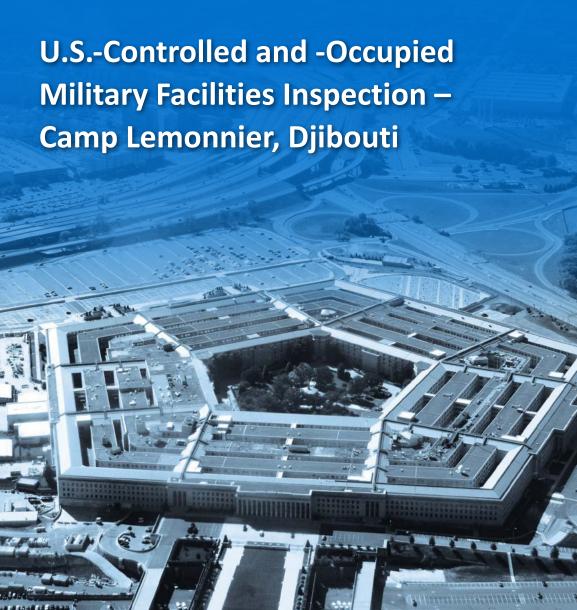


INSPECTOR GENERAL

U.S. Department of Defense

JUNE 2, 2017





Mission

Our mission is to provide independent, relevant, and timely oversight of the Department of Defense that supports the warfighter; promotes accountability, integrity, and efficiency; advises the Secretary of Defense and Congress; and informs the public.

Vision

Our vision is to be a model oversight organization in the Federal Government by leading change, speaking truth, and promoting excellence—a diverse organization, working together as one professional team, recognized as leaders in our field.



For more information about whistleblower protection, please see the inside back cover.



Results in Brief

U.S.-Controlled and -Occupied Military Facilities Inspection – Camp Lemonnier, Djibouti

June 2, 2017

Objective

Our objective was to inspect U.S. military-occupied facilities at Camp Lemonnier, Djibouti, to verify compliance with DoD health and safety policies and standards regarding electrical and fire protection systems.

Findings

We found that new construction of U.S. military-occupied facilities at Camp Lemonnier, Djibouti, were generally well-built. However, some new construction that was accepted as complete did not fully comply with DoD health and safety policies and standards regarding electrical and fire protection systems.

We found that existing facilities were not being maintained to DoD health and safety policies and standards. We identified a total of 691 deficiencies that could affect the health, safety, and well-being of warfighters: 172 related to electrical systems and 519 related to fire protection systems.

The deficiencies identified during the inspection resulted from: acceptance of new construction that did not comply with DoD health and safety policies and standards, inadequate contractor maintenance, insufficient Government inspection of work performed by the contractor, and lack of onsite Government specialized skills in electrical and fire protection inspections.

We considered five of the deficiencies we identified to be critical deficiencies requiring immediate corrective action and issued a

Findings (cont'd)

notice of concern on September 9, 2016, to the Commanders of Navy Installations Command, and Camp Lemonnier, Djibouti. See Appendix C.

Recommendations

We recommend that the Commander, Navy Region Europe, Africa, Southwest Asia:

- Conduct a root cause analysis and implement a corrective action plan for all deficiencies identified in this report. Ensure that all facility operations and maintenance comply with the Unified Facilities Criteria and the National Fire Protection Association standards. Provide the DoD Office of Inspector General a copy of the analysis and corrective action plan within 90 days of the issuance of this report.
- Prepare and implement a corrective action plan to ensure all construction projects are reviewed for compliance with applicable electrical and fire protection systems codes and standards before they are accepted by the Government as complete. Provide the DoD Office of Inspector General a copy of the corrective action plan within 90 days of the issuance of this report.
- Review the circumstances surrounding the failure by the contracting officer, contracting officer's representative, and the performance assessment representative to fully document the contractor's work performance and, as appropriate, initiate administrative action. Provide the DoD Office of Inspector General a copy of the review findings within 90 days of the issuance of this report.
- Create an acquisition plan and take action for obtaining the services of certified electrical safety experts, as well as qualified fire protection engineers, sufficient to provide continual inspection of the base operating services contract. Provide the DoD Office of Inspector General a copy of the plan within 90 days of the issuance of this report.



Results in Brief

U.S.-Controlled and -Occupied Military Facilities Inspection - Camp Lemonnier, Djibouti

Management Actions

The Commanding Officer, Camp Lemonnier, Djibouti, immediately directed the contractor to take action to correct the deficiencies identified in the September 9, 2016, notice of concern regarding the high-explosive magazines and affirmed that the contractor's performance will not be accepted until all deficiencies are corrected. Furthermore, the Commanding Officer ordered the installation of temporary barrier protection in locations where live conductors were on the ground.

The Commander, Navy Region Europe, Africa, Southwest Asia (CNREURAFSWA), initiated a plan to correct electrical deficiencies and in the future. will coordinate with the Naval Facilities Engineering Command (NAVFAC) Atlantic on corrections for the fire protection deficiencies.

In addition, the CNREURAFSWA indicated that personnel will comply with NAVFAC's existing policies and regulations to ensure that thorough design reviews are conducted to verify compliance with applicable electrical codes and standards.

Management Comments and Our Response

The Commander, Navy Installation Command (CNIC), and the CNREURAFSWA agreed with our findings and recommendations and have taken steps to mitigate and reduce the risks to Government personnel and property. The CNREURAFSWA stated that he will develop a corrective action plan to address electrical safety decencies but did not indicate that he would develop a corrective action plan to address fire protection deficiencies. In addition, the CNREURAFSWA agreed

to comply with NAVFAC performance assessment guidelines to ensure designs comply with applicable electrical codes and standards but did not address design review compliance with fire protection codes and standards. Therefore, the electrical recommendations are resolved, but will remain open until we receive a root cause analysis and corrective action plans and we can verify that the plans have been implemented. We request that the CNREURAFSWA provide the root cause analysis and the electrical corrective action plan within 90 days of the issuance of this report. The fire protection recommendations are unresolved because, CNREURAFSW did not comment on them or provide a root cause analysis and corrective action plans or an alternate solution. We request that the CNREURAFSWA provide comments that address the specifics of the fire protection recommendations and provide a root cause analysis and corrective actions plan within 90 days of the issuance of this report.

The CNREURAFSWA did not fully address our recommendations regarding the accountability of the acquisition specialist who did not adhere to NAVFAC guidelines because he did not indicate that a review of the circumstances would be provided. In addition, the CNREURAFSWA did not fully address our recommendation to acquire the services of electrical safety experts and fire protection engineers because he did not so indicate what action would be taken if current staffing is not adequate. Therefore, the recommendations are unresolved and remain open. We request that the CNREURAFSWA provide further comments that address the specifics of the recommendations within 90 days of the issuance of this report. Please see the Recommendations Table on the next page.

Recommendations Table

Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed
Commander, Navy Region Europe, Africa, Southwest Asia	B.1.a, B.1.b, C.1.a, and C.1.b	A.1.a, A.1.b	None
Commander, Navy Installations Command	B.1.a, B.1.b, C.1.a, and C.1.b	A.1.a, A.1.b	None

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.



INSPECTOR GENERAL DEPARTMENT OF DEFENSE

4800 MARK CENTER DRIVE ALEXANDRIA. VIRGINIA 22350-1500

June 2, 2017

MEMORANDUM FOR DISTRIBUTION

SUBJECT: U.S.-Controlled and -Occupied Military Facilities Inspection - Camp Lemonnier, Djibouti (Report No. DODIG-2017-087)

We are providing this report for review and comment. The Commander, Navy Installation Command is providing new well-built facilities at Camp Lemonnier, Djibouti. However, some new construction that was accepted as complete did not fully comply with DoD health and safety policies and standards regarding electrical and fire protection systems. We also found that existing facilities were not being maintained to DoD health and safety policies and standards.

We conducted this inspections of electrical and fire protection systems in accordance with the Council of the Inspectors General on Integrity and Efficiency, "Quality Standards for Inspection and Evaluation." DoD Instruction 7650.03 requires that recommendations be resolved promptly. The Commander, Navy Installation Command, agreed with all the recommendations, however, the Commander's comments did not indicate when the Navy Region Europe, Africa, Southwest Asia will provide the corrective action plans. Therefore the recommendations remain open. Also, the Commander's comments did not describe the corrective actions the Navy Region Europe, Africa, Southwest Asia will take to address Recommendations B and C. Therefore, Recommendations B and C remain unresolved, and we request additional comments by July 16, 2017. The recommendations can be resolved by detailing the specific actions the Navy Region Europe, Africa, Southwest Asia will take to implement the recommendations or by providing alternate means of addressing the finding. The recommendations will be closed once we receive the corrective action plans and can verify that they have been implemented.

Please send a PDF file containing your comments to PO-TAD@dodig.mil. Copies of your comments must have the actual signature of the authorizing official for your organization. We cannot accept the /Signed/ symbol in place of the actual signature. If you arrange to send classified comments electronically, you must send them over the SECRET Internet Protocol Router Network (SIPRNET).

We appreciate the courtesies extended to the staff

Rándolph R. Stone

Deputy Inspector General

Policy and Oversight

Distribution:

UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS UNDER SECRETARY OF DEFENSE (COMPTROLLER)/CHIEF FINANCIAL OFFICER COMMANDER, U.S. AFRICA COMMAND COMMANDER, COMBINED JOINT TASK FORCE-HORN OF AFRICA DIRECTOR, JOINT STAFF NAVAL INSPECTOR GENERAL COMMANDER, NAVY INSTALLATIONS COMMAND COMMANDER, NAVY REGION EUROPE, AFRICA, SOUTHWEST ASIA COMMANDER, NAVAL FACILITIES ENGINEERING COMMAND COMMANDER, CAMP LEMONNIER, DJIBOUTI

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Introduction

Objective

Our objective was to physically inspect U.S.-controlled and -occupied facilities at Camp Lemonnier, Djibouti, to verify compliance with health and safety policies and standards regarding electrical and fire protection systems. This project was conducted in support of the overseas contingency operation, Operation FREEDOM'S SENTINAL, and was completed in accordance with our oversight responsibilities, described in Section 8L of the Inspector General Act of 1978, as amended. See Appendix A for information about the scope and methodology and Appendix B for prior coverage.

Background

The DoD Office of Inspector General (OIG) regards the health and safety of the warfighter as a priority and has previously performed similar inspections of U.S military-occupied facilities in Southwest Asia, Asia, the Middle East, and the United States. This inspection project verified whether the electrical and fire protection systems in U.S. military-occupied facilities at Camp Lemonnier were in compliance with DoD health and safety policies and standards. This inspection was conducted onsite at Camp Lemonnier, Djibouti.

Camp Lemonnier, Djibouti

Camp Lemonnier is in Djibouti, an east African country, bordering the Gulf of Aden and the Red Sea, between Eritrea and Somalia. The base is operated by U.S. Navy Region Europe, Africa, Southwest Asia, and is the headquarters for Combined Joint Task Force-Horn of Africa (CJTF-HOA). CJTF-HOA provides and supports demining, humanitarian, and counter-terrorism efforts, and serves as a hub for aerial operations in the Gulf region.

Inspection Process and Criteria

We inspected electrical and fire protection systems in U.S. military-occupied and -controlled facilities at Camp Lemonnier to verify compliance with DoD health and safety policies and standards. We reviewed the base operating services (BOS) contract requirements to determine which Unified Facilities Criteria (UFC) and National Fire Protection Association (NFPA) codes were applicable for the inspection. See Appendix E for a list of inspection standards, codes, policies, and laws. We inspected 324 rooms in 52 buildings. The buildings included offices, a clinic, a theater, shops, living quarters, latrines, showers, laundry, and mechanical rooms. We also inspected 38 supporting facilities which included fuel storage, power plants, an incinerator, and a hazardous waste storage facility.

Government contract administration policies and practices were not the focus of this inspection. However, the inspection team included an audit subject matter expert (SME) who reviewed the BOS contract N62470-13-D-3008 performance work statement (PWS) with regard to electrical and fire protection requirements and interviewed the contracting officer's representative (COR) for the electrical and fire protection portion of the BOS contract. After our inspection was completed, we briefed the results to the installation commander and his staff and provided them a draft copy of all deficiencies identified.

Notice of Concern

On September 9, 2016, we issued a notice of concern (NOC) documenting critical electrical deficiencies identified during this inspection that required immediate corrective action. Specifically, the NOC identified deficiencies found in the newly constructed, high-explosive magazines, a building where military arms are stored. The magazines lacked air terminals and had insufficient bonding of metal doors, frames, and fence gates. These issues present a significant and immediate risk of explosion during adverse weather. We also found unprotected conductors on the ground, vulnerable to abrasion by foot traffic, which increases the risk of shock and electrocution due to contact with exposed wiring. We found an electrical panel intended for indoor use being used outside. The panel had open vents that can allow dust and water to enter and contact exposed wires, increasing the risk of shock and electrocution. Also the lockout/tagout¹ process was not being properly followed; this could lead to inadvertently energizing a circuit that has been shut down for repair and electrocution.

The Commander, Navy Region Europe, Africa, Southwest Asia, and the Commanding Officer, Camp Lemonnier, Djibouti, responded to our NOC on September 19, 2016, with a plan to correct the safety deficiencies. See Appendix C and Appendix D for a copy of the NOC and the Navy's response.

¹ To lockout/tagout is to isolate a circuit to prevent an unplanned re-energization and the resulting hazard to personnel and equipment.

Finding A

Camp Lemonnier Electrical System Deficiencies

We identified 172 deficiencies related to electrical systems. These deficiencies could have been mitigated if Camp Lemonnier officials had ensured that electrical installation and maintenance was performed as required by applicable NFPA codes and standards, as well as base policy. As a result, these deficiencies pose an increased risk of fire, injury, and loss of life or property.

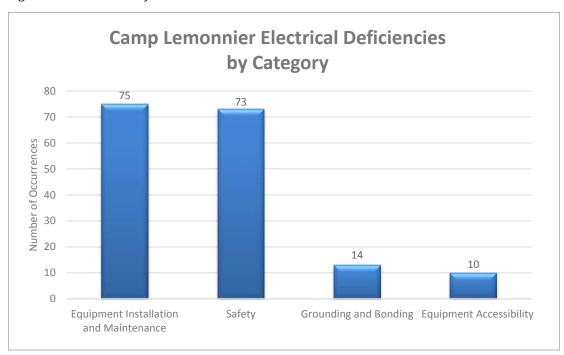


Figure 1. Electrical Deficiencies

We documented 172 deficiencies related to electrical systems (see Figure 1). The deficiencies were related to equipment installation and maintenance, safety, grounding and bonding, and equipment accessibility. All of these deficiencies pose a risk of shock, electrocution, or fire.

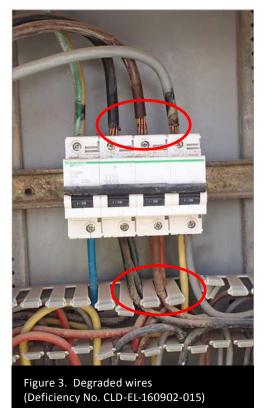
Electrical equipment installation and maintenance at Camp Lemonnier was not being performed in a manner consistent with NFPA standards. We found electrical panels installed outdoors that were not designed for outdoor conditions. The surge tents, which were temporary sleeping quarters, were powered by a nearby electrical panel, which was placed outdoors. The panel (Figure 2) was not protected from the environment and significantly degraded. The vents on the panel allowed dust and water to penetrate the panel, which could energize the panel exterior and shock personnel or start a fire. In addition, there was no front panel cover to prevent contact with the internal energized parts.

In another panel, we found scorched, cracked, and receding insulation on wires, which were signs of the wires overheating (Figure 3). Because the wire size was not rated for as high of a load as the circuit breaker, the wires were failing before the panel breakers tripped and stopped the flow of electricity. Wires that fail by overheating could cause an arc flash. An arc flash occurs when a flashover of electric current leaves its intended path and travels through the air from one conductor to another. The results are often violent and when a human is in close proximity to the arc flash, serious injury, and even death can occur.

We identified 17 occurrences of improper attachment of electrical wires to electrical fixtures, such as switches and outlets. These wires are required to have sheathing or flexible conduit secured inside the electrical box. Without the sheathing or flexible conduit secured inside the electrical box, there is an increased risk of electrical shock or electrocution.



environmental degradation (Deficiency No. CLD-EL-160902-020)



4 DODIG-2017-087

We documented 25 occurrences of unprotected large feeder wires. Buildings and air conditioning units were powered by large feeder wires, which were routed above ground without protection from foot, bicycle, and vehicle traffic. Traffic over wires causes the insulation to break or wear away, thus exposing the metal wire. Worn insulation may result in shock and electrocution. A wire with damaged insulation and submerged in water (Figure 4) was discovered between containerized working units. We observed the wire smoking and making crackling noises, which is evidence of broken insulation and energized water.

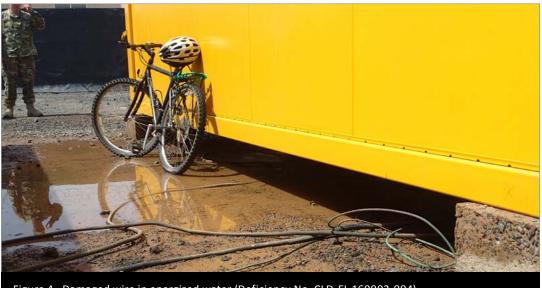


Figure 4. Damaged wire in energized water (Deficiency No. CLD-EL-160902-004)

We found 25 occurrences where ground fault circuit interrupters (GFCIs) should have been installed for personnel safety. Additionally, some GFCIs were not properly maintained and were not working. If personnel use outlets unprotected by GFCIs in wet areas, there is a risk of shock or electrocution.

Ten buildings had air conditioning units that did not have a service disconnect installed. A service disconnect is required by NFPA 70, article 440.14, to be within sight of air conditioning units so technicians can ensure power is turned off while performing maintenance.

Fourteen electrical panels were not sufficiently secured. The panel adjacent to building 100 was unsecured and contained cracked and degrading wires. Personnel may open the unsecured panel and come into contact with exposed wires and be shocked or electrocuted.

Electrical circuits under maintenance were not secured in a safe manner. These circuits are required by NFPA 70E, article 120.2, to be secured using a lockout/tagout procedure, which ensures that the circuit cannot be inadvertently

energized while undergoing maintenance. In building 310, we observed a breaker in the off position with a note attached inside electrical panel KP-3. The note read, "unit not working don't on breaker." The NFPA code requires the breaker to be locked with a key or combination. Additionally, there was no lockout/tagout log to identify the circuits under maintenance in building 310. This increases the risk of shock or electrocution to anyone using or working on the electrical circuit.



Figure 5. Magazine with inadequate lightning protection (Deficiency No. CLD-EL-160902-021)

All four of the newly built, high-explosive magazines in the munition storage area had deficient lightning protection systems and lacked bonding of conductive fixtures (Figure 5). Without adequate lightning protection and bonding, lightning could strike a high-explosive magazine, create arcing, and transfer electricity through the conductors to electrocute personnel or explode ordnance. The distances between air terminals, also known as lightning rods or strike termination devices, was greater than the maximum allowed 25 feet. Each magazine has only two air terminals, which did not fully protect the structure. All of the magazines were missing the air terminals required on each of the rear vents.

The munition storage area had the following insufficient bonding of metal fixtures.

- All four magazine blast doors were not bonded to the ground ring electrode.
- The metal door, frame, and grate in one magazine were not properly bonded to one another.
- The perimeter fence and gate, access road stop sign, and light post, were not properly bonded.

We also found that the swimming pool water pumps were not bonded to the structure or the pool. If any of the three pool pumps fail, they may energize the water and electrocute swimmers.

Conclusion

Electrical equipment installation and maintenance at Camp Lemonnier was not being performed in a manner consistent with contract required NFPA standards. The lack of qualified onsite Government personnel performing inspections and oversite has resulted in systemic issues that increase the risk of personnel being electrocuted.

Recommendations, Management Comments, and **Our Response**

Recommendation A.1

We recommend that the Commander, Navy Region Europe, Africa, **Southwest Asia:**

- Conduct a root cause analysis and implement a corrective action plan for all electrical deficiencies identified in this report. Ensure that all facility operations and maintenance comply with the Unified Facilities Criteria and the National Fire Protection Association standards. Provide the DoD Office of Inspector General a copy of the analysis and corrective action plan within 90 days of the issuance of this report.
- b. Prepare and implement a corrective action plan to ensure all construction projects are reviewed for compliance with applicable electrical codes and standards before they are accepted by the Government as complete. Provide the DoD Office of Inspector General a copy of the corrective action plan within 90 days of the issuance of this report.

Commander, Navy Installation Command, Comments

The CNIC, endorsing comments from the CNREURAFSWA, agreed and asserted that the cause of the deficiencies was that existing Navy best practices, policies, and regulations were not followed. The CNREURAFSWA further stated that the Navy Region Europe, Africa, Southwest Asia (EURAFSWA) is developing a corrective action plan and has corrected the pool bonding deficiencies under the BOS contract. A follow-on project to address all electrical issues has been designed and delivered to EURAFSWA for funding.

The CNREURAFSWA indicated that NAVFAC's existing policies and regulations to ensure that thorough design reviews are conducted to verify compliance with applicable electrical codes and standards would be followed. Additionally, the CNREURAFSWA stated that the NAVFAC Atlantic had generated a lessons learned in January 2017 to ensure that the construction oversight issues are not repeated.

Our Response

Comments from the CNREURAFSWA addressed all specifics of the recommendations; therefore, the recommendations are resolved but remain open. We request that the CNREURAFSWA provide the NAVFAC Atlantic January 2017 lessons learned document or another document containing a root cause analysis of the failure to follow existing Navy best practices, policies, and regulations at Camp Lemonnier. Additionally, we request the CNREURAFSWA provide a corrective action plan for implementing the lessons learned, responsive to Recommendation A.1.a, as well as a second corrective action plan responsive to Recommendation A.1.b, within 90 days of the issuance of this report. We will close the recommendations when we receive the root cause analysis and can verify that the corrective action plans have been implemented.

Finding B

Camp Lemonnier Fire Protection System Deficiencies

We identified 519 fire protection deficiencies. The deficiencies found during our inspection could have been mitigated if Camp Lemonnier officials had ensured that fire protection system installation and maintenance was performed as required by applicable NFPA codes and standards, as well as base policy. As a result, these deficiencies pose an increased risk of fire, injury, and loss of life or property.

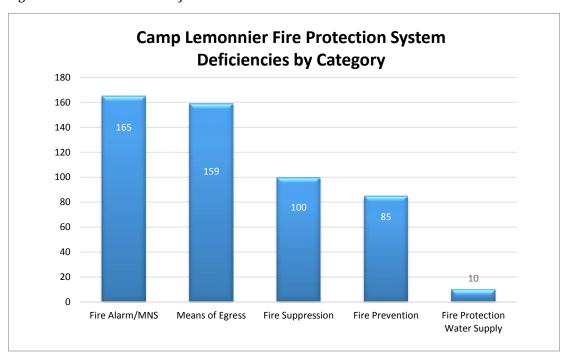


Figure 6. Fire Protection Deficiencies

We documented 519 fire protection deficiencies. The deficiencies found were related to fire alarm or mass notification, means of egress, fire suppression, fire prevention, and fire protection water supply. These deficiencies increase the risk of fire, injury, or death.

We observed two fire alarm control panels that were inoperable and seven that had multiple trouble conditions.² The alarm control panel receives information from sensors designed to detect fire and automatically controls equipment and the transmission of information necessary for the building occupants and the fire department to react to a fire. A panel may control, monitor, or initiate several hundred devices or functions, such as smoke detector operations, sprinkler water

² Trouble conditions are also known as "faults" or "defects" in the system.

flow, closing of fire doors, and delivery of building-wide announcements. If the panel detects a problem with one of these features, it will display a trouble condition on the panel screen. Failing to correct the trouble condition means part of the system may not work properly to prevent a fire from spreading or notify building occupants of a fire, increasing the risk of injury, death, or property damage.

We found that the base-wide mass notification system (MNS) maintained by the Space and Naval Warfare Systems Command (SPAWAR) did not interface with the individual building MNS transceivers. As a result, none of the newly installed building fire alarm panels were integrated with the base-wide MNS system.

Means of egress available for immediate use by occupants is required by NFPA 101. Inadequate means of egress could inhibit occupants' ability to escape in the event of fire, leading to injury or death. We found five buildings that had door hardware that was broken or in disrepair. We found two tents in the surge camp section that had been built for morale welfare and recreation (MWR) to serve as the united service organization (USO) facility. The building plan was not reviewed by the fire protection contractor or the Camp Lemonnier PWD for compliance with health and safety requirements before or during construction. We observed that four of the exits in the USO had no panic hardware on the exits. The USO tents were one example of the lack of coordination of construction projects with PWD and the fire protection contractor.

We found six buildings with missing or nonfunctioning exit signs. NFPA 101 requires signs to be placed in every location where the direction of travel is not apparent, so that people can quickly and safely get out of the building in the event of a fire.

We found seven buildings with blocked exits, four of which had egress stairs blocked or were being used as storage. In building 737, there was a sign posted warning that storage is not allowed; however, there was storage present in the area (Figure 7). Potentially combustible materials, such as paint, brushes, and rags, stored in stairways could compromise the tenability of the exit enclosure and put lives at risk.



Figure 7. Storage in stairway (Deficiency No. CLD-EL-160902-039)

The assembly occupancy building 305 that is used as an MWR gathering hall did not have an automatic fire suppression sprinkler system. The need for the sprinkler system was identified by NAVFAC in 2013; however, it had not been installed due to budget constraints. According to the Deputy Fire Chief and NAVFAC, the Commanding Officer imposes operations constraints forcing the fire department to keep the occupancy below 300 people, which is the maximum occupancy for new assembly buildings that do not have an automatic sprinkler system. However, the hall is an existing assembly building. The UFC limits the maximum occupancy of existing assembly buildings that do not have automatic sprinkler systems to 100 people. Limiting the occupancy to 300 people does not bring the hall into compliance with UFC standards. The lack of automatic sprinklers in the assembly hall poses a risk to large crowds. Further, given the higher occupant loads, the risk is compounded by the fire alarm system not working.



Figure 8. Triple stack CLUs (Deficiency No. CLD-EL-160902-056)

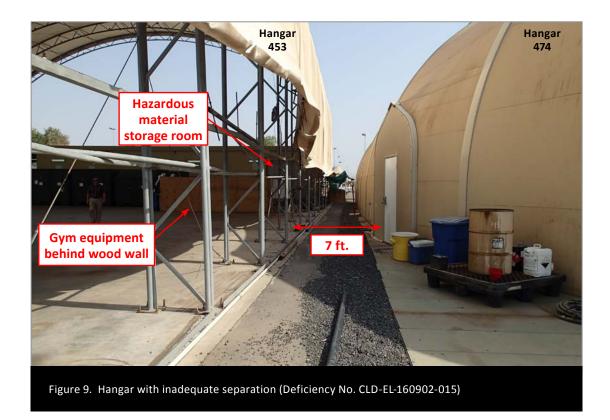
We found occupied containerized living units (CLUs) stacked three stories high with fire alarm systems that were not working and may not activate the sprinkler system. Figure 8 is a photograph of triple stacked CLUs. A CLU is a nonpermanent type of construction that UFC 1-201-01, section 3-3.1.5.1, limits stacking to four stories. However,

three stories or more is only allowed if the building is constructed of non-combustible material or provided with a working fire alarm and sprinkler system.

We observed that 21 of the 52 buildings inspected did not have the required safe building separation. When buildings are too close together, or material is stored too close to buildings, the risk of fire spreading is increased. If site constraints do not permit compliance with the UFC's building separation requirements, a fire-safety analysis must be done. This analysis must be performed or reviewed by the unit safety officer and be approved by the first 0-6 level officer in the chain of command, as required by UFC-1-201-01, "Non-Permanent DoD Facilities in Support of Military Operations," section 2-4.2.4. The fire safety analysis was completed; however, Camp Lemonnier could not provide evidence that the fire safety analysis was reviewed or approved at the 0-6 level.

We observed inadequate separation between all the tents in the surge tent compound. The distance between individual tents was as little as 8 feet, and the separation between rows of tents was as little as 10 feet. The UFC-1-201-01 minimum required separation between individual tents is 12 feet and the minimum required separation between rows of tents is 30 feet. Complying with the minimum spacing of tents not only reduces the risk of fire spreading, it also allows emergency responders access and space to work between the tents.

Two 13,000 square foot hangars (453 and 474) had inadequate separation. The distance between the two hangars was 7 feet (Figure 9). The UFC 1-201-01, "Non-Permanent DoD Facilities in Support of Military Operations," requires hangars this size that are not separated by at least 50 feet to have fire protection as called for by UFC 3-600-01, "Fire Protection Engineering For Facilities." Further, neither of the aircraft hangars had fire suppression systems and associated fire alarm as required by UFC 4-211-01N, "Aircraft Maintenance Hangars: Type I, Type II and Type III," section 3-10. In hangar 474, we observed that an office had been constructed without code-required, fire-rated walls and doors. Fire-rated walls and doors prevent the risk of injury to occupants by allowing them ample time to escape during a fire.



Three of the five fuel storage facilities inspected were leaking fuel. At the fuel bladder storage area and ground vehicle fuel station, we observed the improper storage and maintenance of fuel hoses. The fuel hoses at the bladder storage area were left in the sun and not properly stored on racks in the shade, as required by UFC 3-460-03, "Operation and Maintenance of Petroleum Systems." Vapors from all petroleum products constitute fire and explosion hazards and are also toxic to the human body. Reducing or controlling the open presence of petroleum products and vapors, limiting sources of ignition, and taking all precautions to prevent petroleum product leaks or spills can reduce the risk of petroleum fires.

Fuel pump emergency break-away connections were not installed at the gas and diesel ground vehicle fueling station. If a vehicle drives away with the fueling hose still in the vehicle gas intake, the lack of a fuel pump line break-away connection could result in a fueling hose break, accidental spills, and spread of fire.

Four of the six fuel facilities had improper hazardous, flammable, or combustible materials stored inside the containment areas. Combustible materials within a fuel containment area contribute to the potential for fire. Two of the six fuel facilities containments were failing. The concrete containment for the diesel ground vehicle fueling station was severely cracked, and the new jet fuel containment was leaking around the sump drain. These conditions could result in fuel leaking from the containment into the ground, which could contaminate ground water.

We found two hangars with inadequate fire hydrant coverage, and five buildings that had fire hydrants without protective bollards,³ rendering them susceptible to being struck by vehicles and damaged. The UFC 3-600-01, section 3-7.3.3, requires at least one fire hydrant at each corner of a hangar. We found only one hydrant at the corner of one of the hangars, and the other hangar had no hydrants. These conditions may significantly inhibit the firefighter's options in the event of a fire in or near these structures.

Conclusion

Fire protection system installation and maintenance at Camp Lemonnier was not being performed in a manner consistent with UFC and NFPA standards. These systemic deficiencies resulted from the lack of qualified representatives ensuring Government interests are protected and are subjecting personnel and property to avoidable risk from fire hazards.

³ A bollard is a short post used to divert vehicle traffic.

Recommendations, Management Comments, and Our Response

Recommendation B.1

We recommend that the Commander, Navy Region Europe, Africa, Southwest Asia:

- a. Conduct a root cause analysis and implement a corrective action plan for all deficiencies identified in this report. Ensure that all facility operations and maintenance complies with the Unified Facilities Criteria and the National Fire Protection Association standards. Provide the DoD Office of Inspector General a copy of the analysis and corrective action plan within 90 days of the issuance of this report.
- b. Prepare and implement a corrective action plan to ensure all construction projects are reviewed for compliance with applicable fire protection systems codes and standards before they are accepted by the Government as complete. Provide the DoD Office of Inspector General a copy of the corrective action plan within 90 days of the issuance of this report.

Commander, Navy Installation Command, Comments

The CNIC, endorsing comments from the CNREURAFSWA, acknowledged shortfalls in fire safety and will coordinate with NAVFAC EURAFSWA and NAVFAC Atlantic to coordinate SME assistance visits to provide recommendations regarding future projects to correct deficiencies or take mitigating steps to reduce risks to acceptable levels. The CNREURAFSWA indicated that NAVFAC's existing policies and regulations to ensure that thorough design reviews are conducted to verify compliance with applicable electrical codes and standards would be followed.

Our Responses

Comments from the CNREURAFSWA did not address the specifics of the recommendation to conduct a root cause analysis nor the preparation of a corrective action plan. Further, the comments did not address ensuring that all construction projects are reviewed for compliance with applicable fire protection system codes and standards before they are accepted by the Government as complete. In addition, the CNREURAFSWA did not specify how or when the recommendations would be implemented. Therefore, the recommendations are unresolved and remain open. We request that the CNEURAFSWA provide comments that address the specifics of Recommendations B.1.a and B.1.b within 90 days of the issuance of this report. We will close this recommendation after we verify that the corrective action plans have been implemented.

Finding C

Camp Lemonnier Contracting Officials Did Not Oversee the Maintenance and Repair of Electrical and Fire Protection Systems

The base contracting officials did not ensure that the BOS contractor adequately maintained the electrical and fire protection systems in accordance with the BOS contract. In addition, Government personnel trained to perform electrical and fire protection inspections were not overseeing the contractor's work.

The Contractor Did Not Perform Maintenance and Repair Required by the Contract

The BOS⁴ contract requires the contractor to maintain fire protection systems to ensure the facilities meet the health and safety standards found in the UFC and the NFPA standards. The BOS contract includes specific fire protection UFCs including UFC 3-601-02, "Operations and Maintenance: Inspection, Testing, and Maintenance of Fire Protection Systems." The BOS contract also requires the contractor to operate electrical systems efficiently and safely according to the NFPA standards.

The contractor did not operate and maintain the electrical systems equipment and fire protection systems safely in accordance with contract requirements as evidenced by the number of noncompliances identified in this report.

Lack of Government Oversight

We randomly selected 4 months in 2016 of the Government-contracting official prepared performance assessment worksheets (PAWs). The PAW is a tool the Government used to document its assessment of the contractor's performance. According to the contracting officer's representative (COR), there is a performance assessment representative (PAR) assigned to each annex of the contract. The COR requires the PAR to assess the contractor's performance of maintenance on electrical and fire protection systems. The PAR records for the randomly selected months indicate that the Government conducted minimal (less than one percent) oversight of the contractor's maintenance of the electrical and fire protection systems.

⁴ Issued by the Commander NAVFAC Atlantic contract N62470-13-D-3008, March 1, 2013.

Lack of Specialized Skills

According to the NFPA, to be certified in electrical safety compliance, you must have a minimum of 6,000 hours (3 years) of verifiable work experience with electrical power systems, attend 40 hours of specific safety training, and pass a 3-hour exam. According to the UFC 3-600-01, "Fire Protection Engineering for Facilities," section 1-5, projects involving designing or modifying fire-rated construction, fire detection, fire suppression, or life safety systems require the services and review of a qualified fire protection engineer.

Camp Lemonnier has a licensed electrical engineer on staff; however, it receives fire protection engineer support from NAVFAC EURAFSWA. NAVFAC EURAFSWA does not have a National Electric Code master electrician on staff due to the organizational structure of the command. During our inspection, we did not find onsite Government personnel certified in electrical safety and fire protection to provide technical support for the PAR. The overall poor electrical, fire, and safety conditions indicate a problem in relying on contractor technical support or requesting off base technical support for assessing the contractor's work. As a result, even if the PAR had been performing their duty, they most likely would not have the technical skills to ensure that Camp Lemonnier was receiving quality products and services from the contractor.

Conclusion

The contractor's failure to fully comply with all requirements of the BOS contract is subjecting U.S.-operated facilities at Camp Lemonnier to avoidable risk. Enforcing contract requirements and maintaining qualified Government personnel on staff is critical to the safety and welfare of base personnel.

Recommendations, Management Comments, and Our Response

Recommendation C.1

We recommend that the Commander, Navy Region Europe, Africa, Southwest Asia:

a. Review the circumstances surrounding the failure by the contracting officer, contracting officer's representative, and the performance assessment representative to fully document the contractor's work performance and, as appropriate, initiate administrative action. Provide the DoD Office of Inspector General a copy of the review findings within 90 days of the issuance of this report.

b. Provide a plan and take action for acquiring the services of certified electrical safety experts, as well as qualified fire protection engineers, sufficient to provide continual inspection of the base operating services contract and, by extension, the more than 2,058 facilities at Camp Lemonnier. Provide the DoD Office of Inspector General a copy of the plan within 90 days of the issuance of this report.

Commander, Navy Installation Command, Comments

The CNIC, endorsing comments from the CNREURAFSWA, agreed that in the past acquisition specialists failed to fully document the contractor's work performance in accordance with NAVFAC performance assessment guidelines. However, the oversite of the contractor's performance is now being conducted in accordance with NAVFAC guidelines. Contractor performance assessment reporting system evaluations are conducted on an annual basis and provide feedback to the BOS contractor. In addition, PAWs are being completed on a minimum of 10 percent of all work actions. For example, an average of 300 PAWs a month are being conducted on the 2,000 work actions that fall under the Facilities Investment Annex to verify that they are accomplished properly. Although NAVFAC EURAFSWA now visits quarterly to conduct training for the assigned senior performance assessment representatives (SPARs) and PARs, management requests further oversight through spot checks and reviews of PAR and SPAR performance to ensure that the contractor is evaluated scrupulously.

The CNREURAFSWA agreed with reviewing staffing requirements and will determine if the current staffing model provides for adequate SME availability. Currently, Camp Lemonnier has a licensed electrical engineer on staff. Camp Lemonnier receives fire protection engineer support from NAVFAC EURAFSWA and does not have a National Electric Code master electrician on staff due to the organizational structure of the command.

Our Response

Comments from the CNREURAFSWA indicated agreement that there were past failures of acquisition specialists to properly fulfill their duties. CNREURAFSWA also indicated those failures were now corrected. However, the comments did not address the specifics of the recommendation to provide a copy of the findings surrounding this failure. In addition, CNREURAFSWA agreed to review staffing models to determine if the current model provides for adequate SME support, but did not indicate an action plan if the current staffing model is not adequate. Therefore, the recommendations are unresolved and remain open. We request that the CNEURAFSWA provide the review findings and a firm action plan that address Recommendations C.1.a and C.1.b. respectively, within 90 days of the issuance of this report.

Appendix A

Scope and Methodology

We conducted the physical inspection from August 22, 2016, through September 2, 2016. We limited our inspection of Camp Lemonnier, Djibouti, to U.S. military-occupied facilities. We inspected to applicable UFC standards in accordance with the contract performance requirements and in compliance with Council of the Inspectors General on Integrity and Efficiency (CIGIE), "Quality Standards for Inspection and Evaluation," published in January 2012. The CIGIE standards require that we plan and perform the inspection to obtain sufficient appropriate evidence to provide a reasonable basis for our findings and conclusions based on our inspection objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our inspection objectives.

We independently selected facilities based on size, type, and age. We also interviewed performance assessment representatives, the contracting officer, and the contracting officer's representative.

Use of Computer-Processed Data

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

Use of Technical Assistance

During this inspection, we used the assistance of SMEs. We used a certified master electrician to inspect electrical distribution systems and a fire protection engineer to inspect fire protection systems. SMEs were certified in their associated fields.

Appendix B

Prior Coverage

DoD OIG

Report DODIG-2016-141, "Improvements Needed in Managing Scope Changes and Oversight of Construction Projects at Camp Lemonnier, Djibouti," September 30, 2016

Naval Facilities Engineering Command (NAVFAC) Atlantic constructed the Bachelor Enlisted Quarters project in accordance with the Federal law. However, NAVFAC officials did not obtain approval from the Navy and initiate the congressional notification process for the Ammunition Supply Point project scope changes as required by Federal law and Navy guidance. In addition, officials at NAVFAC Camp Lemonnier, Djibouti, did not provide adequate oversight for the Bachelors Enlisted Ouarters and Ammunition Supply Point projects. As a result, there is an increased risk that construction will not meet contract requirements and that the DoD will not receive what it paid for.

Report DODIG-2015-163, "Plans for Assessing Contractor Performance for the Camp Lemonnier Base Operations Support Contract Needed Improvement," August 27, 2015

Our objective was to determine whether DoD officials were effectively administering the base operations support contract at Camp Lemonnier, Djibouti, (CLDJ) Africa. Specifically, we determined the adequacy of the plans developed for assessing contractor performance. Naval Facilities Engineering Command (NAVFAC) Atlantic officials did not ensure plans for assessing contractor performance for the CLDJ base operations support contract were adequate. We nonstatistically sampled 3 of 22 base operations support contract services— security operations, fire and emergency services, and supply services. In summary, NAVFAC officials did not ensure the functional assessment plans (FAP) for the three services contained all contractor work requiring assessment, measurable performance standards, and adequate methods for assessing contractor performance.

Report DODIG-2014-074, "Navy Controls Over the Requirements Development Process for Military Construction Projects at Camp Lemonnier, Djibouti, Need Improvement," May 16, 2014

The objective of this audit was to determine whether DoD officials had valid requirements for military construction projects at Camp Lemonnier, Djibouti, in accordance with applicable guidance. As the only forward operating site in Africa, Camp Lemonnier provides critical support for U.S. military operations.

In June 2011, the Senate Committee on Appropriations expressed concerns of shortfalls in the Navy's master plan for Camp Lemonnier, including limited construction timelines and future cost estimates. The total value of the Master Plan is estimated to be \$1.32 billion. The report is For Official Use Only.

Report No. DODIG-2014-005, "Combined Joint Task Force-Horn of Africa Needed Better Guidance and Systems to Adequately Manage Civil-Military Operations," October 30, 2013

Our objective was to determine whether Combined Joint Task Force-Horn of Africa (CJTF-HOA) officials were adequately planning and executing civil-military operations (CMO) in accordance with U.S. Africa Command objectives. We reviewed 49 of 137 humanitarian assistance and humanitarian and civic assistance projects that were planned, ongoing, or completed from FY 2010 through FY 2014 with an estimated value of \$8.70 million.

During the last 5 years, the DoD OIG issued several reports discussing military housing inspections. Unrestricted DoD OIG reports can be accessed at http://www.dodig.mil/pubs/index.cfm. These include the following:

Report No. DODIG-2016-139, "Military Housing Inspection – Camp Buehring, Kuwait," September 30, 2016

Report No. DODIG-2016-106, "U.S. Military – Occupied Facilities Inspection – King Abdullah II Special Operations Training Center (KASOTC)," July 7, 2016

Report No. DODIG-2015-181, "Continental United States Military Housing Inspections – Southeast," September 24, 2015

Report No. DODIG-2015-162, "Continental United States Military Housing Inspections – National Capital Region," August 13, 2015

Report No. DODIG-2015-160, "U.S. Army Generally Designed Adequate Controls to Monitor Contractor Performance at the King Abdullah II Special Operations Training Center, but Additional Controls Are Needed," August 7, 2015

Report No. DODIG-2015-013, "Military Housing Inspections – Republic of Korea," October 28, 2014

Report No. DODIG-2014-121, "Military Housing Inspections – Japan," September 30, 2014

Report No. DODIG-2013-099, "Compliance with Electrical and Fire Protection Standards of U.S. Controlled and Occupied Facilities in Afghanistan," July 18, 2013

Appendix C

Notice of Concern



INSPECTOR GENERAL DEPARTMENT OF DEFENSE 4800 MARK CENTER DRIVE ALEXANDRIA, VIRGINIA 22350-1500

September 9, 2016

MEMORANDUM FOR COMMANDER, NAVY INSTALLATIONS COMMAND COMMANDER, CAMP LEMONNIER, DJIBOUTI

SUBJECT: Notice of Concern - U.S. Controlled and Occupied Military Facilities Inspection Camp Lemonnier, Djibouti (Project No. D2016-D000PT-000.0178)

As the Lead Inspector General for Operation INHERENT RESOLVE, the Office of the Inspector General (OIG), DoD, performed Fire Protection and Electrical System Safety inspections of U.S. military occupied facilities at Camp Lemonnier, Djibouti (CLDJ) from August 19 - September 3, 2016. We completed this project in accordance with the OIG's oversight responsibilities as described in Section 8L of the Inspector General Act of 1978, as amended. We identified electrical and fire protection system deficiencies, which, individually or in combination pose a significant risk of fire, electrocution, loss of life and/or, property.

This Notice of Concern (NOC), however, addresses the five most critical deficiencies requiring immediate corrective action. DoD Instruction 6055.01, "DoD Safety and Occupational Health (SOH) Program," October 14, 2014, requires DoD "to protect DoD personnel from accidental death, injury, or occupational illness that apply to all personnel at all operations worldwide." We inspected the U.S. military occupied facilities at CLDJ for compliance with general criteria for fire protection and electrical system safety found in the DoD Unified Facilities Criteria program. This criteria provides a general baseline for identification of deficiencies that impact life, health, and safety.1

- All four of the Igloo (High Explosive Magazines), Buildings 1050, 1060, 1070 and 1080 have air terminals with too large a separation distance; also there are missing air terminals on the left side of each Igloo and on the rear vent on top of each Igloo. This presents a significant and immediate risk of explosion during adverse weather. Deficiency: CLD-EL-160902-021.
- All four of the Igloo (High Explosive Magazines), Buildings 1050, 1060, 1070 and 1080 have a lack of, or improper bonding with their metal doors, metal frames, and fence gates. This presents a significant and immediate risk of explosion during adverse weather. Deficiency: CLD-EL-160902-022.

¹ We did not consider controlling agreements or other authorities (including host nation) that might impact the fire safety or electrical criteria at CLDJ.

Notice of Concern (cont'd)

- We found unprotected conductors laying on the ground vulnerable to abrasion by foot traffic. This is a systemic issue with 25 occurrences in the following 17 buildings; 313C, 313D, 925, 230, 111, 305, 427, 100, 453, 420E, 101, 102, 211, 86, 853, 630 and 130. This constitutes a severe shock/electrocution hazard to the warfighter should they come in contact with the exposed wiring. This is a base wide concern. Deficiency: CDL-EL-160902-004.
- At building 111, an outdoor Electrical Panel built for use indoors is continually degrading
 due to it being placed in direct contact with the elements; openings allow for the
 infiltration of water and it has no dead-front protecting the internal components. This
 creates a shock and explosion hazard. Deficiency: CLD-EL-160902-020.
- We observed circuits improperly locked out with removable wire and lack of
 identification at Building 310. Also, the lockout/tagout program lacked an accurate log
 of lockout/tagout events to demonstrate adherence to an acceptable process. This could
 lead to inadvertently energizing a circuit that has been shut down for repair. Extreme
 danger of electrocution exists. Deficiency CLD-EL-160902-023.

The DoD OIG has identified avoidable risks to deployed personnel that need to be mitigated. The critical deficiencies requiring immediate corrective action will be provided to all recipients of this NOC via uploads to the Aviation and Missile Development and Engineering Center (AMRDEC) Safe Access File Exchange website. You will receive an automated AMRDEC delivery notice e-mail with instructions detailing the process for downloading the deficiencies for review and comment.

In accordance with requirements of DoD Instruction 7650.03, please provide your comments and proposed corrective actions by September 22, 2016. We will include copies of your comments in our official report. If possible, send a portable document format (.pdf) file containing your comments to

If you have any questions, please contact my Director of the Technical Assessment Directorate,

Randolph R. Stone Deputy Inspector General Policy and Oversight

Notice of Concern (cont'd)

Under Secretary of Defense for Acquisition, Technology, and Logistics Under Secretary of Defense (Comptroller)/Chief Financial Officer, DOD Naval Inspector General

Commander, Naval Facilities Engineering Command

Commander, U.S. Africa Command

Commander, Combined Joint Task Force - Horn of Africa Commander, Navy Region Europe, Africa, Southwest Asia

3

Appendix D

Response to Notice of Concern



DEPARTMENT OF THE NAVY

CAMP LEMONNER PSC 831 BOX 0040 FFC AE 09363 000

> 11000 Ser PWD/012 17 Sep 16

From: Commanding Officer, Camp Lemonnier, Djibouti

Inspector General, Department of Defense

(1) Commander, Navy Region Europe, Africa and Southwest Asia

(2) Commander, Navy Installations Command

Subj: RESPONSE TO NOTICE OF CONCERN - U.S. CONTROLLED AND OCCUPIED MILITARY FACILITIES INSPECTION CAMP LEMONNIER, DJIBOUTI PROJECT NO. D2016-D000PT-000,0178

- I have acknowledge receipt of the 09 Sep 16 Notice of Concern pertaining to the five critical deficiencies identified during your visit 19 Aug - 03 Sep of this year. Our plan of action and milestones to address each NOC deficiency is as follows:
- a. CLD-EL-160902-021 Excessive distance between air terminals on Bldgs. 1050, 1060, 1070, and 1080 Earth Covered Magazines (ECMs) (identified as High Explosive Magazines in the 09 SEP memo).
- (1) These ECMs are a part of an active Military Construction (MILCON) project. The ECMs have been accepted by the Navy and are in use, however the contractor remains on-site completing other project structures. The contract requirements have been reviewed, and include conformance to NFPA 780, as indicated in the NOC. The contractor is presently ordering the components necessary for the correction. The project shall not be closed out until the deficiencies indicated in the NOC have been corrected to the satisfaction of the Contracting Officer. The current Planned Contract Completion Date (CCD) for this project is 30 Oct 16.
 - b. CLD-EL-160902-022 Lack of or improper bonding on Bldgs. 1050, 1060, 1070, and 1080.
- (1) These ECMs are a part of the active MILCON project described above. As above, the contractor is presently ordering the components necessary for the correction. The project shall not be closed out until the deficiencies indicated in the NOC have been corrected to the satisfaction of the Contracting Officer. The current Planned CCD for this project is 30 Oct 16.
 - c. CLD-EL-160902-004 Unprotected conductors on ground at 17 buildings (25 occurrences)
- (1) Temporary barrier protection has been installed in the locations identified in the NOC to prohibit pedestrian traffic over those conductors. These locations will be regularly inspected to ensure the barriers are performing and the risk of traffic is eliminated.

Response to Notice of Concern (cont'd)

Subj: RESPONSE TO NOTICE OF CONCERN - U.S. CONTROLLED AND OCCUPIED MILITARY FACILITIES INSPECTION CAMP LEMONNIER, DJIBOUTI PROJECT NO. D2016-D000PT-000.0178

- (2) Conductors that are damaged and exposed to the elements are being repaired as an emergency project.
- (3) Public Works Department (PWD) is developing a comprehensive base wide project to correct the systemic problem of conductor exposure and traffic impact. The project scope will include burying exposed cables or encasement in conduit, repair of broken conduit or cables, relocation and rerouting as necessary, and conformance to existing codes for buried and ground level cabling. This project will be top priority for FY 17 funding, and the planned project award date is 01 Dec.
 - d. Deficiency CLD-EL-160902-020 Degrading electrical panel outdoors at Bldg. 111.
- (1) PWD has performed the immediate response of temporary enclosures or covers constructed to protect panels from the environment, securing loose or open covers, and prevent unauthorized access to conductors in panels without a dead-front. Proper and code-compliant panels, enclosures and panel boxes shall be included in the project described above, to be awarded by 01 Dec.
- e. Deficiency CLD-EL-160902-023 Improper lockout at Bldg. 310 and inaccurate log of LO/TO events.
- (1) Our PWD Performance Assessment Representatives (PARs), together with our BOS contractor, inspected the panel at B310 and ensured the circuit breakers were secured properly using appropriate LO/TO devices and procedures. The contractor immediately applied correct locks and tags in conformance with the KBR Safety reference Manual and NFPA standards.
- (2) The Base Operating Support (BOS) contract performs all LO/TO actions and manages the LO/TO program. NFPA standards are referenced in the Performance Objectives of the BOS contract annex for electrical production and distribution. However, a LO/TO log for electrical systems is not specifically included in the NAVFAC-approved KBR Safety Reference Manual, Part II. Section 13. PWD CLDJ will develop the clear requirement for a LO/TO log and management procedure to ensure records are kept in accordance with NFPA 70E. We estimate this log and procedure to be in place base wide by 30 Sep.
- (3) PWD PARs conduct Level 1 oversight of all BOS activities by random inspections of 10-15% of the work projects and standard services performed, per NAVFAC guidance for BOS contract oversight. PWD will develop a process by which work involving LO/TO will be identified at the initial stages for increased inspection by PWD Safety or qualified PAR, until the Contracting Officer is satisfied that returning to Level 1 performance assessment is acceptable. This action will begin immediately.
- (4) CLDJ's facility-level low-voltage electrical infrastructure is aged, constructed using various criteria in a contingency environment, and in many cases utilizes old, existing infrastructure installed prior to US Navy occupation. To better manage safe maintenance, repair,

Response to Notice of Concern (cont'd)

Subj: RESPONSE TO NOTICE OF CONCERN - U.S. CONTROLLED AND OCCUPIED MILITARY FACILITIES INSPECTION CAMP LEMONNIER, DJIBOUTI PROJECT NO. D2016-D000PT-000.0178

recapitalization of these components, CLDJ will increase its Request For Forces by one Petty Officer to be assigned specifically in support of electrical safety and electrical work order oversight for facility-level maintenance and repair, and responsible for review and assurance of BOS contractor LO/TO program compliance. This Petty Officer (US Navy Active or Reserve) shall be included in the PWD Safety organization and report to the PWD Site Safety Manager. We estimate it will take 9 months to obtain a new service member for this purpose,

2. If there are any questions regarding this memorandum please contact the Public Works

J. H. BLACK

Response to Notice of Concern (cont'd)



DEPARTMENT OF THE NAVY

COMMANDER NAVY REGION EUROPE, AFRICA, SOUTHWEST ASIA PSC 817 BOX 108 FPO AE 09622-0108

11000 Ser N00/ 350 19 Sep 16

FIRST ENDORSEMENT on CLDJ ltr 11000 Ser PWD/012 of 17 Sep 16

From: Commander, Navy Region Europe, Africa, Southwest Asia To: Inspector General, Department of Defense

Commander, Navy Installations Command

Subj: RESPONSE TO NOTICE OF CONCERN - U.S. CONTROLLED AND OCCUPIED

MILITARY FACILITIES INSPECTION CAMP LEMONNIER, DJIBOUTI PROJECT

NO. D2016-D000PT-000.0178

1. Forwarded, recommending approval.

2. Point of contact is

R. L. WILLIAMSON

Appendix E

Inspection Standards and Criteria

The BOS contract requires the contractor to operate electrical systems equipment and components efficiently and safely in accordance with American National Standards Institute, Institute of Electrical and Electronics Engineers, National Electrical Safety Code, and NFPA standards, and other appropriate operating manuals, procedures, and instructions. Additionally, the BOS contract includes specific fire protection UFCs to include the UFC 3-601-02, "Operations and Maintenance: Inspection, Testing, and Maintenance of Fire Protection Systems."

In addition, the BOS contract states that the contractor is to perform fire protection maintenance to ensure facility compliance with applicable UFCs. These additional applicable UFCs include but are not limited to:

- UFC 3-501-01, "Electrical Engineering," October 6, 2015
- UFC 3-460-01, "Design: Petroleum Fuel Facilities," Change 2, June 17, 2015
- UFC 1-200-01, "General Building Requirement," Change 1, September 1, 2013
- UFC 3-600-01, "Fire Protection Engineering for Facilities," Change 3, March 1, 2013
- UFC 1-201-01, "Non-Permanent DoD Facilities in Support of Military Operations," January 1, 2013
- UFC 3-601-02, "Operation and Maintenance: Inspection, Testing, and Maintenance of Fire Protection Systems," September 8, 2010
- UFC 4-021-01, "Design and O&M: Mass Notification Systems," Change 1, January 2010
- UFC 4-211-01N, "Aircraft Maintenance Hangars: Type II, Type III, and Type III," Change 1, December 16, 2009
- UFC 3-460-03, "Operation and Maintenance: Maintenance of Petroleum Systems," January 21, 2003

The BOS contract requires compliance with the NFPA. The applicable NFPA codes should include:

- NFPA 30, "Flammable and Combustible Liquids Code," 2015 edition
- NFPA 101, "Life Safety," 2015 Edition
- NFPA 70, "National Electrical Code (NEC)," 2014 Edition
- NFPA 780, "Standard for the Installation of Lightning Protection Systems,"
 2014 Edition

- NFPA 72, "National Fire Alarm and Signaling Code," 2013 Edition
- NFPA 13, "Standard for the Installation of Sprinkler Systems," 2013 Edition
- NFPA 1, "Fire Code," 2012 Edition
- NFPA 70E, "Standard for Electrical Safety in the Workplace," 2012 Edition
- NFPA 30A, "Code for Motor Fuel Dispensing Facilities and Repair Garages," 2012 Edition
- NFPA 704, "Standard System for the Identification of Hazards of Materials for Emergency Responders," 2012 Edition

Management Comments

Department of the Navy, Commander, Navy Installations Command



DEPARTMENT OF THE NAVY

COMMANDER, NAVY INSTALLATIONS COMMAND 716 SICARD STREET, SE, SUITE 1000 WASHINGTON NAVY YARD, DC 20374-5140

Ser N00G/17U0030 22 Mar 2017

FIRST ENDORSEMENT on CNREURAFSWA ltr 5040 Ser N00/131 of 15 Mar 17

From: Commander, Navy Installations Command

Deputy Inspector General, Policy and Oversight, Inspector General, Department of Defense

Subj: DRAFT REPORT RESPONSE TO U.S. CONTROLLED AND OCCUPIED MILITARY FACILITIES INSPECTION CAMP LEMONNIER DJIBOUTI (PROJECT NO. D2016-D000PT-0178.000)

1. Forwarded. Concur with Commander, Navy Region Europe, Africa, Southwest Asia (CNREURAFSWA) response.

2. The CNREURAFSWA technical point of contact

The CNIC Audit

Liaison

GERALD R. MANLEY By direction

Copy to: CNIC (N00, N4) CNREURAFSWA

Department of the Navy, Commander, Navy Region Europe, Africa, Southwest Asia



DEPARTMENT OF THE NAVY

COMMANDER
NAVY REGION EUROPE, AFRICA, SOUTHWEST ASIA PSC 817 BOX 108 FPO AE 09622-0108

5040 Ser N00/ 131 15 Mar 17

From: Commander, Navy Region Europe, Africa, Southwest Asia

Department of Defense Office of Inspector General

Via: Commander, Navy Installations Command

Subj: DRAFT REPORT RESPONSE TO U.S. CONTROLLED AND OCCUPIED MILITARY FACILITIES INSPECTION CAMP LEMONNIER DJIBOUTI (PROJECT NO.

D2016-D000PT-0178.000)

Ref: (a) Department of Defense Office of Inspector General Draft Report No. D2016-D000PT-0178.000 dtd 21 Feb 17

Encl: (1) Management Comments on Department of Defense Office of Inspector General Draft

Report (Project No. D2016-D000PT-0178.000)

1. In response to reference (a), Commander, Navy Region Europe, Africa, Southwest Asia concurs with all recommendations. Management comments from Camp Lemonnier. Djibouti are provided in enclosure (1).

> CAPT, USN. Chief of Staff

2. Point of contact is

Department of the Navy, Commander, Navy Region Europe, Africa, Southwest Asia (cont'd)

Subj: DRAFT REPORT RESPONSE TO U.S. CONTROLLED AND OCCUPIED MILITARY FACILITIES INSPECTION CAMP LEMONNIER DJIBOUTI (PROJECT NO. D2016-D000PT-0178.000)

- <u>Recommendation A.1</u>: We recommend that the Commander, Navy Region Europe, Africa, Southwest Asia:
- a. Conduct a root cause analysis and implement a corrective action plan for all electrical deficiencies identified in this report. Ensure that all facility operations and maintenance comply with the Unified Facilities Criteria and the National Fire Protection Association standards. Provide the DoD Office of Inspector General a copy of the analysis and corrective action plan within 90 days of the issue of this final report.
- b. Prepare and implement a corrective action plan to ensure all construction projects are reviewed for compliance with applicable electrical codes and standards before they are accepted by the Government as complete. Provide the DoD Office of Inspector General a copy of the corrective action plan within 90 days of the issue of this final report.

2. Management Response (Recommendation A.1):

- a. Management Comments to Recommendation A.1.a:
- (1) Management concurs with developing a corrective action plan and has already commenced correcting electrical deficiencies. In preparation for the release of this report, the issues annotated as non-compliance issues requiring immediate repair were incorporated into a design that eliminated these issues. On 6 February 2017, at a value of \$302,168, this design was awarded. A follow-on project to address all electrical issues has been designed and delivered to Navy Region Europe, Africa, Southwest Asia (EURAFSWA) for funding. Of note, the bonding issues that were raised in this report were 1) repaired at the pool via the Base Operations Support (BOS) contractor and 2) addressed in Camp Lemonnier correspondence dated 17 September 2016 and referenced as Appendix D of this report.
- (2) With respect to a root cause analysis, management concluded that the cited electrical deficiencies were primarily the result of a failure to properly follow Naval Facilities Engineering Command (NAVFAC) best business practices, policies, and regulations in years past.
- b. Management Comments to Recommendation A.1.b: Management concurs with the intent of the recommendation and confirms that NAVFAC best business practices, policies, and regulations (specifically, Business Management System section B-1, Design & Construction and Naval Engineering and Training Operating Procedures Standards (NETPOS)) to ensure that thorough design reviews are conducted in order to verify compliance with applicable electrical codes and standards. Management will continue to impose stringent design review efforts, and NAVFAC Atlantic generated a January 2017 Lessons Learned document that captured previous oversights in order to ensure they are not repeated and are addressed in future designs. Management does not foresee any additional policies or regulations required specific to Camp Lemonnier and will maintain current design standards and practices.

Enclosure (1)

Department of the Navy, Commander, Navy Region **Europe, Africa, Southwest Asia (cont'd)**

Subj: DRAFT REPORT RESPONSE TO U.S. CONTROLLED AND OCCUPIED MILITARY FACILITIES INSPECTION CAMP LEMONNIER DJIBOUTI (PROJECT NO. D2016-D000PT-0178.000)

- 3. Recommendation B.1: We recommend that the Commander, Navy Region Europe, Africa, Southwest Asia:
- a. Conduct a root cause analysis and implement a corrective action plan for all deficiencies identified in this report. Ensure that all facility operations and maintenance complies with the Unified Facilities Criteria and the National Fire Protection Association standards. Provide the DoD Office of Inspector General a copy of the analysis and corrective action plan within 90 days from the issue of this final report.
- b. Prepare and implement a corrective action plan to ensure all construction projects are reviewed for compliance with applicable fire protection systems codes and standards before they are accepted by the Government as complete. Provide the DoD Office of Inspector General a copy of the corrective action plan within 90 days from the issue of this final report.

4. Management Response (Recommendation B.1):

- a. Management Comments to Recommendation B.1.a: Camp Lemonnier acknowledges shortfalls in fire safety and will coordinate within NAVFAC FEC EURAFSWA and NAVFAC Atlantic to coordinate subject matter expert assist visits to provide recommendations regarding future projects to correct deficiencies or take mitigating steps to reduce the risk to an acceptable
- b. Management Comments to Recommendation B.1.b: Management concurs with the intent of the recommendation and confirms that NAVFAC best business practices, policies, and regulations (specifically, Business Management System section B-1, Design & Construction and NETPOS to ensure that thorough design reviews are conducted in order to verify compliance with applicable electrical codes and standards. Management does not foresee any additional policies or regulations required specific to Camp Lemonnier and will maintain current design standards and practices.
- 5. Recommendation C.1: We recommend that the Commander, Navy Region Europe, Africa, Southwest Asia:
- a. Review the circumstances surrounding the failure by the contracting officer, contracting officer's representative and the performance assessment representative to fully document the contractor's work performance and, as appropriate, initiate administrative action. Provide the DoD Office of Inspector General a copy of the review findings within 90 days of the issue of this final report.
- b. Provide a plan and take action for acquiring the services of certified electrical safety experts, as well as qualified fire protection engineers, sufficient to provide continual inspection of the BOS contract and, by extension, the over 2,058 facilities at Camp Lemonnier. Provide the DoD Office of Inspector General a copy of the plan within 90 days of the issue of this report.

Enclosure (1)

Department of the Navy, Commander, Navy Region Europe, Africa, Southwest Asia (cont'd)

Subj: DRAFT REPORT RESPONSE TO U.S. CONTROLLED AND OCCUPIED MILITARY FACILITIES INSPECTION CAMP LEMONNIER DJIBOUTI (PROJECT NO. D2016-D000PT-0178.000)

6. Management Response (Recommendation C.1):

a. Management Comments to Recommendation C.1.a: Management concurs that in the past, Contracting Officers, Contracting Officer's Representatives, and Performance Assessment Representatives (PARs) failed to fully document the contractor's work performance in accordance with NAVFAC Performance Assessment Guidelines. Presently, contracting performance oversight is being conducted in accordance with NAVFAC Performance Assessment Guidelines. Contractor Performance Assessment Reporting System (CPARS) evaluations are conducted on an annual basis and provide feedback to the BOS contractor. In addition, Performance Assessment Worksheets (PAWs) are being completed on a minimum of 10 percent of all work actions. For example, on a monthly average, 300 PAWs are being conducted on the 2,000 work actions that fall under the Facilities Investment Annex to verify it is accomplished properly. Although NAVFAC EURAFSWA now visits quarterly to conduct training for the assigned Senior Performance Assessment Representatives (SPARs) and PARs, management requests further oversight through spot checks and reviews of PAR and SPAR performance to ensure the contractor is evaluated scrupulously.

b. Management Comments to Recommendation C.1.b: Currently Camp Lemonnier has a licensed electrical engineer on staff. Camp Lemonnier receives fire protection engineer support from NAVFAC EURAFSWA and does not have a National Electric Code master electrician on staff due to the organizational structure of command. Management concurs with reviewing staffing requirements and will determine if the current staffing model provides for adequate subject matter expert availability.

Enclosure (1)

Acronyms and Abbreviations

BOS Base Operating Services

CIGIE Council of the Inspectors General on Integrity and Efficiency

CJTF-HOA Combined Joint Task Force - Horn of Africa

CLDJ Camp Lemonnier, Djibouti

CNREURAFSWA Commander, Navy Region Europe, Africa, Southwest Asia

COR Contracting Officer Representative

DoD OIG Department of Defense Office of the Inspector General

FOIA Freedom of Information Act

FOUO For Official Use Only

GFCI Ground Fault Circuit Interrupter

MNS Mass Notification System

MWR Morale, Welfare, and Recreation

NAVFAC Naval Facilities Engineering Command

NFPA National Fire Protection Association

NOC Notice of Concern

OIG Office of Inspector General

PAR Performance Assessment Representative

PAW Performance Assessment Worksheets

PDF Portable Document Format

PWS Performance Work Statement

SME Subject Matter Expert

SPAWAR Space and Naval Warfare Systems Command

UFC Unified Facilities Criteria

USO United Services Organizations



Whistleblower Protection

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