained through the program. DoD officials did not identify a specific number of days delayed or cost increases for each project related specifically to H-2B for the projects because projects were impacted by more than one issue that caused delays or increases.

\(^{13}\) DoD OIG Project Number D2019-D000AV-0047.000.
In the following sections, we explain the H-2B visa process and provide examples of how the H-2B visas affected the Pacific Airpower Resiliency–Tanker Group Maintenance Hangar and Guam Strike Fuel Systems Maintenance Hangar MILCON projects.

**H-2B Visa Program**

The H-2B program allows U.S. employers who meet specific regulatory requirements to bring foreign nationals to the United States to fill temporary nonagricultural jobs. To qualify for H-2B nonimmigrant classification, the petitioner (employer) must establish the following:

- There are not enough U.S. workers who are able, willing, qualified, and available to do the temporary work.
- Employing H-2B workers will not adversely affect the wages and working conditions of similarly employed U.S. workers.
- The petitioner's need for the prospective worker's services or labor is temporary, regardless of whether the underlying job can be described as temporary.

H-2B petitioners must provide a single valid temporary labor certification from the U.S. Department of Labor, or, if the workers will be employed on Guam, from the Guam Department of Labor.

**H-2B Visa are Temporary**

Generally, the U.S. Citizenship and Immigration Services may grant an H-2B visa for up to the period authorized on the temporary labor certification. H-2B visas may be extended for increments of up to 1 year each. A new, valid temporary labor certification covering the requested time must accompany each extension request. An H-2B visa is granted for a maximum of 3 years. A person who has held H-2B nonimmigrant status for a total of 3 years must depart and remain outside the United States for an uninterrupted period of 3 months before seeking readmission as an H-2B nonimmigrant.

**H-2B Visas in Guam**

Historically, Guam employers—especially in the construction industry—relied on temporary foreign workers holding H-2B visas to augment their existing U.S. workforce. From FYs 2011 to 2016, the Guam Department of Labor reported an average of 1,280 H-2B workers on the island; however, in December 2016, the number of visa holders on the island had dropped to 318. According to the Assistant Director of the Office of the Deputy Assistant Secretary of Defense Infrastructure, in 2015, U.S. Citizenship and Immigration Service personnel
reviewed the H-2B program in Guam and determined that some H-2B workers had been in Guam for 10 to 15 years as “temporary” workers. According to a March 2017 report from the Office of the Assistant Secretary of the Navy for Energy, Installations, and Environment to Congress, after U.S. Citizenship and Immigration Service personnel made this determination, H-2B approvals and renewals in Guam decreased from 95-percent approval to 3.2-percent approval.\(^\text{14}\)

According to the Assistant Director of the Office of the Deputy Assistant Secretary of Defense Infrastructure, JRM officials began experiencing the effects of the reduction in visas in 2016 and 2017; therefore, the DoD asked for relief from Congress regarding the approval and renewals of visas. Congress directed the Secretary of the Navy to submit a report to Congress no later than April 1, 2017, regarding the impacts of the H-2B visa program and renewal process on the relocation of Marine forces to Guam. In the March 2017 Navy report to Congress, Navy officials concluded that the construction necessary to support the relocation of Marines to Guam required large increases in the number of construction workers on Guam and additional H-2B worker flexibility to obtain skilled workers from areas outside the U.S. such as the Philippines. In the FY 2019 National Defense Authorization Act, Congress amended the law, stating that H-2B workers supporting MILCON on Guam did not have to prove the temporary nature of the work in their H-2B applications.\(^\text{15}\)

**Guam Strike Fuel Systems Maintenance Hangar and Pacific Airpower Resiliency–Tanker Group Maintenance Hangar**

NAVFAC Marianas contracting personnel stated that the changes to the H-2B visa program negatively affected the Guam Strike Fuel Systems Maintenance Hangar and Pacific Airpower Resiliency–Tanker Group Maintenance Hangar projects (construction of two reinforced hangars). According to NAVFAC contracting personnel, the construction contractor had 430 H-2B workers on Guam ready to work at the start of the construction contracts for both maintenance hangar projects. However, when the changes to MEC clearance resulted in work being suspended from July 2015 through March 2016, the contractor began to experience the effects of the changes to the H-2B visa program and began losing skilled laborers. According to NAVFAC Marianas contracting personnel, the MILCON contractor employee visas expired when the H-2B visa approval rate diminished, requiring all 430 workers to return home to the Philippines while they attempted to apply for new H-2B visas.

\(^{14}\) “Report to Congress on Workforce Issues for Relocation of Marines to Guam” March 2017.

The excess costs and delays that resulted from changes to the H-2B visa program prevented the contractor from completing construction on the maintenance hangar projects. These delays significantly reduced readiness and could result in degradation of operation capability because the existing hangar provides limited fuel system maintenance capability and does not meet the overall fuel systems maintenance requirement.

We are not making a recommendation regarding the H-2B visa issues in Guam because the FY 2019 National Defense Authorization Act corrected the delays in H-2B visa approvals. A weekly labor certification report from the Guam Department of Labor for the week of April 26, 2019, showed there were 917 H-2B workers in Guam and the approval percentage for H-2B visa under the FY 2019 National Defense Authorization Act exemption was 100 percent.

MILCON Projects Affected Because of Environmental Issues

NAVFAC Pacific contracting personnel experienced delays and cost increases caused by environmental issues such as U.S. Fish and Wildlife Services listing 23 new species as endangered or threatened requiring the biological opinion to be updated before the contract was awarded for the following four projects.

- Upgrade Fuel Pipeline (Project Number 1303)
- Defense Policy Review Initiative Live-Fire Training Range Complex (LFTRC) (Project Number 715)
- Broad Area Maritime Surveillance Forward Operational and Maintenance Hangar (Project 625)
- X-Ray Wharf Improvements (Project Number 518)

DoD officials did not provide documentation identifying a specific number of days delayed or cost increases related specifically to environmental issues for some projects because projects were impacted by more than one issue that caused delays or increases. In the following sections, we provide an example of how environmental issues affected the Defense Policy Review Initiative LFTRC MILCON project.
Defense Policy Review Initiative LFTRC

NAVFAC Pacific contracting personnel delayed the award of the contract for the Defense Policy Review Initiative LFTRC project (construction of a live-fire training range complex) for 1 year because of changing environmental conditions on Guam.\textsuperscript{16} Navy officials included the DD Form 1391 for the live-fire training complex in their FY 2016 MILCON budget estimate to Congress.

In the FY 2016 budget estimate, Navy officials stated that Guam does not have sufficient distance range capacity to accommodate sustainment-level marksman requirements for Marine Corps personnel, and described the live-fire training range complex as having four ranges and supporting facilities, which would require site preparation and clearing of a significant amount of land to construct the complex. In addition, as part of the agreement between the United States and Government of Japan, Marine Corps forces currently stationed in Okinawa are scheduled to relocate to Guam and require these ranges be constructed as part of the relocation to meet Marine Corps policy and requirements for annual marksmanship training.\textsuperscript{17} If the training ranges are not constructed, the move could be delayed compromising the agreement between the two countries or negatively impacting training and readiness because the necessary facilities would not be available on Guam. NAVFAC Pacific contracting personnel awarded the contract for the live-fire training range on August 24, 2017, for $78.2 million.\textsuperscript{18} NAVFAC Pacific personnel stated that they were prepared to award the contract in August 2016, but were unable to because the biological opinion had to be updated before they could award the contract.

2015 Biological Opinion

On July 31, 2015, FWS personnel submitted a biological opinion on the Navy’s relocation of Marine Corps personnel from Okinawa to Guam to the Deputy Director of the Joint Guam Program Office at the Office of the Assistant Secretary of the Navy for Energy, Installations, and Environment, which allowed NAVFAC Pacific contracting personnel to award the contract for the live-fire training range complex. Subsequently, on October 1, 2015, less than 3 months after FWS personnel completed the biological opinion, FWS listed 23 new endangered or threatened species located in Micronesia, 13 of which were found adjacent to or within the proposed project areas on Guam. The Code of Federal Regulations requires reinitiation (updating) of the biological opinion if the FWS lists a new species that may be affected by a MILCON project; therefore, Navy personnel could

\textsuperscript{16} NAVFAC Pacific personnel stated that they were prepared to award the contract in August 2016. To calculate the number of days the project was delayed, we used the last day that the contract could have been awarded, counting the number of days between August 31, 2016, and the contract award date of August 24, 2017.

\textsuperscript{17} Marine Corps Order 3574.2k, “Marine Corps Combat Marksmanship Programs,” August 1, 2007.

\textsuperscript{18} Contract Number N62742-17-C-1319.
not award the contract and reinitiated the 2015 biological opinion because of the newly listed endangered and threatened species before awarding the contract for the LFTRC.\(^{19}\)

**First Reinitiation of the Biological Opinion**

Navy personnel reinitiated the 2015 biological opinion because of the newly listed endangered and threatened species before awarding the contract for the LFTRC. For example, Marine Corps Activity Guam, Public Works Department personnel, explained that one of the threatened species was Cycas micronesica, a tree found in abundance on the land planned for the construction of the LFTRC. In the reinitiation of the 2015 biological opinion, Navy personnel agreed to transplant mature Cycas micronesica as a whole plant or grow Cycas micronesica in a Navy nursery from plants harvested outside the project footprint.\(^{20}\) The Field Supervisor of the Pacific Islands Fish and Wildlife Office signed the reinitiation of the 2015 biological opinion on July 18, 2017, more than 21 months after FWS listed the 23 new threatened or endangered species. The Field Supervisor concluded that the Navy's proposed actions and conservation measures would not adversely affect the threatened or endangered species during the construction of the LFTRC. Therefore, as of July 18, 2017, Navy officials had a favorable biological opinion to move forward with the construction contract. Figure 2 shows a Cycas micronesica.

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\(^{19}\) 50 CFR § 402.16(d).
\(^{20}\) Seedlings (basal sucker) grown in the nursery are known cycad pups.
\(^{21}\) A biologist permitted under Section 10(a)(1)(A) of the Endangered Species Act.
The Field Supervisor of the Pacific Islands Fish and Wildlife Office signed the second reinitiation of the 2015 biological opinion on October 30, 2018, 3 years and 3 months after FWS personnel finalized the 2015 biological opinion. In the updated biological opinion, the Field Supervisor revised the Navy's required conservation measures at the LFTRC and closed the formal consultation. Therefore, as of October 30, 2018, Navy officials received a favorable biological opinion and were able to move forward with the award of the construction contract.

NAVFAC Pacific officials' award of the contract for the live-fire training range complex was delayed a total of 1 year. NAVFAC Pacific and NAVFAC Marianas personnel stated that the FWS do not have enough personnel in Guam to handle the amount of environmental work required on the island. FWS personnel agreed and stated that they are unable to provide the level of customer service they strive for because of challenges with competing priorities, budget uncertainty, and staff turnover.

*Consultation Agreement Between the Navy and the FWS*

We are not making a recommendation related to the contract delays resulting from the reinitiations of the biological opinion because Navy and FWS personnel took corrective action to improve environmental coordination. On March 29, 2019, Navy and FWS personnel entered into a coordination agreement to meet the legal requirements of section 7 of the Endangered Species Act which requires a biological opinion and support the Navy's requirements in the Pacific Region. The agreement:

- establishes a formal procedure for early coordination between the Navy and FWS personnel at the point the Navy identifies that a potential project may require formal consultation instead of once a formal request is initiated;
- defines the information required to initiate a section 7 consultation which includes a description of the action to be considered, the specific area that may be affected, a listing of affected species or critical habitat, relevant reports including the environmental impact statement or environmental assessment, and any other relevant available information;
- establishes timelines for correspondence, consultation, and coordination efforts supporting the section 7 consultation process as well as procedures for extending those timelines; and
- establishes a process to resolve conflicts between the parties.

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DoD Personnel Did Not Follow Typical Programming Procedures

Personnel from the Office of the Assistant Secretary of Defense for Sustainment and CNIC did not follow the normal Navy MILCON programming process for two of the nine projects because of emerging requirements, resulting in schedule delays and MILCON contracts with reduced scopes of work through deductive items.\textsuperscript{23} The two projects included:

- Hardening of Guam POL Infrastructure (Project Number 652)
- Whole House Revitalization, Phase 2 at Lockwood Terrace (Project Number 1403)

OPNAV Instruction 11010.20H describes the typical timeline for programming a MILCON project. The OPNAV Instruction states that, 3 years before the DD Form 1391 is finalized, the Installation Public Works Department should develop DD Forms 1391 to address Navy requirements following the most recent strategic guidance.

Guam Petroleum Oil Lubricant Infrastructure Project

OSD officials directed Navy officials to include the Guam POL Infrastructure project (construction of hardened shelters over and around three Navy POL infrastructure elements in Guam) in the Department of the Navy MILCON and Family Housing Programs for FY 2017 Justification Data Submitted to Congress in February 2016 because of an emerging requirement.\textsuperscript{24} As a result, Navy officials did not have the typical 3 years to develop the DD Form 1391. In the DD Form 1391 Navy officials planned to construct hardened shelters over and around three Navy POL elements. Under the typical programming process, NAVFAC officials receive notice from a customer that a project is planned in the future and work with the customer to develop an initial design and associated cost estimates to request an appropriate budget amount from Congress. A NAVFAC Pacific official stated that, because the project did not go through the typical programming process, the DD Form 1391 submitted and approved by Congress was developed without initial designs, resulting in NAVFAC Pacific receiving bids over the programmed amount.

\textsuperscript{23} The MILCON projects contained deductive items that were subsequently removed from the project. Deductive items are items in a proposed scope of work that may be deducted from the final scope of work. The contracting officer may provide in the solicitation for a base bid item covering the work as specified and for one or more deductive bid items, which omit specified features of the work in a stated order of priority if it appears that funds available for a construction project may be insufficient for all the desired features.

\textsuperscript{24} Emerging requirements are projects identified too late in the MILCON budget process to be considered for funding by the applicable military department.
NAVFAC Pacific contracting officials included three deductive items in the solicitation. NAVFAC Pacific contracting officials awarded the contract with all deductive items because bids came in high, resulting in NAVFAC Pacific contracting officials awarding the contract to harden only two of the three required sites. In addition to removing one of the POL sites from the contract, NAVFAC Pacific personnel requested and received approval for a BTR of $2 million to fund the award amount for the remaining two POL sites. In the BTR, NAVFAC Pacific officials explained that, during the course of the solicitation process, they discovered that the Government estimate underestimated the impact of the H-2B visa revocation and MEC remediation on the construction costs required for the initial contract award. NAVFAC Pacific officials further explained that, after implementing deductive items, the project funding requirement to make the initial project contract award would still escalate the project above the appropriated amount. Because OSD officials added the project without taking the time typically needed to fully develop the DD Form 1391, including the development of initial designs and associated cost estimates with NAVFAC personnel, NAVFAC Pacific awarded the project with a scope reduction and requested an additional $2 million. After the approval of the BTR, the programmed cost increased from $27 million to $29 million.

OSD officials stated that they added the hardening of the POL infrastructure sites project to the FY 2017 Justification to Congress during the OSD Comptroller Program Budget Review process because it was an emerging requirement. OSD officials used the best available information they had at the time, including the general scope of the project and historical cost information for similar facilities.

Each year, DoD officials identify emerging requirements that were not known at the time the Service-specific budgets were developed; however, these requirements must be funded immediately and therefore cannot be fully developed through NAVFAC with initial designs and costs. OSD officials have a process established and updated annually by the USD(C)/CFO and the Office of the Director for Cost Assessment and Program Evaluation for the inclusion of emerging requirements which OSD officials used for this project; therefore, we are not making a recommendation.

Whole House Revitalization Phase 2 at Lockwood Terrace Project

Navy officials did not follow the typical programming procedures for the Whole House Revitalization Phase 2 at Lockwood Terrace project (revitalization to 59 three- and four-bedroom housing units), resulting in NAVFAC Pacific personnel awarding the contract with deductive items and requesting an ATR and a BTR. NAVFAC Pacific personnel stated that programming did not go through the typical
NAVFAC programming process because this was a housing project and, therefore, CNIC Housing personnel developed their own budget for the project without relying on NAVFAC for input.25

A CNIC Housing Programming and Resource Manager explained that while CNIC is responsible for housing projects in the Navy, CNIC personnel did not have the cost expertise or history in budgeting for family housing MILCON projects because the Navy has completed only minimal family housing MILCON projects since the early 1980s especially in overseas locations with high housing construction costs similar to Guam. The majority of family housing projects are conducted under privatized housing and not MILCON; therefore, the budget estimates were not sufficient for Guam.

In the DD Form 1391, Navy officials proposed revitalization to 59, 3- and 4-bedroom, single-family housing units because the units were originally built in 1960 and were not handicap accessible or energy efficient. Congress approved $23.1 million for the project, the same amount Navy officials requested in the DD Form 1391. According to CNIC personnel, the project cost came in over budget and packages for cost variation and reprogramming were submitted to CNIC for approval.

In the cost variation report, Navy officials asked for an additional $6.5 million and explained that the cost increase occurred because the Government estimate did not fully reflect the scope of renovations and multiple unit types associated with the homes. Navy officials further explained that, without the additional funding, 14 family housing units would have to be dropped from the project, which would affect the quality of life for service members and their families while stationed at Guam. On February 11, 2015, Congress approved the variation in cost. The Principal Deputy Assistant Secretary of the Navy approved the $6.5 million cost variation package; however, the reprogramming package was not processed in time by CNIC and provided to NAVFAC officials to meet the expiration date of the multi-award contract NAVFAC planned to use for the housing units. As a result, NAVFAC Pacific requested a BTR of $1.7 million before awarding the contract, which was approved on April 23, 2015, because the project programming documents did not account for high housing construction costs in Guam. NAVFAC Pacific contracting personnel awarded the contract for only 48 of the required 59 housing units, with 11 housing units as deductive items, on April 30, 2015.26

25 OPNAVINST 5009.1 assigned responsibility for the operation of housing to CNIC include all Navy owned family housing.
26 The additional units will be added to subsequent Whole House Revitalization phases of Lockwood Housing. As of May 2019, the remaining phases had not been programmed.
On November 16, 2017, the USD(C)/CFO asked Congress for an ATR request for the Whole House Revitalization Phase 2 at Lockwood Terrace project. In the justification, the USD(C)/CFO explained that an additional $1.3 million was needed to account for a request for equitable adjustment for extended overhead because of MEC and State Historic Preservation Office-related changes to the contract, archaeological mitigation requirements, and Leadership in Energy and Environmental Design rating completion. Including the $3 million BTR and ATR, the total obligated amount increased from $23.1 million to $26.1 million.

In addition to the cost increases, NAVFAC Marianas contracting personnel also experienced schedule delays when they issued contract modifications related to MEC and archaeological mitigation that resulted in the project going 7 months over the scheduled completion.

Navy officials stated that they are in the process of updating OPNAVINST 11.010.20H to require that all Navy housing projects follow the same procedures for programming and approval as traditional non-housing MILCON projects and are developed in coordination with NAVFAC officials. As a result, CNIC officials will no longer be independently responsible for developing budget estimates for future MILCON housing projects. The Chief of Naval Operations should ensure that OPNAVINST 11.010.20H is updated and reissued to avoid future delays in programming for military housing projects.

**MILCON Projects Delayed for a Dredging Permit**

NAVFAC Marianas contracting personnel experienced schedule delays of 6 months and cost increases of $2.3 million for the X-Ray Wharf improvements MILCON project (Project Number 518, modernization of the North Berth at X-Ray Wharf) because of challenges acquiring a work permit from the U.S. Army Corps of Engineers to allow work and dredging at Apra Harbor, where Naval Base Guam is located. The U.S. Environmental Protection Agency and U.S. Army Corps of Engineers require contracting personnel to obtain a work permit to abide by environmental regulations regarding construction or dredging around marine environments. The contractor submitted an initial schedule and permit application on October 11, 2014, incorporating the requirements of the statement of work and organizing its critical project milestones based on the expectation that the U.S. Army Corps of Engineers would approve the permit by February 28, 2015.

On January 26, 2015, NAVFAC Marianas officials notified the project team that NAVFAC would not receive the U.S. Army Corps of Engineers permit by February 28, 2015, because the permit required a more robust process than

originally anticipated because of project size and affected area. U.S. Army Corps of Engineers officials included requirements in the permit that NAVFAC officials considered to be beyond the scope of the project, including increased screening of dredged material at the Guam Deep Ocean Disposal Site and increased Hazard Analysis and Critical Control Point Plan screening that was not required on previous dredging projects. However, according to U.S. Army Corps of Engineers officials, NAVFAC officials accepted risk by awarding the contract before securing the dredging permit. U.S. Army Corps of Engineers officials stated that they balance the reasonably foreseeable benefit and detriments of proposed projects, while considering the views of Federal, state, and local agencies, interest groups, and the general public. The results of these reviews are decisions that allow infrastructure development while offsetting the impacts to the water of the United States through mitigation requirements. Furthermore, U.S. Army Corps of Engineers officials stated that they strive to make permit decisions in a timely manner. On July 21, 2015, U.S. Army Corps of Engineers officials issued the permit to NAVFAC and work began on July 24, 2015. Figure 3 shows the completed X-Ray Wharf improvements MILCON project.

Figure 3. X-Ray Wharf Improvements MILCON Project
Source: NAVFAC Marianas.

28 Hazard Analysis and Critical Control Plans are designed to prevent the introduction of invasive species or pollution transported on equipment.
On September 2, 2015, NAVFAC Marianas contracting personnel issued a contract modification to incorporate the incurred costs of the delay caused by the delayed approval of the U.S. Army Corps of Engineers in-water work permit. The modification accounted for a 5-month schedule delay and a cost increase of $717,940.

According to the DD Form 1391, the X-Ray Wharf improvements had a planned cost of $53.4 million. NAVFAC Marianas contracting personnel did not exceed the planned cost; however, they requested a BTR to complete the project because of additional dredging in areas not originally mapped in preliminary scans was discovered once dredging began. On July 6, 2017, NAVFAC Marianas contracting personnel received approval for a BTR of $2 million. After the approval of the BTR, the programmed cost increased from $53.4 million to $55.4 million to accommodate the unforeseen cost increases. NAVFAC Marianas contracting personnel completed the project on November 17, 2017, 1 year and 1 month after the original CCD, with a final cost of $49.1 million.

The Commander, NAVFAC Marianas should coordinate with U.S. Army Corps of Engineers officials to develop processes and best practices for obtaining permits for underwater construction.

**Archaeological Items Found on MILCON Site**

NAVFAC Marianas contracting personnel issued a 3-month construction contract modification and the USD(C)/CFO requested an ATR for $1.3 million for the Whole House Revitalization, Phase 2 at Lockwood Terrace Number 1403, revitalization to 59 three- and four-bedroom housing units) in part because of archaeological items identified during construction. A subcontractor discovered archaeological artifacts, while working on the Whole House Revitalization, Phase 2 at Lockwood Terrace project. The Guam standard operating procedure and discovery guidance for an inadvertent find such as an archaeological item states that, upon discovery of an archaeological item, the contractor must stop work in the area where the item was discovered, carefully protect the artifact in place, immediately report the finding to the contracting officer, and wait for direction from the contracting officer to resume work. The Naval Base Guam archaeologist, environmental office, and State Historic Preservation Office worked together and developed a Data Recovery Plan for all of the inadvertent discovery sites at Lockwood. In addition to the archaeological discovery, the contractor was also performing MEC clearance efforts at the site,

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29 NAVFAC Marianas contracting personnel issued the initial construction contract for $39.7 million, more than $13 million less than the programmed amount. Therefore, even with the BTR and other contract modifications the total project cost did not exceed the programmed amount.
requiring increased coordination efforts to complete both tasks concurrently. Figure 4 shows a site where the contractor performed archaeological mitigation for historical artifacts on the MILCON site.

![Figure 4. Archaeological Mitigation at a MILCON Site](image)

Source: NAVFAC Marianas.

As a result of the discovery of archaeological items at the MILCON site, NAVFAC Marianas contracting personnel issued a modification increasing the construction completion date (CCD) date by 3 months. In addition, the USD(C)/CFO requested an ATR for $1.3 million because resolution of the State Historic Preservation Office issues had exceeded the construction contingency for the project, and archaeological investigation and mitigation required a combined team of archaeologist and MEC personnel to perform the work.

NAVFAC Marianas personnel spent significant time determining how to perform MEC clearance during archaeological investigations. JRM environmental office personnel, the JRM MEC coordinator, contracting office personnel, and the contractor ensured that they met both State Historic Preservation Office and Naval Ordnance Safety and Security Activity requirements. On May 1, 2017, the JRM Commander issued JRM Notice 8000 to establish controls for managing excavations at sites suspected of containing cultural resources. The JRM notice was valid until April 2018. In the notice, the JRM Commander required the MEC Process Improvement Team to review the standard operating procedures.

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annually to determine whether the procedures should be extended, canceled, or incorporated into an instruction.\textsuperscript{31} However, NAVFAC officials did not provide documentation that the MEC Process Improvement Team reviewed the standards after the notice was issued in May 2017.

The NAVFAC Marianas Commander should coordinate with JRM environmental and MEC personnel and the Guam Historic Preservation Office to develop processes and best practices for archaeological preservation at MILCON sites when MEC clearance is also required.

**MILCON Project Experienced Post-Award Security and Aviation Requirement Changes**

NAVFAC Marianas contracting personnel experienced a schedule delay of 2 years and 5 months and cost increases of $4.3 million for the Broad Area Maritime Surveillance (BAMS) Surveillance Forward Operational and Maintenance Hangar (Project Number 625, construction of an operations and maintenance hangar for the MQ-4C Triton Unmanned Aircraft System). NAVFAC Marianas contracting personnel encountered design problems near the end of the project because of post-award changes and new Electronic Security System requirements. The post-award changes consisted of design changes to the floor plan and battery storage room. Initially, NAVFAC Marianas contracting personnel modified the contract on January 30, 2015, to add a $1.2 million cost increase and 4 months to the schedule for a modification to the design based on security changes. Subsequently, NAVFAC Marianas contracting personnel issued a second modification to incorporate design changes for the battery storage room on February 7, 2018, resulting in a $433,223 cost increase and adding over 3 months to the schedule. The Unified Facilities Criteria for battery storage changed after the contract was awarded, and introduced new requirements for the specialized lithium batteries that are stored in the battery storage room. Without this modification, Naval Air Systems Command would not be able to certify the battery storage room to store the specialized lithium batteries.

\textsuperscript{31} JRM Instruction 8000.15A, “Munitions and Explosives of Concern Oversight Program,” November 13, 2018, established the MEC Process Improvement Team as a forum to address and resolve MEC-related issues, increase regional MEC awareness, facilitate MEC-related communications to and from the field, and provide timely risk-based recommendations to the JRM Commander. The team members and advisors include construction managers, explosives safety experts, and leadership from both JRM and NAVFAC Marianas.
Additionally, NAVFAC Marianas contracting personnel awarded post-award change modifications because of new Electronic Security System requirements. The new Electronic Security System requirements consisted of updates to protect classified information and installation of additional security protocols. NAVFAC Anti-Terrorism Force Protection personnel required the re-scoping of the Electronic Security Systems to be updated to protect classified information. NAVFAC Marianas officials issued the modification on November 30, 2016, resulting in an 8.5-month schedule delay, and increasing the contract cost by $1.3 million. Finally, NAVFAC Marianas contracting personnel issued another modification for security changes on May 8, 2018, to increase the cost of the project by $113,615 and add 46 days to the CCD. In addition to the security requirement changes, NAVFAC Marianas contracting personnel also issued a modification on May 16, 2017, resulting in a 74-day schedule delay. The NAVFAC Marianas contracting officer stated that the purpose of the modification was to install antennas and a lightning protection system for the maintenance hangar. During the course of the project, the antenna requirements changed and the Federal Aviation Administration requirements for the lightning protection system were added to meet Federal Aviation Administration code.

NAVFAC Marianas contracting personnel completed the project on September 7, 2018, 2 years and 5 months after the original CCD, with a $4.3 million cost increase, raising the total cost of the project to $49.7 million. We are not making a recommendation related to the changes in security requirements because the changes were subsequent to the award of the construction contract and were required for anti-terrorism and force protection.

Award Protest Delayed a MILCON Project

NAVFAC Marianas contracting personnel extended the contract completion date of the Upgrade Fuel Pipeline project (Project Number 1303, upgrading of the existing fuel transfer pipeline from Sasa Valley Fuel Farm to Andersen Air Force Base, Guam) by 3 months because of a suspension of work issued January 2, 2014, and lifted on April 8, 2014, as a result of an award protest. Two offerors protested the award of the contract, challenging the Navy’s evaluation of the proposals and the selection decision. In an April 4, 2014, decision, Government Accountability Office officials denied the protest, stating that the Navy’s selection decision was reasonable.

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32 Other delays accounted for the other 277 days in the CCD, which included time extension request because of Government delay and environmental concerns.
33 31 U.S.C. § 3553 requires a contracting officer, when properly notified of a bid protest, to suspend contract performance if the contract has already been awarded. Therefore, the contracting officer suspended the contract as required and we are not making a recommendation.
**NAVFAC Marianas is Experiencing Resource Shortages**

NAVFAC Marianas officials stated that they have experienced ongoing challenges recruiting personnel with experience and the required qualifications for many positions such as construction management engineers, leaving NAVFAC Marianas personnel shorthanded and limited in the level of support they can provide as construction contract agents.\(^{34}\) NAVFAC officials stated that Guam does not have adequate training for construction trades on the island; therefore, NAVFAC officials must recruit individuals from outside the island who have construction experience and are qualified to perform quality assurance. Guam is located in a remote location in the Pacific Ocean and transportation to and from the island is lengthy and expensive, further complicating recruitment efforts. NAVFAC Marianas officials stated that they have multiple job openings they are unable to fill or retain personnel for, resulting in increases in workload for current personnel. As the MILCON efforts in JRM increase as a result of the Defense Policy Review Initiative, NAVFAC Marianas officials’ workload will continue to increase, making it imperative that open vacancies are filled in a timely manner to avoid the risk of projects being delayed further.

The NAVFAC Commander should perform a review to determine resource requirements at NAVFAC Marianas and identify potential solutions to address vacant positions.

**Delayed Military Construction Projects and Increased Costs Impact DoD Readiness and Operations**

DoD officials experienced a total of 13 years and 5 months in schedule delays and $37.8 million in increased costs over the programmed budget on the nine projects we reviewed valued at $574 million as of April 2019. However, Guam’s unique characteristics and environments present challenges in managing MILCON in the region. Specifically, DoD officials have and continue to experience schedule delays and cost increases because of unanticipated MEC, changes to the H-2B visa process, accelerated project programming, the identification of endangered species and delays in obtaining a dredging permit, archaeological findings, post-award changes to the scope of its construction projects, and protests of a contract award.

DoD official’s inability to complete MILCON projects at JRM on time and within the programmed budget indirectly affects the implementation of the National Defense Strategy and achievement of DoD priorities. Ultimately, DoD officials are

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34 Construction contract agent functions include establishing a budget and schedule for the project; soliciting, evaluating proposals, and awarding contracts for construction; performing construction oversight; and transferring of real property upon completion.
experiencing delays and cost increases to MILCON projects that are disabling the Nation’s ability to meet warfighter needs and maintain operational readiness. According to the National Defense Strategy, DoD installations in the Pacific region must be capable of persistent engagement with all countries in Indo-Pacific region. As the most forward U.S. territory in the region, JRM installations are critical for countering threats in the region and must be able to respond quickly and effectively to any contingency threatening regional security, as well as ensuring rapid delivery of humanitarian assistance, and providing a foundation of stability for continued free movement of trade, investment, and commerce. Delays in MILCON projects, such as the construction of the maintenance hangars and upgrading of the fuel pipeline, hinder readiness in the region and the DoD’s ability to build a more lethal force capable of protecting its assets and meeting the goals of the National Defense Strategy. These delays also impede facility modernization needed to meet the changing environment.

Because of today’s changing environment, DoD officials’ plans for JRM MILCON include providing modern infrastructure capable of meeting increased security concerns while also incorporating advances in technology. For example, the Guam Strike Fuel Systems Maintenance Hangar project is needed because the current hanger does not meet the fuel system maintenance requirements and cannot be dedicated to support home stationed aircrafts. Furthermore, according to DoD officials, without the necessary infrastructure, they are unable to host joint Pacific training exercises, which could negatively impact training and readiness.

Congress limited funding to $8.7 billion to complete the movement of Marines from Okinawa to Guam under the Defense Policy Review Initiative; however, continued delays and cost increases make it increasingly difficult for NAVFAC officials to meet this statutory limit while also providing the necessary infrastructure for the relocation. As of January 2019, DoD officials approved $1.6 billion through FY 2020 for the Defense Policy Review Initiative; however, an additional 50 MILCON projects at JRM are planned to accommodate the Marine Corps move. DoD officials continue to experience schedule delays in ongoing MILCON projects, and delays will potentially continue to compound as MILCON increases to meet the FY 2024 Marine Corps movement schedule. Escalating MILCON costs affect not only projects within JRM, but also throughout the DoD. Each time an ATR or BTR is required for a MILCON project, DoD officials must realign funding from other MILCON projects, further hindering readiness.

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35 The $8.7 billion includes the $3.1 billion the Government of Japan agreed to contribute to the project.
Recommendations, Management Comments, and Our Response

**Recommendation A.1**
We recommend that the Commander of the Naval Facilities Engineering Command:

a. Issue a memorandum emphasizing to personnel the importance of identifying all costs related to Munitions and Explosives of Concern clearance when completing the DD Form 1391, “FY____ Military Construction Project Data,” for all future Military Construction projects.

b. Perform a review to determine resource requirements at Naval Facilities Engineering Command Marianas and identify potential solutions to address vacant positions.

**Management Comments Required**
The NAVFAC Commander did not respond to the recommendations in the report. Therefore, the recommendations are unresolved. We request that the Commander provide comments on the final report.

**Recommendation A.2**
We recommend that the Defense Logistics Agency Director issue a memorandum emphasizing to facilities personnel the importance of identifying all costs related to Munitions and Explosives of Concern clearance when completing the DD Form 1391, “FY____ Military Construction Project Data,” for all future Military Construction projects.

**Defense Logistics Agency Comments**
The DLA Chief of Staff, responding for the DLA Director, agreed with the recommendation and stated that the DLA Director issued a memorandum to facilities personnel on October 30, 2019, emphasizing the importance of identifying all costs related to MEC clearance when completing the DD Form 1391, “FY____ Military Construction Project Data,” for all future MILCON projects.

**Our Response**
The comments from the Chief of Staff addressed the specifics of the recommendation. We reviewed the memorandum the Director issued on October 30, 2019, and confirmed it emphasized the importance of identifying all costs related to MEC clearance when completing the DD Form 1391, “FY____ Military Construction Project Data,” for all future MILCON projects; therefore, the recommendation is resolved and closed.
**Recommendation A.3**

We recommend that the Commander of the Pacific Air Forces issue a memorandum emphasizing to personnel the importance of identifying all costs related to Munitions and Explosives of Concern clearance when completing the DD Form 1391, “FY____ Military Construction Project Data,” for all future Military Construction projects.

**Pacific Air Forces Comments**

The Deputy Commander of the Pacific Air Forces, responding for the Commander, agreed with the recommendation and stated that the Pacific Air Forces will emphasize in a memorandum the importance of identifying all costs related to MEC clearance when completing the DD Form 1391, “FY____ Military Construction Project Data,” and for all future MILCON projects. The Deputy Commander provided an estimated completion date of November 30, 2019.

**Our Response**

The comments from the Deputy Commander addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation upon confirmation that the Pacific Air Forces has issued a memorandum emphasizing the importance of identifying all costs related to MEC clearance when completing the DD Form 1391 for all future MILCON projects.

**Recommendation A.4**

We recommend that the Commander of Naval Facilities Engineering Command Marianas:

a. Coordinate with U.S. Army Corps of Engineers officials to develop processes and best practices for obtaining permits for underwater construction.

b. Coordinate with Joint Region Marianas Environmental and Munitions of Explosive Concern personnel and the Guam Historic Preservation Office to develop processes and best practices for archaeological preservation at military construction sites when munitions of explosive concern clearance is also required.

**Management Comments Required**

The NAVFAC Marianas Commander did not respond to the recommendations in the report. Therefore, the recommendations are unresolved. We request that the Commander provide comments on the final report.
Recommendation A.5
We recommend that the Chief of Naval Operations revise and reissue Office of the Chief of Naval Operations Instruction 11010.20H, "Navy Facilities Projects," to ensure that all Navy military construction projects, including housing projects, follow the same planning and programming process.

Chief of Naval Operations Comments
The Director of the Shore Readiness Division in the Office of the Chief of Naval Operations N46, responding for the Chief of Naval Operations, partially agreed with the recommendation and is revising the Instruction to require Family Housing Construction to follow the same planning and programming processes as other MILCON projects. The Director stated that the draft Instruction is at the 06/GS-15 review level, the estimated completion date is November 20, 2019, and the Instruction is expected to be ready for review by the Director of Navy Staff in March 2020. Additionally, for emergent requirement, the Director stated the Navy will follow established planning and programming processes as much as possible but will focus on meeting timelines.

Our Response
The comments from the Director addressed the specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close the recommendation upon confirmation that the Chief of Naval Operations has issued the instruction requiring Family Housing Construction to follow the same planning and programming processes as other Military Construction.
**Finding B**

**NAVFAC Officials Did Not Complete Required Contractor Performance Assessment Reporting System Evaluations as Required by the FAR**

NAVFAC Marianas officials did not always complete Contractor Performance Assessment Reporting System (CPARS) evaluations in a timely manner, as required by the Federal Acquisition Regulation (FAR). NAVFAC Marianas personnel stated that this occurred because they have had trouble hiring and retaining staff. Although NAVFAC Marianas officials stated that they have resource shortages, contracting officials are required by the FAR to complete past performance evaluations in a timely manner. Because NAVFAC Marianas officials did not always complete CPARS evaluations in a timely manner, contracting personnel could award additional contracts to poor performing contractors and the DoD and other Federal agencies may not receive the best value for goods and services if they unknowingly contract with a firm that has a track record of poor performance.

**NAVFAC Marianas Staffing Shortages Delayed CPARS Reporting**

NAVFAC Marianas personnel completed CPARS evaluations on an annual basis for seven MILCON projects; however, according to NAVFAC officials they did not always complete the CPARS evaluations for five of the seven MILCON projects in a timely manner because of staffing shortages. Past performance information is critical in source selection evaluations to aid in determining the best value services for the DoD. When contracting personnel do not complete CPARS evaluations in a timely manner, contractor performance information is not available for use in other procurement source selections.

**Federal Regulations Require Past Performance Evaluations**

Contracting officials are required under Federal regulations to complete past performance evaluations for contractors in a timely manner. FAR subpart 42.15 states that past performance evaluations must be prepared at least annually, as well as at the time the contracted work or order is completed. The FAR also states that past performance evaluations are required for construction contracts of $700,000 or more and for construction contracts terminated for default regardless

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36 NAVFAC Marianas personnel did not complete, and were not yet required to complete, the CPARS reports for two of the nine MILCON projects because the first year of the contract was not complete as of April 15, 2019.
of contract value. Additionally, past performance evaluations are required for architect-engineer services contracts of $35,000 or more, and architect-engineer contracts terminated for default regardless of contract value.

Contracting personnel must enter past performance evaluations into the CPARS, a paperless contractor evaluation system that the Government uses to ensure that current, complete, and accurate information on contractor performance is available for use by Federal agencies in procurement source selections. Officials evaluate contractors in CPARS by preparing a performance assessment report. When officials submit a completed performance assessment report, it automatically transfers to the Past Performance Information Retrieval System, the Government-wide repository for past performance data, contained within CPARS. Government source selection officials obtain performance assessment reports from this system.

In addition to the CPARS reporting requirements outlined in FAR subpart 42.15, the CPARS Program Office issued “Guidance for the Contractor Performance Assessment Reporting System,” which states that the entire evaluation process should be completed within 120 days following the end of the period of performance. Furthermore, the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics issued a memorandum, “Past Performance Assessment Reporting,” on January 9, 2009, requiring program managers and other requirements office personnel to ensure that annual assessments are completed on registered contracts within 120 days of the end of the performance period.

**NAVFAC Marianas Personnel Did Not Complete CPARS Evaluations for Five Projects Within the Required Timeframe**

NAVFAC Marianas personnel did not always complete the CPARS evaluations within the 120 days for five of the seven MILCON projects. For our review, we calculated the 120 days from the date of the last day of the assessment period and the date the CPARS evaluation was approved by either the reviewing official or assessing official, depending on the Contractor Representative's comments. If the Contractor Representative either concurred with the evaluation or did not send comments, the Assessing Official could close the evaluation; therefore, we used the date listed for the Assessing Official’s review in the CPARS evaluation in these instances. If the Contractor Representative did not concur with the evaluation, the Assessing Official was required to send the evaluation to the Reviewing Official. The Reviewing

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37 FAR subpart 42.15, paragraph 42.1502.
38 This guidance is non-regulatory in nature and intended to provide useful information and best practices to the workforce.
39 The Office of the Under Secretary of Defense for Acquisition and Sustainment was known as the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics at the time the memorandum was issued.
Official’s comments and signature are required whenever the Contractor Representative indicates that they do not concur; therefore, we used the date listed for the Reviewing Official’s review in the CPARS evaluation in these instances. Table 3 shows the seven MILCON projects and the timeliness of the CPARS evaluations.

Table 3. Status of the Timeliness of CPARS Evaluations

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Source: The DoD OIG.

NAVFAC Marianas personnel stated that the CPARS evaluations were not completed in 120 days because of personnel shortages and turnover. Specifically, for project 1303, the NAVFAC Marianas contracting officer explained that, over the course of 6 years, there were six technical leads. In addition, because of multiple unexpected events and additional MEC requirements, the project was a full-time job requiring additional work outside normal hours on a regular basis. The NAVFAC Marianas contracting officer stated that the project team could have benefited from additional staff to administer this complex project adequately.

Although NAVFAC Marianas officials stated they are experiencing resource shortages, contracting officials are required by the FAR to complete past performance evaluations in a timely manner. CPARS is the government-wide system for tracking past performance including evaluations of the contractor’s record of conforming to requirements, good workmanship, controlling costs, and adherence to schedules; therefore, NAVFAC personnel’s delay in completing evaluations affects not only DoD contracting officials but contracting officials throughout the Federal Government. Because NAVFAC Marianas personnel did not complete CPARS evaluations in a timely manner, contracting personnel could award additional contracts to poor performing contractors and DoD and other Federal agencies may not receive the best value for goods and services. The NAVFAC
Commander should issue a memorandum directing contracting personnel to issue annual past performance evaluations for contractors in CPARS within 120 days following the end of the period of performance.

**Recommendation, Management Comments, and Our Response**

**Recommendation B.1**
We recommend that the Commander, Naval Facilities Engineering Command issue a memorandum directing contracting personnel to issue annual past performance evaluations for contractors in Contractor Performance Assessment Reporting System within 120 days following the end of the period of performance.

**Management Comments Required**
The NAVFAC Commander did not respond to the recommendation in the report. Therefore, the recommendation is unresolved. We request that the Commander provide comments on the final report.
Appendix A

Scope and Methodology

We conducted this performance audit from November 2018 through October 2019 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Universe and Sample Information

Section 2835 of the FY 2010 National Defense Authorization Act requires audits of funds made available for MILCON projects on Guam. In order to comply with the FY 2010 National Defense Authorization Act, we assessed delayed, ongoing, and recently completed projects at JRM.

NAVFAC Headquarters personnel provided the audit team a list of ongoing and recently completed MILCON projects. NAVFAC officials identified 420 MILCON projects, valued at $12.2 billion as of July 31, 2018. We filtered the list NAVFAC officials provided to include only the ongoing MILCON projects at JRM, excluding all projects funded by the Government of Japan. We identified 36 ongoing and recently completed JRM MILCON projects with a total value of $1.4 billion.

We identified projects with a known schedule delay by identifying projects that were completed or still ongoing past their planned beneficial occupancy dates as of July 31, 2018. From the list of 36, we excluded the projects with a planned beneficial occupancy date past October 1, 2018, and verified that the projects listed were not completed by the beneficial occupancy date or were still ongoing. We also decided to include the projects without a planned beneficial occupancy date listed. In addition, we excluded all JRM MILCON-funded projects that were valued at less than $10 million and any projects that did not have an actual award date listed. After removing these projects, we identified 10 MILCON projects with a total project amount of $445 million that met the selection criteria.

According to the FY 2018 National Defense Authorization Act, the Office of the Secretary of Defense must provide an annual report to Congress identifying all delayed MILCON projects as of the end of FY 2017. In the report, OSD personnel identified 58 projects, including 2 projects that were delayed in Guam as of September 30, 2017. Of the two Guam projects, one was included on the list of projects NAVFAC provided. We added the other project to the audit universe for 11 MILCON projects at JRM with a total value of $512 million.
On November 26, 2018, NAVFAC officials provided an updated list of 533 ongoing MILCON projects. We used the same methodology to exclude projects in the July 2018 NAVFAC-provided list of MILCON projects, and added seven projects with schedule delays to the audit universe bringing the total number of projects to 18. Additionally, Air Force personnel provided a list of Air Force-funded projects at JRM that have schedule delays. From the list, Air Force personnel requested that we include one of the Air Force projects that we had previously filtered out because of its large contract value. We added the project to the original audit universe, increasing the audit universe to 19 MILCON projects at JRM with a total value of $1.02 billion. See Table 4 for the 19 MILCON projects.

Table 4. MILCON Projects.

<table>
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<tbody>
<tr>
<td>1</td>
<td>Pacific Airpower Resiliency-Tanker Group Maintenance Hangar</td>
</tr>
<tr>
<td>2</td>
<td>Guam Strike Fuel Systems Maintenance Hangar</td>
</tr>
<tr>
<td>4</td>
<td>Upgrade Fuel Pipeline</td>
</tr>
<tr>
<td>5</td>
<td>X-Ray Wharf Improvements</td>
</tr>
<tr>
<td>6</td>
<td>Broad Area Maritime Surveillance Forward Operational and</td>
</tr>
<tr>
<td></td>
<td>Maintenance Hangar</td>
</tr>
<tr>
<td>7</td>
<td>Hardening of Guam Petroleum Oil Lubricant Infrastructure</td>
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<tr>
<td>8</td>
<td>Whole House Revitalization, Phase 2 at Lockwood Terrace</td>
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<tr>
<td>9</td>
<td>Petroleum Oil Lubricant Fuel System Hardened Structures</td>
</tr>
<tr>
<td>10</td>
<td>Pacific Airpower Resiliency-Tactical Missile Maintenance Facility</td>
</tr>
<tr>
<td>11</td>
<td>Modular Storage Magazines</td>
</tr>
<tr>
<td>12</td>
<td>Emergent Repair Facility Expansion</td>
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<tr>
<td>13</td>
<td>Dehumidified Supply Storage Facility</td>
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<tr>
<td>14</td>
<td>Defense Policy Review Initiative-Aircraft Maintenance Hangar-North Ramp</td>
</tr>
<tr>
<td>15</td>
<td>Ground Support Equipment Shops at North Ramp</td>
</tr>
<tr>
<td>16</td>
<td>Marine Wing Support Squadron Facilities at North Ramp</td>
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<tr>
<td>17</td>
<td>Power Upgrade</td>
</tr>
<tr>
<td>18</td>
<td>Defense Policy Review Initiative-Aircraft Maintenance Hangar #2</td>
</tr>
<tr>
<td>19</td>
<td>Sanitary Sewer System Recapitalization</td>
</tr>
</tbody>
</table>

Source: The DoD OIG.

From the 19 MILCON projects, we selected 9 to review with a total project dollar amount of $574.4 million. To select the nine projects we considered the following information NAVFAC officials provided: the fiscal year awarded, project dollar amount, the projected completion date, the requiring agency, reason for delay,
completion status, and whether an ATR was required. We selected the sample from a variety of projects funded by the Services and Defense organizations at JRM, including the Navy, Air Force, Marine Corps, and DLA. For the sample, we selected the two projects included on the OSD-provided list, two Air Force projects that had not been 100 percent completed, and two projects with the largest dollar amount over the planned cost. We also selected the Air Force project suggested by Air Force personnel because of the high project dollar value. Furthermore, we added one Marine Corps project because of the large Marine Corps development starting in the area and one Navy project that had experienced schedule delays because of challenges acquiring proper work permits from the U.S. Army Corp of Engineers. See Appendix D for additional details on MILCON projects reviewed. Table 5 lists the nine projects we reviewed.

Table 5. Nine MILCON Projects Reviewed

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Description</th>
<th>Requiring Activity</th>
<th>Programmed Amount</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Pacific Airpower Resiliency Tanker Group Maintenance Hangar</td>
<td>Air Force</td>
<td>$132,600,000</td>
</tr>
<tr>
<td>2</td>
<td>Guam Strike Fuel Systems Maintenance Hangar</td>
<td>Air Force</td>
<td>$128,000,000</td>
</tr>
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<td>3</td>
<td>Defense Policy Review Initiative Live-Fire Training Range</td>
<td>Navy</td>
<td>$125,677,000</td>
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<td>4</td>
<td>Upgrade Fuel Pipeline</td>
<td>DLA</td>
<td>$67,400,000</td>
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<td>5</td>
<td>X-Ray Wharf Improvements</td>
<td>Navy</td>
<td>$53,420,000</td>
</tr>
<tr>
<td>6</td>
<td>Broad Area Maritime Surveillance Forward Operational and Maintenance Hangar</td>
<td>Navy</td>
<td>$61,702,000</td>
</tr>
<tr>
<td>7</td>
<td>Hardening of Guam Petroleum Oil Lubricant Infrastructure</td>
<td>Navy</td>
<td>$26,975,000</td>
</tr>
<tr>
<td>8</td>
<td>Whole House Revitalization, Phase 2 at Lockwood Terrace</td>
<td>Navy</td>
<td>$23,100,000</td>
</tr>
<tr>
<td>9</td>
<td>Petroleum Oil Lubricant Fuel SystemHardened Structures</td>
<td>Air Force</td>
<td>$20,000,000</td>
</tr>
</tbody>
</table>

1 Project 3010 was incrementally funded in 2 consecutive fiscal years for $64 million each.

2 Project 715 supports the Marine Corps relocation to Guam from Okinawa, Japan.

3 The obligated amount was reduced by $5.2 million as a result of sequestration bringing the total obligated after sequestration to $62.2 million.

Source: The DoD OIG.
Review of Documentation and Interviews

We obtained and reviewed contracts and documentation issued by NAVFAC Pacific and Marianas contracting personnel for the construction of JRM projects between FYs 2014 and 2017. See Appendix D for a list of the contracts. We selected a nonstatistical sample of nine MILCON projects and associated contracts that we determined had exceeded the planned beneficial occupancy date. From the contract files and additional documentation, we reviewed the following.

- Modifications to the contracts issued between June 12, 2014 and April 2, 2019 request and approvals for BTRs and ATRs.
- Contracting Officer representative appointment files.
- CPARS evaluations with approval dates from September 21, 2015 through December 12, 2018.
- Pictures of the MILCON projects.

In addition, we reviewed the Government Accountability Office protest decision, dated April 4, 2014; Biological Opinion for the Navy's relocation of the U.S. Marine Corps from Okinawa to Guam and associated activities on Guam; and the Consultation Agreement between the Department of the Navy and U.S. Fish and Wildlife Service, Region 1 for Endangered Species Act Section 7 Consultations, dated March 29, 2019.

We also reviewed the following criteria and guidance.

- FAR Part 36, "Construction and Architect-Engineer Contracts"
- FAR Part 42, "Construction Administration and Audit Services," Subpart 41.15, "Contractor Performance Information"
- Defense Federal Acquisition Regulation Supplement Part 236, "Construction and Architect Engineer Contracts," Subpart 236.6, "Architect-Engineer Services"
- FMR 7000.14-R, Volume 2B, Chapter 6, "Military Construction/Family Housing Appropriations"
- DoD Directive 6055.09E, "Explosives Safety Management"
- Unified Facilities Criteria
- OPNAV Instruction 11010.20H, "Navy Facilities Projects"
- NAVSEA OP 5 Volume 1, Seventh Revision, "Ammunition and Explosives Safety Ashore"
- NAVFAC Engineering and Construction Bulletins
We interviewed program and contracting personnel from the U.S. Indo-Pacific Command, Pacific Air Forces, Air Force Civil Engineer Center, Marine Corps Forces Pacific, DLA, and NAVFAC Pacific. We interviewed the JRM Chief of Staff and Executive Director, Andersen Air Force Base Vice Commander, the 36th Wing Director, and NAVFAC Marianas and Facilities Engineering and Acquisition Division contracting personnel. Additionally, we interviewed contractors performing the construction on the installations, and personnel from the Office of the Assistant Secretary of Defense for Sustainment, Office of Facilities Management; OSD, Office of General Counsel; Deputy Assistant Secretary of Defense for Infrastructure; DoD Explosives Safety Board; Navy Housing; Naval Safety and Security Activity; and Commander, Navy Installations Command. Finally, we interviewed personnel from FWS regarding the biological opinions and endangered species at JRM.

**Use of Computer-Processed Data**

We did not use computer-processed data to perform this audit.

**Use of Technical Assistance**

We used assistance from the DoD Research and Engineering Directorate to review the MILCON projects at JRM and determine whether each modification occurred as a result of a design deficiency.

**Prior Coverage**

During the last 5 years, the DoD Office of Inspector General (DoD OIG) issued three reports discussing schedule delays and cost increases for MILCON projects.

**DoD OIG**

DODIG-2018-125, “The Fort Bliss Hospital Replacement Military Construction Project,” June 6, 2018

The Office of the Assistant Secretary of Defense for Energy, Installations, and Environment and U.S. Army Corps of Engineers Headquarters implemented, or are in the process of implementing, several initiatives, including updating guidance on roles, responsibilities, and management controls. During the Fort Bliss Hospital Replacement, the U.S. Army Corps Engineers Southwestern Division and Fort Worth Division replaced Government management of the project, conducted a design validation review, and conducted a cost schedule risk analysis. As of March 2018, there were no ongoing or completed proceedings or investigations related to the Fort Bliss Hospital Replacement project.

U.S. Army Corps of Engineers Omaha District personnel experienced multiple delays and cost increases to the U.S. Strategic Command replacement facility because of the lack of expert involvement in the requirements development, inaccurate cost estimates, design deficiencies, contract modifications, fire, floods, mold, and challenges related to the execution of contract modifications. The Office of the Assistant Secretary of Defense for Energy, Installations, and Environment, the Air Force Civil Engineer Center, U.S. Army Corps of Engineers Headquarters, and U.S. Army Corps of Engineers Omaha District have implemented or are implementing several initiatives to prevent further schedule delays and cost increases on the project.


NAVFAC Marianas contract administration personnel did not effectively administer the Guam Multiple Award Construction Contract task order. As a result, the DoD did not have a comprehensive record of decisions made on the task order, and expended at least $1.45 million and added 93 days to the construction schedule for facilities that did not meet requirements and required further modification. As a result of our audit, NAVFAC Marianas personnel started to implement corrective actions on construction specifications, estimates, and contract documentation.
Appendix B

Additional Military Construction Guidance

Federal Acquisition Regulation Part 36

FAR part 36 establishes policies and procedures for contracting construction and architect-engineer services. Specifically, FAR part 36 states that, for architect-engineer services, the Government must announce all contract requirements publicly and negotiate contracts for required services based on the demonstrated competence and qualifications of prospective contractors at fair and reasonable prices. Personnel from the agency contracting for these services must evaluate each potential contractor based on factors such as professional qualifications, capacity to accomplish the work in the required time, and past performance. The agency head or a designated selection authority makes the final selection decision.

Defense Federal Acquisition Regulation Supplement Subpart 236.6

Defense Federal Acquisition Regulation Supplement subpart 236.6 states that the DoD must send written notifications to the congressional defense committees if the total estimated contract price for architect-engineer services or construction design exceeds $1.5 million. During the applicable notice period of 14 to 21 days, the DoD may begin developing a summary of the proposed contract action and administrative actions leading to the award. Defense Federal Acquisition Regulation Supplement part 236—in alignment with 10 U.S.C. Sections 4540, 7212, and 9540—including the statutory fee limitation for architect-engineer services for the preparation of designs, plans, drawings, and specifications as 6 percent of the project’s estimated construction cost. The 6-percent fee limitation also applies to work that was not initially included in the contract and redesign.

DoD Directive 6055.09-STD

DoD Directive 6055.09-STD, requires DoD Components to implement and maintain an effective explosive safety management program. The DoD protects people, property, and the environment from the potential damaging effects of an accident involving ammunition and explosives. DoD Directive 6055.09-STD provides precedence to explosive safety management principles and requirements that protect people and property while complying with applicable environmental regulations.

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40 The notice period is dependent on the medium used to transmit the information—14 days if provided by an electronic medium and 21 days if provided by other than electronic medium.

**NAVFAC Engineering and Construction Bulletins**

Engineering and Construction Bulletins provide timely guidance and information throughout NAVFAC on various engineering and construction topics. The bulletins contain information and policy related to business line programs, processes and metrics, technical information on engineering and construction topics, criteria, safety information, and delivery system information. For example, Engineering and Construction Bulletin No. 2007-01, October 13, 2006, details the authorized uses of MILCON design and construction funds.
Appendix C

MILCON Projects Reviewed

We reviewed nine MILCON projects on JRM valued at $574 million. The following sections provide details related to each MILCON project.

Pacific Airpower Resiliency-Tanker Group Maintenance Hangar (Project Number 3027)

NAVFAC Pacific contracting personnel awarded a design-bid-build contract to construct a reinforced concrete maintenance hangar to sustain critical missions such as Continuous Bomber Presence, Tanker Task Force, and Theater Security Packages. In the DD Form 1391, Air Force officials stated that the maintenance hangar bay will support aircraft maintenance, repair, and regularly scheduled inspections that require complete protection from the elements, including landing gear retraction tests, aircraft weighing, and airframe repairs. In addition, Air Force officials stated that, without this facility, JRM-Andersen officials are unable to provide timely maintenance to aircraft, significantly reducing readiness and degrading operational capability to support the Continuous Bomber Presence, Tanker Task Force, and Theater Security Packages. Air Force officials also stated that not having this facility leaves aircrews without required protection in the event of a contingency. NAVFAC Pacific contracting personnel awarded the contract on December 18, 2014, for $96.6 million with a CCD of March 22, 2017.

Guam Strike Fuel Systems Maintenance Hangar (Project Number 3010)

NAVFAC Marianas awarded a design-bid-build contract to construct a maintenance hangar to provide repairs, functionality checks, and inspections on aircraft fuel systems, fuel tanks, and related components in support of the Guam Strike mission. In the DD Form 1391, Air Force officials stated that the Fuel Systems Maintenance Hangar was required to support a Continuous Bomber Presence, Tanker Task Force, Theater Security Packages, and the Global Hawk beddown. Air Force officials stated that, without this facility, Andersen Air Force Base will not be able to provide adequate maintenance to aircraft fuel systems to support the Continuous Bomber Presence, Tanker Task Force, Theater Security Packages, and the Global Hawk beddown. NAVFAC Marianas contracting personnel awarded the contract on February 20, 2015, for $89.9 million with a CCD of March 21, 2017.

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42 Contract Number N62742-10-D-1307, Task Order 0002.
43 Contract Number N62742-10-D-1307, Task Order JQ01.
Defense Policy Review Initiative Live-Fire Training Range Complex (Project Number 715)

NAVFAC Pacific contracting personnel awarded a design-build contract to construct an LFTRC at U.S. Naval Support Activity Andersen Guam, JRM, Guam, on August 24, 2017, for $78.2 million in support of the Marine Corps relocation. In the request for proposal, NAVFAC Pacific contracting personnel stated that the LFTRC would include: four new small arms ranges, a range administrative building, a range maintenance building, observation towers, utilities, information technology and communication lines to Naval Computer and Telecommunications Station Finegayan, roadways, and reconstruction of an existing route. Upon completion of the LFTRC, the facility will be available for use by Marines presently stationed on Guam, along with Marines who deploy to Guam for other training events, and other Service forces on Guam, such as the National Guard. As Marines relocate from Okinawa to Guam, use of the facility will increase to the capacity the range is designed for.

As of January 2019, Guam did not have sufficient known distance range capacity to accommodate anticipated sustainment level marksmanship requirements to support the Marine Corps active duty personnel relocating to Guam. Weapons training and qualifications are essential components of Marine readiness, and constructing these ranges was part of the agreement to relocate Marines from Okinawa. If the training ranges are not constructed, the agreement between the United States and Japan could be compromised.

Upgrade Fuel Pipeline (Project Number 1303)

NAVFAC Marianas contracting personal awarded a design-bid-build contract to upgrade the existing fuel transfer pipeline from Sasa Valley Fuel Farm to Andersen Air Force Base, Guam on December 21, 2013, for $52.4 million. The project included upgrading two existing 7.5-mile, 10-inch diameter cross-island transfer pipelines and one existing 15.7-mile, 254-millimeter diameter fuel cross-island transfer pipeline. In addition, the project included constructing one new 15.7-mile, 254-millimeter diameter transfer pipeline. Work included upgrading a pumphouse, a new generator building with emergency generators, new filter separators, piping modifications, upgrades to the electrical system, cathodic protection, and leak detection.

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44 Contract Number N62742-17-C-1319.
45 Contract Number N40192-14-C-1300.
In the DD Form 1391, DLA personnel explained that the existing pipeline supplies fuel at less than one-half the rate needed to meet operational requirements. The existing system does not have the pressure controls to safely operate at the higher pressures needed to allow for higher fuel flow rates. In addition, the inbound filtration is not adequate for the required design flows. DLA personnel added that failure to complete the project could negatively affect mission readiness because issue capability at maximum requirements are greater than the current capability.

**Broad Area Maritime Surveillance Forward Operational and Maintenance Hangar (Project Number 625)**

NAVFAC Pacific contracting personnel awarded a design-build contract to construct a BAMS Forward Operational and Maintenance Hangar at Andersen Air Force Base, Guam, to support operations and maintenance for the MQ-4C Triton Unmanned Aircraft System.\(^{46}\) NAVFAC Pacific contracting personnel awarded the contract on March 27, 2014, for $45.5 million with a planned CCD of April 25, 2016. In the DD Form 1391, Navy officials explained that, without the BAMS hangar, U.S. and allied forces operations and surveillance intelligence would be severely impacted by the absence of information that the BAMS platform provides.

**X-Ray Wharf Improvements (Project Number 518)**

NAVFAC Pacific contracting personnel awarded a design-build contract for X-Ray Wharf Improvements on Naval Base Guam on June 3, 2014, with a CCD of October 20, 2016, for $39.7 million.\(^{47}\) In the DD Form 1391, NAVFAC Pacific contracting personnel detailed the modernization of the North Berth at X-Ray Wharf to provide berthing for T-AKE class auxiliary cargo and ammunition ships. NAVFAC Pacific contracting personnel also included minimum utilities services, including potable water, sewer, Bilge and Oily Wastewater Treatment System, and power, as well as fire protection, storm drainage, wharf and security lighting, and dredges portions of the Inner Apra Harbor. In the DD Form 1391, Navy officials stated that without the X-Ray Wharf Improvements, the Navy would have to continue using Kilo Wharf, causing delayed ammunition handling and inefficient supply movement to and from other locations.

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\(^{46}\) Contract Number N62742-10-D-1309, Task Order 0003.

\(^{47}\) Contract Number N62742-10-D-1309, Task Order 0006.
**Hardening of Guam Petroleum Oil Lubricant Infrastructure (Project Number 652)**

NAVFAC Pacific contracting personal awarded a design-bid-build contract to harden shelters over and around three Navy POL infrastructure elements in Guam on May 23, 2018, for $24.7 million.\(^{48}\) In the DD Form 1391, Navy officials explained that the Navy requires the project to reduce the risk of damage to its infrastructure and assure the capability of distributing and dispensing fuel during a contingency and various POL sites were identified as candidates for hardening to meet this requirement. The Navy mission requires that the POL system continue to operate with minimal downtime to support refueling operations and to minimize risk due to damage. Minimizing damage to the POL infrastructure requires hardening of these sites by constructing overhead structures. In the DD Form 1391, Navy officials stated that the existing infrastructure is critical for POL distribution and refueling and there are no contingency plans that will support operations should one of the three facilities become damaged.

**Whole House Revitalization, Phase 2 at Lockwood Terrace (Project Number 1403)**

NAVFAC Pacific contracting personnel awarded the design-build contract to provide whole house revitalization to 59 three- and four-bedroom single-family officer and enlisted housing units.\(^{49}\) In the DD Form 1391, Navy officials explained that the whole house improvements would bring the housing units up to acceptable DoD housing standards and was required to support Navy service members and their families in Guam. Without this project, these homes would have fallen short of the DoD construction standards, and the Navy would not be able to provide enough suitable, modern, and adequate housing to military personnel and their families. NAVFAC Pacific contracting personnel awarded the contract for $21.6 million on April 30, 2015, and had a CCD of August 13, 2017.

**Petroleum Oil Lubricant Fuel System Hardened Structures (Project Number 3760)**

NAVFAC Marianas contracting personnel awarded the design-bid-build contract to construct reinforced concrete hardened structures around three existing and new POL structures, expanding the hydrant loop system, and providing additional system redundancy.\(^{50}\) In the DD Form 1391, Air Force officials explained that a

\(^{48}\) Contract Number N62742-18-C-1318.

\(^{49}\) Contract Number N62742-10-D-1302, Task Order 0002.

\(^{50}\) Contract Number N40192-10-D-2804, Task Order 0020.
resilient fuel system is crucial to sustain operations at JRM, Andersen Air Force Base, and that without hardened structures for these components and hydrant connections, the fuel systems are more vulnerable to temporary loss, which could result in potential mission failure to a remote location that is critical to regional security. NAVFAC Marianas contracting personnel awarded the contract for $17.9 million, on October 7, 2014, and had a CCD of March 30, 2016.
# Appendix D

## Construction Contracts Reviewed

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Description</th>
<th>Contract Number</th>
<th>Programmed Amount ($)</th>
<th>Time Delays</th>
<th>Cost Increase Over Programmed Amount ($)</th>
<th>Reasons For Delays and Cost Increases</th>
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<tbody>
<tr>
<td>3027</td>
<td>Pacific Airpower Resiliency - Tanker Group Maintenance Hangar</td>
<td>N62742-10-D-1307, Task Order 0002</td>
<td>132,600,000</td>
<td>1 year, 6 months</td>
<td>-</td>
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<td>3010</td>
<td>Guam Strike Fuel Systems Maintenance Hangar</td>
<td>N62742-10-D-1307, Task Order JQ01</td>
<td>128,000,000</td>
<td>1 year, 1 month</td>
<td>-</td>
<td>✓ ✓</td>
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<tr>
<td>715</td>
<td>Defense Policy Review Initiative Live-Fire Training Range</td>
<td>N62742-17-C-1319</td>
<td>125,677,000</td>
<td>1 year</td>
<td>-</td>
<td>✓</td>
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<td>1303</td>
<td>Upgrade Fuel Pipeline</td>
<td>N40192-14-C-1300</td>
<td>67,400,000</td>
<td>2 years, 1 month</td>
<td>25,421,993.75</td>
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<td>625</td>
<td>BAMS Forward Operational and Maintenance Hangar</td>
<td>N62742-10-D-1307, Task Order 0003</td>
<td>61,702,000</td>
<td>2 years, 5 months</td>
<td>-</td>
<td>✓ ✓</td>
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## Construction Contracts Reviewed (cont’d)

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Description</th>
<th>Contract Number</th>
<th>Programmed Amount ($)</th>
<th>Time Delays</th>
<th>Cost Increase Over Programmed Amount ($)</th>
<th>Reasons For Delays and Cost Increases</th>
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<tr>
<td>652</td>
<td>Hardening Of Guam POL Infrastructure</td>
<td>N62742-18-C-1318</td>
<td>26,975,000</td>
<td>-</td>
<td>2,000,000</td>
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<td>1403</td>
<td>Whole House Revitalization, Phase 2 At Lockwood Terrace</td>
<td>N62742-10-D-1312, Task Order 0002</td>
<td>23,100,000</td>
<td>7 months</td>
<td>2,993,420</td>
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<td>3760</td>
<td>POL Fuel System Hardened Structures</td>
<td>N40192-10-D-2804, Task Order 0020</td>
<td>20,000,000</td>
<td>3 years, 10 months</td>
<td>5,422,000</td>
<td>✓  ✓</td>
</tr>
</tbody>
</table>

**Acronyms**
- BAMS: Broad Area Maritime Surveillance
- POL: Petroleum Oil Lubricant

**Source:** The DoD OIG.
MEMORANDUM FOR DoD OIG, ATTENTION: PROGRAM DIRECTOR FOR AUDIT ACQUISITION, CONTRACTING AND SUSTAINMENT

SUBJECT: Response to DoD OIG Audit D2019-D0000AV-0048.000, Audit of Cost Increases and Schedule Delays for Military Construction Projects at Joint Region Marianas

Ref: (a) SECNAVINST 5200.34E
(b) DoD OIG Draft Report 02 October 2019

1. Per references (a) and (b), OPNAV response to the pertinent recommendation is provided.

RECOMMENDATION A.5: We recommend the Chief of Naval Operations revise and reissue Office of the Chief of Naval Operations Instruction 11010.20H, “Navy Facilities Projects,” to ensure that all Navy military construction projects, including housing projects, follow the same planning and programming process.

RESPONSE/CURRENT STATUS: Partially concur. OPNAV N46 is revising the cited instruction. The draft instruction is at the O6/GS15 review level with an estimated completion date of 20Nov19 and expected to be ready for Director, Navy Staff review in March 2020. The draft revision requires Family Housing Construction to follow the same planning and programming processes as other Military Construction. As for emergent requirements, Navy will follow established planning and programming processes as much as possible but will focus on meeting emergent requirement timelines.

2. My point of contact for this matter is [PERSONAL INFORMATION REDACTED].

E. M. KERN
Director, Shore Readiness Division
DEPARTMENT OF THE AIR FORCE
PACIFIC AIR FORCES

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL

FROM: PACAF/CD
25 E Street, Suite G-210
JBPH-HI 96853-5420


1. This is the HQ PACAF response to the DoDIG Draft Report, “Audit of Cost Increases and Schedule Delays for Military Construction Projects at Joint Region Marianas,” Project No. D2019-D000AV-0048.000. PACAF concurs with the report as written.

2. The PACAF/A4 in coordination with SAF/A4 will correct issues identified in this report, and develop and implement a corrective action plan outlined in the following recommendation.

   a. Recommendation: The DoDIG recommends Pacific Air Forces issue a memorandum emphasizing to personnel the importance of identifying all costs related to Munitions and Explosives of Concern clearance when completing the DD Form 1391, “FY2020 Military Construction Project Data,” and for all future Military Construction projects.

   b. Air Force Response: PACAF concurs and PACAF/A4 will issue a memorandum emphasizing the importance of identifying all costs related to Munitions and Explosives of Concern clearance when completing the DD Form 1391, “FY2020 Military Construction Project Data,” and for all future Military Construction projects. The estimated completion date is 30 November 2019.

3. The HQ PACAF POC is

   [Redacted]

   [Signature]

   BRIAN M. KILLOUGH
   Major General, USAF
   Deputy Commander
MEMORANDUM FOR DEPARTMENT OF DEFENSE OFFICE OF THE INSPECTOR GENERAL PROGRAM DIRECTOR FOR AUDIT ACQUISITION, CONTRACTING AND SUSTAINMENT

SUBJECT: DLA Response to DoD OIG Draft Report “Audit of Cost Increases and Schedule Delays for Military Construction Projects at Joint Region Marianas” (Project No. D2019-D000AV-0048.000)

Attached is the Defense Logistics Agency’s response to recommendation A.2. of the subject draft report. DLA appreciates the opportunity to review and comment on the finding and recommendation. DLA concurs with the recommendation and has taken corrective action.

The point of contact for this engagement is:

KRISTIN K. FRENCH
DLA Chief of Staff

Attachment:
As stated
Defense Logistics Agency (cont’d)

DLA Response to Draft Report:

**Recommendation A.2.** The Defense Logistics Agency Director issue a memorandum emphasizing to facilities personnel the importance of identifying all costs related to Munitions and Explosives of Concern clearance when completing the DD Form 1391, “FY____ Military Construction Project Data,” for all future Military Construction projects.

**DLA Response:** Concur. On October 30, 2019, the Director, DLA Installation Management issued a memorandum to Installation Support Facilities Modernization Division personnel emphasizing the importance of identifying all costs related to Munitions and Explosives of Concern clearance when completing the DD Form 1391, “FY____ Military Construction Project Data,” for all future military construction projects. It also highlights the importance of ensuring that current interpretations of applicable DoD Policy are considered. DLA believes this action meets the intent of the recommendation and requests closure.
### Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATR</td>
<td>Above Threshold Reprogramming</td>
</tr>
<tr>
<td>BAMS</td>
<td>Broad Area Maritime Surveillance</td>
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<tr>
<td>BTR</td>
<td>Below Threshold Reprogramming</td>
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<td>CCD</td>
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<td>CPARS</td>
<td>Contractor Performance Assessment Reporting System</td>
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<td>CNIC</td>
<td>Commander, Navy Installations Command</td>
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<td>Naval Sea Systems Command Ordnance Pamphlet</td>
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<td>OSD</td>
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<tr>
<td>USD(C)/CFO</td>
<td>Under Secretary of Defense (Comptroller)/Chief Financial Officer</td>
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