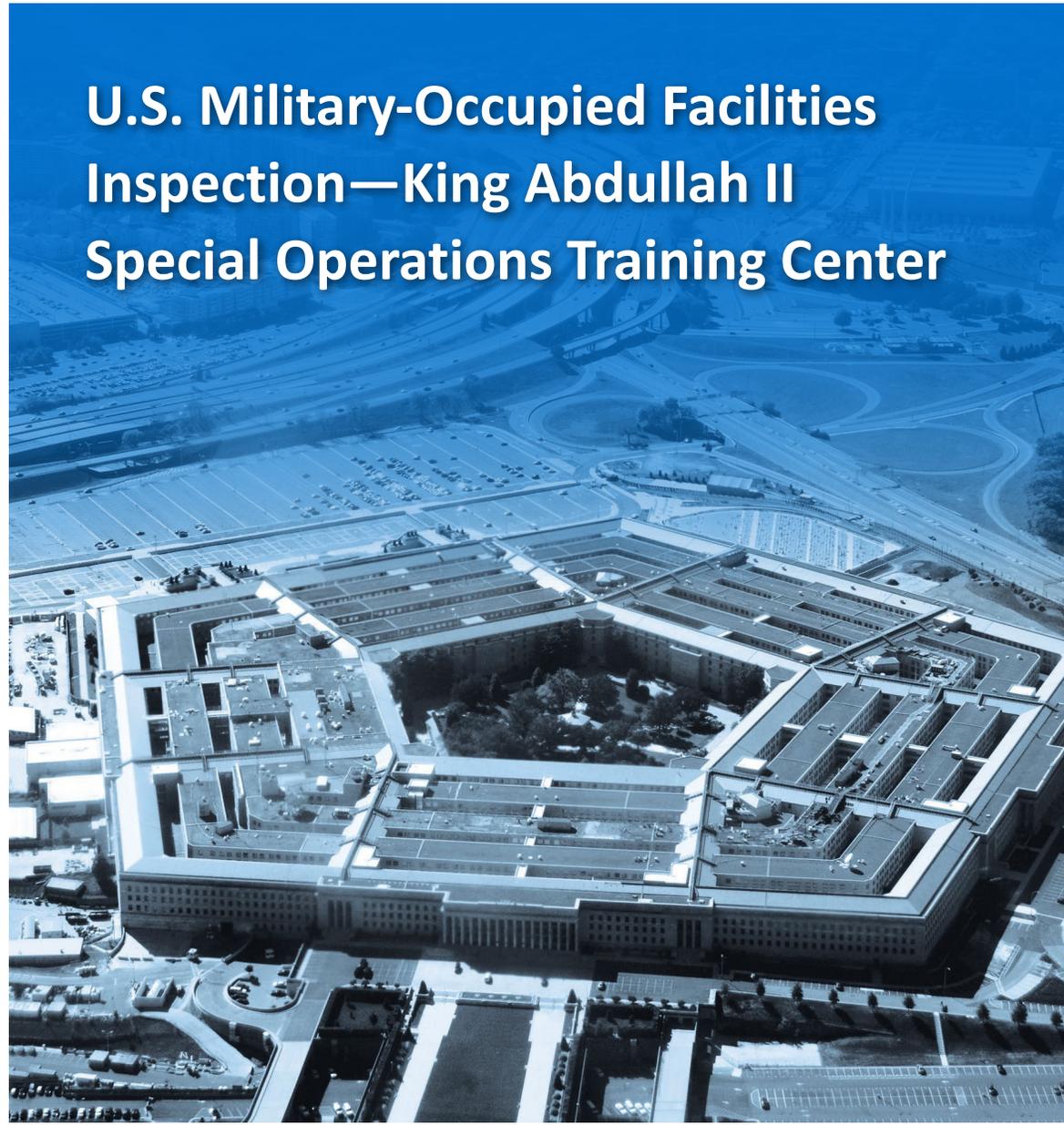




INSPECTOR GENERAL

U.S. Department of Defense

JULY 7, 2016



U.S. Military-Occupied Facilities Inspection—King Abdullah II Special Operations Training Center

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Results in Brief

U.S. Military-Occupied Facilities Inspection— King Abdullah II Special Operations Training Center

July 7, 2016

Objective

Our objective was to inspect U.S. military-occupied facilities at King Abdullah II Special Operations Training Center (KASOTC) to verify compliance with DoD health and safety policies and standards regarding the electrical and fire protection systems and to conduct a radiological assessment to determine whether background radiation levels from foreign building materials pose an unacceptable health risk.

Findings

We found significant deficiencies in electrical and fire protection systems during the physical inspections of the U.S. military-occupied facilities at KASOTC. We identified a total of 286 deficiencies that could affect the health, safety, and well-being of warfighters: 154 related to fire protection and 132 related to electrical systems. Based on our evaluation, the majority of deficiencies resulted from insufficient inspection and inadequate maintenance of the facilities attributable to the lack of a maintenance and inspection plan.

Of the total deficiencies, 77 were critical, requiring immediate action; therefore, we issued a notice of concern (NOC) to the Commanders of U.S. Central Command (USCENTCOM) and U.S. Army Central (USARCENT). We received a response to the NOC on October 9, 2015,

Findings (cont'd)

which provided a mitigation plan. In the mitigation plan, the Director, CENTCOM Forward-Jordan, in a memorandum through the Commander, USARCENT, requested that three of the deficiencies identified be re-evaluated as he believed the deficiencies were not violations of applicable regulatory guidance. After reevaluating the codes and standards and consulting with subject matter experts, we stand by our original recommendations.

For the radiological assessment, the health physicist team measured external radiation of indoor facilities and adjacent outdoor areas as well as the contact radiation surface of building materials at KASOTC to evaluate background radiation levels from cosmic and terrestrial sources (natural background) and from building materials. The annual individual dose at KASOTC was determined to be comparable to the average annual background external radiation dose individuals receive in the United States (less than 1.0 mSv). At these levels, there are no demonstrable radiation-induced health effects.

Recommendations

We recommend that the Commander, USARCENT, for both Finding A (Electrical System Deficiencies) and Finding B (Fire Protection System Deficiencies):

- Conduct a root-cause analysis and implement a corrective action plan for all 286 deficiencies identified in this report.
- Create and execute a plan for ongoing inspections and maintenance of all U.S. military-occupied facilities at KASOTC and other locations under the Commander, Combined Joint Operations Center-Jordan (CJOC-J). Ensure that inspection and maintenance of these locations complies with applicable electrical and fire protection safety codes and standards.



Results in Brief

U.S. Military-Occupied Facilities Inspection— King Abdullah II Special Operations Training Center

Management Comments and Our Response

The Commander, USARCENT, agreed with our findings and recommendations. He concurs and supports the work being performed to correct the deficiencies as addressed in the March 2, 2016, memorandum from the Commander, CJOC-J. The Commander, CJOC-J reported that of the 286 electrical and fire protection systems deficiencies found in our inspection, CJOC-J has corrected a total of 109 deficiencies (82 electrical and 27 fire), and will correct an additional 45 electrical and 61 fire deficiencies via a contract modification to the KASOTC Base Life Support (BLS) contract, effective March 30, 2016. For the remaining 71 deficiencies (5 electrical and 66 fire), however, the Commander, CJOC-J stated that Armed Forces-Jordan will submit waiver requests, along with safety mitigation measures, for deficiencies where appropriate corrective measures would be cost prohibitive or impede the operational mission of the occupying unit. Comments from the USARCENT Commander only partially addressed the specifics of the recommendations.

Our report recommends a root-cause analysis and corrective action plan for all 286 electrical and fire protection deficiencies, whereas the Armed Forces-Jordan plans to submit waivers for 71 deficiencies. The Commander, USCENCOM, is granted authority by DFARS 246.270-3 to waive compliance with UFC 1-200-01 when it is “impracticable to comply with such standards under prevailing operational conditions.” However, we believe that all of deficiencies found are safety related issues and create hazardous environment for the health and life of the occupants. Rectifying these deficiencies will eliminate the hazard, but with mitigation the hazards remain. Consequently, the occupants are still potentially exposed to the unsafe environments. Also, we believe that rectifying these deficiencies would not be expensive nor

interrupt the operational mission. Neither USARCENT nor USCENCOM responses provided adequate evidence to support a justification of the DFARS waivers for the 71 deficiencies. Therefore, we request USCENCOM, in coordination with the Commander, USARCENT, to provide the cost estimate for the corrective actions, and the statements on how implementing of these corrective actions will interrupt the mission operation.

Although not required to comment, the Chief of Staff, USCENCOM, agreed that our findings are violations of UFC 1-200-01, “General Building Requirements,” which is the criteria we used to inspect KASOTC. However, the Chief of Staff, USCENCOM, non-concurs with the criteria we used for the inspection, stating that UFC 1-201-02, “Assessment of Existing Facilities for Use in Military Operations,” is the appropriate criteria for inspecting facilities at KASOTC. We disagree with USCENCOM’s assertion. UFC 1-201-02, which provides assessment guidelines for evaluating existing facilities for the potential use in military operations, was published in June 2014 as a guide for warfighters to assess the life safety and habitability of existing facilities for potential occupancy by DoD personnel in support of military operations. At the time of our inspection, the facilities at KASOTC were not existing facilities to be evaluated for potential occupancy. They were constructed as permanent facilities, built for the KASOTC mission and had been occupied by U.S. Forces since 2009. Thus, we concluded that inspection of the U.S. military-occupied facilities at KASOTC for compliance with general criteria for fire protection and electrical system safety found in UFC 1-200-01 was valid.

Furthermore, our companion audit report, Report No. DODIG-2016-065, found that the 2010 Defense Federal Acquisition Regulation Supplement (DFARS) clause, which implements Public Law 111-84 (Section 807), October 28, 2009,



Results in Brief

U.S. Military-Occupied Facilities Inspection— King Abdullah II Special Operations Training Center

Management Comments (cont'd)

was mistakenly omitted from the BLS contract for the operation and maintenance of the KASOTC facilities and recommended that it be included. Inclusion of this clause in the BLS contract would have required compliance with UFC 1-200-01. The Executive Director, U.S. Army Contracting Command-Rock Island (ACC-RI), in his response to the audit, agreed, and stated the clause will be added to the contract no later than March 30, 2016. ACC-RI amended the BLS contract to include the contract clause on March 24, 2016. The change made as stated contractually mandates compliance with UFC 1-200-01.

Please see our response in “Management Comment on Appropriate Inspection Criteria and Our Response” Section.

Recommendations Table

Management	Recommendations Requiring Comment	No Additional Comments Required
Commander, U.S. Army Central	A.1 and B.1	A.2 and B.2



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

July 7, 2016

MEMORANDUM FOR COMMANDER, U.S. ARMY CENTRAL

SUBJECT: U.S. Military-Occupied Facilities Inspection—King Abdullah II Special Operations Training Center (Report No. DODIG-2016-106)

We are providing this final report for review and comment. We inspected U.S. military-occupied facilities at King Abdullah II Special Operations Training Center (KASOTC) for compliance with DoD health and safety policies and standards regarding the electrical and fire protection systems. We also conducted a radiation survey to determine whether background radiation levels due to building materials posed an unacceptable health risk. This project relates to the overseas contingency operation entitled Operation INHERENT RESOLVE, and was completed in accordance with the OIG's oversight responsibilities, as described in Section 8L of the Inspector General Act of 1978, as amended.

We conducted this inspection in accordance with the Council of Inspectors General on Integrity and Efficiency, "Quality Standards for Inspection and Evaluation." Our inspection identified a total of 286 deficiencies that could affect the health, safety, and well-being of the warfighters. Of the total deficiencies, 77 were critical deficiencies requiring immediate corrective action and these were recorded in a notice of concern issued to the Commanders of U.S. Central Command (USCENTCOM) and U.S. Army Central (USARCENT) in September 2015. The majority of the deficiencies identified during the inspections resulted from insufficient inspection and inadequate maintenance.

For the radiological assessment, the annual individual dose based on radiation measurements obtained from natural background radiation and from building materials at KASOTC was determined to be comparable to the average annual background external radiation dose individuals in the United States receive (less than 1.0 mSv). At these levels, there are no demonstrable radiation-induced health effects.

We considered management comments on a draft of this report when preparing the final report. Comments from the Commander, USARCENT, and Chief of Staff, USCENTCOM, conformed to the requirements of DoD Instruction 7650.03. Additional comments have been requested, as applicable, in the report. We should receive your comments within 30 days from the date of this report.

Please send a PDF file containing your comments to anh.tran@dodig.mil and vernard.jackson@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. Please direct questions to CAPT Chris Failla at (703) 604-8915 (DSN 664-8915) or at christopher.failla@dodig.mil.

A handwritten signature in black ink, appearing to read 'R. Stone', with a long horizontal flourish extending to the right.

Randolph R. Stone
Deputy Inspector General
Policy and Oversight

cc:
Under Secretary of Defense for Acquisition, Technology and Logistics
Commander, U.S. Central Command
Commander, Combined Joint Operations Center-Jordan
Inspector General, Department of the Army

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Introduction

Objective

Our objective was to physically inspect U.S. military-occupied facilities at King Abdullah II Special Operations Training Center (KASOTC), Amman, Jordan, to verify compliance with health and safety policies and standards regarding electrical and fire protection systems. We also conducted a radiation survey to determine whether background radiation levels due to the natural environment and building materials pose an unacceptable health risk. According to the Health Physics Society, building materials will have different radiation levels depending on the natural radioactive substances and the source of the material.¹

Materials from different regions of the world have been documented to contain greater radiation levels than those obtained from the United States. Because KASOTC buildings were constructed by foreign contractors and with materials from unknown origins, we conducted a radiation survey to ensure the health and safety of the U.S. military occupying these structures. This project was conducted in support of the overseas contingency operation, Operation INHERENT RESOLVE, 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.

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 Asia and the United States. This inspection project verified whether the U.S. military-occupied facilities at KASOTC were in compliance with DoD health and safety policies and standards. We conducted this inspection onsite at KASOTC near Amman, Jordan. Amman is the capital and most populous city of Jordan. It is the country's economic, political, and cultural center and one of the oldest continuously inhabited cities in the world. Situated in north-central Jordan, Amman, is the administrative center of the Amman Governorate. It has an estimated population of 4 million residents and a land area of 648.7 square miles (1,680 square kilometers). Amman is positioned on the mountains near the Mediterranean climate zone and has a semiarid climate.

¹ Center for Disease Control. "Radiation From Building Materials," <http://www.cdc.gov/nceh/radiation/building.html>, Accessed December 8, 2015.

King Abdullah II Special Operations Training Center

KASOTC provides reality-based training for special operations forces, counterterrorism units, and law enforcement agencies from Jordan and around the world. The Jordanian Government, which owns and operates the facility, designed the center with the U.S. Government in response to an unpredictable international security environment (see Figure 1).



The U.S. Central Command Forward-Jordan (CF-J) is a forward-deployed command element subordinate to U.S. Central Command (USCENTCOM) that operates from KASOTC. The CF-J coordinates between U.S. and Jordanian forces, as well as other U.S. organizations, including the U.S. Agency for International Development, the U.S. State Department, and the Military Services. Also, U.S. Army Central (USARCENT) is the Army component of USCENTCOM and is USCENTCOM's Coalition Forces Land Component Command that plans, coordinates, and employs land forces for KASOTC.

Concurrent with our inspection, the DoD OIG Assistant Inspector General for Contract Management and Payments performed an audit related to facility maintenance at KASOTC, focusing on compliance with the Basic Life Support Services (BLS) Contract. Our inspection focused on compliance of the U.S. military-occupied KASOTC facilities with DoD health and safety policies and standards.

The construction of KASOTC facility was partially financed by the U.S. Government in 2005.² According to the Army Acquisition Logistics and Technology (AL&T) article,³ KASOTC opened in 2009 and was built to meet U.S. technical and safety standards. However, USARCENT could not provide official documentation confirming which safety standards were utilized. Furthermore, they could not provide evidence of any periodic inspection and maintenance plans that complied with U.S. safety standards.

As part of our inspection, we also reviewed any relevant contractual requirements related to facility maintenance and safety. The BLS contract was the only contract from the U.S. Army Contracting Command-Rock Island (ACC-RI) awarded to KASOTC Incorporated⁴ to provide facility support for CF-J at KASOTC. This contract omitted health and safety requirements as required by the Defense Federal Acquisition Regulation Supplement (DFARS).

Specifically, DFARS Subpart 246.2, "Contract Quality Requirements," requires contracts for the construction, installation, repair, maintenance or operation of facilities acquired for use by DoD personnel, including facilities existing in host nation, to require contractor compliance with Unified Facilities Criteria (UFC) 1-200-01, "General Building Requirements," to minimize safety and health risks.⁵ DoD IG Report No. DODIG-2016-065, "U.S. Army Central and U.S. Army Contracting Command-Rock Island Need to Improve Facility Maintenance at King Abdullah II Special Operations Training Center," March 23, 2016, states that the required contract clause⁶ implementing the UFC 1-200-01 requirement was mistakenly omitted from the BLS contract and recommended that it be included. The Executive Director, ACC-RI, in his response to the DoD IG audit report, agreed, and stated that the clause will be added to the contract no later than March 30, 2016.

² FY 2005 Emergency Supplemental Act (Public Law 109-13).

³ Army AL&T October-December 2009 article, "King Abdullah Special Operations Training Center (KASOTC) Provides Capabilities for Coalition Forces," by LTC Rod Alexandre and SGM David Lanham.

⁴ A private Jordanian company that contracted with ACC-RI to provide Basic Life Support Service at KASOTC.

⁵ This DFARS criteria implements section 807 of the National Defense Authorization Act for Fiscal Year 2010, (Public Law 111-84, October 28, 2009).

⁶ DFARS 252.246-7004, "Safety of Facilities, Infrastructure, and Equipment for Military Operations (Oct 2010)."

Inspection Process and Criteria

We inspected U.S. military-occupied facilities at KASOTC to verify compliance with DoD health and safety policies and standards. We reviewed DoD policies and standards to determine which UFC and National Fire Protection Association (NFPA) codes were applicable and should be used as the general criteria for the fire and electrical system safety inspection. See Appendix C for a list of inspection standards and criteria. These criteria provide a general baseline for identification of deficiencies that impact life, health, and safety.⁷ We used the UFCs for enduring operations facilities (occupied for more than two years) rather than the UFCs for contingency operations facilities (occupied less than two years) because the U.S. military has occupied the facilities at KASOTC since 2009 (and have contractual obligations to occupy these facilities until 2019).⁸

We inspected office buildings, including common areas such as utility rooms, boiler rooms, mechanical rooms, electrical rooms, rooftops, laundry rooms, lounges, and common kitchen areas. We also inspected living quarters and selected the available units within sleeping quarters for inspection to minimize interruption to the residents. We also interviewed residents, maintenance personnel, facility management, and other installation subject matter experts (SMEs).

DoD OIG onsite inspectors were accompanied by base representatives known as Task Force Protect Our Warfighters and Electrical Resources (TF POWER). Each deficiency identified by a DoD OIG SME was discussed with a TF POWER representative. Following our inspection, the installation commander and his staff were briefed on the results and were provided a draft copy of all deficiencies identified via deficiency forms. See Appendix D for a sample deficiency form.

Notice of Concern

On September 17, 2015, we issued a notice of concern (NOC) on critical health and safety deficiencies⁹ identified during this inspection that require immediate corrective action. Specifically, the NOC identified systemic issues found in the sleeping quarters and working areas. These included construction with flammable materials, a lack of automatic sprinkler protection systems and smoke detectors, and faulty and disabled fire alarms. Systemic issues also included a lack of electrical equipment grounding throughout all facilities, improperly and ineffectively installed lightning protection systems, and other significant issues that created the potential for a fire or electrocution. Additionally, emergency means of egress were compromised by inward opening doors and improperly locked and blocked exits.

⁷ We did not consider controlling agreements or other authorities (including host nation) that might impact the fire safety or electrical criteria at KASOTC.

⁸ Basic Life Support contract with KASOTC Incorporated, W52P1J-14-C-0009, March 28, 2014.

⁹ A deficiency represents noncompliance with UFC standards.

The Director of CF-J through the Commander, USARCENT, responded to our NOC on October 9, 2015, with a plan to correct most of the fire and electrical safety deficiencies identified by the DoD OIG. USARCENT requested the DoD OIG re-evaluate the deficiencies related to the electrical main bonding jumper, accessibility of fire trucks, inaccessibility of fire hydrants, and the lack of critical fire door, stating that the deficiencies as written are not considered discrepancies in accordance with applicable regulatory guidance. The DoD OIG re-evaluated the deficiencies in question and provided detailed rationale in a response dated October 30, 2015. In our response, we maintained our initial recommendations due to the severity and risk of the deficiencies. See Appendix E for the NOC and response memorandum.

Overall Findings and Recommendations

We inspected 17 buildings, 2 transient tents, 24 trailer offices, 8 latrines, 2 ammunition and handling storage facilities, and the front gate security guard office. Of these facilities, nine buildings and two transient tents were used as sleeping quarters.

We identified a total of 286 deficiencies: 132 in electrical and 154 in fire protection systems. We provided a copy of all 286 deficiencies to USARCENT by way of the U.S. Army Aviation and Missile Research Development and Engineering Center Safe Access File Exchange. Any individual or combination of these deficiencies increases the risk of electrocution, fire, and the loss of life or property. Many of the electrical and fire protection systems for U.S. military-occupied facilities at KASOTC were insufficient, unreliable, and unsafe. The TF Power representatives informed us that many of these deficiencies were the result of a lack of inspection and routine maintenance, and attributed this to the lack of a published maintenance and inspection plan available for KASOTC facilities.

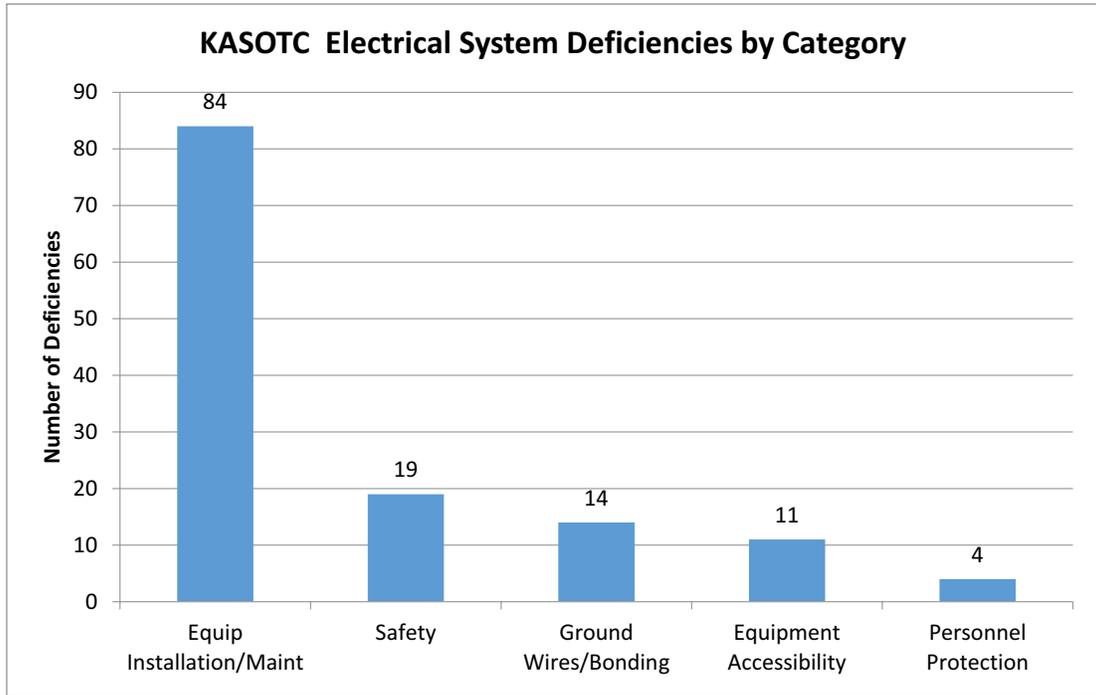
Finding A

KASOTC Electrical System Deficiencies

We identified a total of 132 electrical code deficiencies as documented on the OIG Evaluation Record. These deficiencies could have been mitigated if USARCENT had performed periodic inspection and maintenance in accordance with applicable standards and codes. As a result, these facilities pose a significant risk of electrocution, injury, or death.

We documented a total of 132 deficiencies (see Figure 2) related to electrical systems. Based on our evaluation, the deficiencies found were related to equipment installation and maintenance, safety, ground wires and bonding, equipment accessibility, and personnel protection, posing a risk of electrocution, injury, or death. The deficiencies included unprotected and exposed electrical wires and physically compromised lightning protection systems throughout KASOTC. The electrical systems also lacked equipment groundings and bonding jumpers at main service panels. In many instances equipment grounding was disabled or cut, suggesting a lack of proper knowledge and training of the local electricians contracted to perform installation and maintenance.

Figure 2. Electrical Deficiencies



Source: DoD OIG, PO-TAD



Figure 3. Water circulator motor with the ground conductor cut or missing (Deficiency No. KAS-EL-150828-023 Source: DoD OIG, PO-TAD)

One such critical deficiency included equipment ground conductors which were cut and not utilized, thus leading to potential shock or electrocution of tenants (see Figure 3).

We also identified numerous instances of main electrical panels with missing bonding jumpers and improperly sized conductors for their respective breakers. The lack of main bonding jumpers could create dangerous voltage levels during a ground fault condition and pose a safety threat to personnel. The branch circuits

that supply outlets in the electrical panel for the sleeping quarters lacked arc-fault circuit interrupters (AFCI).¹⁰ These deficiencies increase the risk of electrical system failure, fire, and electrocution hazards.

Many latrines, showers, and other bathroom areas had lighting fixtures that were not rated for use in areas that could be exposed to water or moisture. Without “wet labeled” or “damp labeled” indications, light fixtures are not suitable for use in damp conditions. If the fixtures are not designed for these conditions,

they increase the likelihood of electrocution. In many instances, light fixtures were also broken or were missing lens covers, thus exposing wiring to water, which increases the potential for electrical shock or electrocution (see Figure 4).



Figure 4. Light fixtures were missing lens covers and wiring was exposed (Deficiency No. KAS-EL-150828-076) Source: DoD OIG, PO-TAD

The team also found fluorescent lights with electronic ballasts that were overheating. This caused discoloration of the ceilings where the light fixtures were mounted, and charring of light fixture wires, which increase the risk of fire.

¹⁰ An AFCI is a device intended to provide protection from the effects of arc faults by recognizing characteristics unique to arcing and by functioning to de-energize the circuit when an arc fault is detected.

For personal protection deficiencies, we identified several receptacles where ground-fault circuit interrupter (GFCI)¹¹ protection was not used in the required areas, such as near the sink, washer, or water fountain. We also found energized wires that were not installed in junction boxes or they were installed in the junction box but were missing the covers. In addition, bare wires were connected to an electrical receptacle and electrical wire raceway covers were not installed or were broken, resulting in conductors that were lying on the floor or roof. Conductors lying loose on the floor posed a trip hazard and could be damaged, exposing bare wires, which could pose a fire hazard (see Figure 5).



Figure 5. Missing junction box with exposed energized wires (Deficiency No. KAS-EL-150828-074)
Source: DoD OIG, PO-TAD

The purpose of the lightning protection systems on many buildings was defeated or compromised because on the roofs of the buildings, the tops of the air terminals were lower than other antennas, air ducts, and heating, ventilation, and air conditioning (HVAC) equipment.

¹¹ GFCI is a fast-acting circuit breaker designed to protect personnel and property by disconnecting electric power in the event that a short circuit is detected.

Recommendations, Management Comments, and Our Response

Recommendation A

We recommend that the Commander, U.S. Army Central:

- 1. Conduct a root-cause analysis and implement a corrective action plan for all electrical deficiencies identified in this report.**
- 2. Create and execute a plan for ongoing inspection and maintenance of all U.S. military-occupied facilities at the King Abdullah II Special Operations Training Center and other locations where Commander, Combined Joint Operations Center-Jordan (CJOC-J) provides base operations support and inspection (BOS-I). Ensure that inspection and maintenance of these locations complies with applicable electrical codes.**

United States Army Central Comments

The Commander, USARCENT, agreed with our findings and recommendations. He concurs and supports the work being performed to correct the deficiencies as addressed in the March 2, 2016, memorandum from the Commander, CJOC-J. The Commander, CJOC-J indicated in his memorandum that a root-cause analysis identified the need for a fire and electrical inspection capability in KASOTC. This need was filled by a TF POWER representative, who immediately began prioritizing, repairing, and inspecting repairs to all deficiencies. The TF POWER representative noted that of the 132 electrical deficiencies identified, 82 had been corrected, 45 will be corrected via contract modification to the Base Life Support Services contract effective March 30, 2016, and that USARCENT would submit waiver requests for 5 deficiencies along with safety mitigation measures. These waiver requests will be submitted for faults where appropriate corrective actions would be cost prohibitive or impede the operational mission of the occupying unit. Furthermore, the representative stated that Armed Forces Jordan (ARFOR-J) Engineers (ENG) implemented a plan to inspect all facilities in Jordan occupied by Title 10 forces for which USARCENT has base operation support and inspection (BOS-I) responsibility every 3-6 months with status briefed to the Commander ARFOR-J on the 1st and 3rd Sunday of every month.

Our Response

Comments from the Commander, USARCENT partially addressed the specifics of the Recommendation A.1. The comment by the Commander, ARFOR-J, that they will submit waiver requests for 5 electrical deficiencies where appropriate corrective actions would be cost prohibitive or impede the operational mission of the occupying unit was not fully explained and supported. We understand that KASOTC is operated and maintained under a BLS contract, and the Commander, USCENTCOM, is granted authority by DFARS 246.270-3 to waive compliance with UFC 1-200-01 when it is “impracticable to comply with such standards under prevailing operational conditions.” However, we believe that all of deficiencies found are safety related issues and create hazardous environment for the health and life of the occupants. Rectifying these deficiencies will eliminate the hazard, but with mitigation the hazards remain. Consequently, the occupants are still potentially exposed to the unsafe environments. For example, installing the arc-fault circuit-interrupters, versus requesting waivers, will eliminate or reduce the risk of electrical fire and provide safer environment for the occupants. Also, we believe that rectifying these deficiencies would not be expensive nor interrupt the operational mission. Neither USARCENT nor USCENTCOM responses provided adequate evidence to support a justification of the DFARS waivers for the 5 electrical deficiencies. Therefore, we request USCENTCOM, in coordination with the Commander, USARCENT, to provide the cost estimate for the corrective actions, and the statements on how implementing of these corrective actions will interrupt the mission operation.

The Commander, CJOC-J’s plan for ongoing inspections and maintenance with oversight by AFFOR-J ENG and a TF POWER representative fully addressed the specifics of Recommendation A.2. We revised our Recommendation A.2 in the draft report from “other locations under the Commander, U.S. Army Central” to only include “other locations where Commander, Combined Joint Operations Center-Jordan (CJOC-J), provides base operations support and inspection (BOS-I),” based on USARCENT’s response.

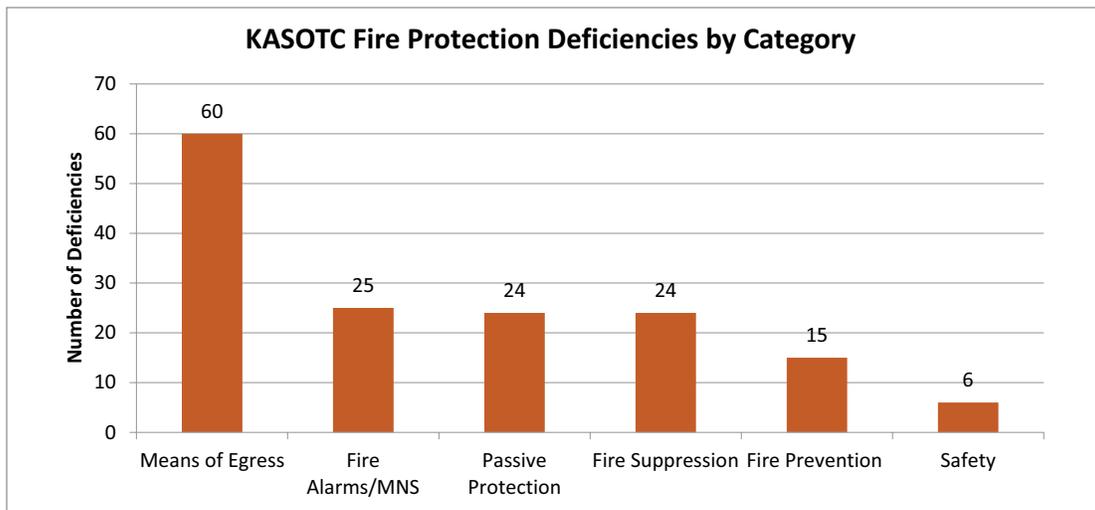
Finding B

KASOTC Fire Protection System Deficiencies

We identified 154 fire protection system code deficiencies as documented on the OIG Evaluation Record. These deficiencies could have been mitigated if USARCENT had performed periodic inspection and maintenance in accordance with applicable standards and codes. As a result, these facilities pose a significant risk of fire and loss of life or property.

We identified 154 deficiencies related to fire protection systems (see Figure 6). The majority of deficiencies found were related to the means of egress, passive protection, fire alarm and mass notification system (MNS), fire suppression, and fire prevention. These deficiencies in fire protection systems pose a significant risk of fire and loss of life or property.

Figure 6. Fire protection deficiencies



Source: DoD OIG, PO-TAD

One of the critical deficiencies identified during the inspection was the lack of notification and communication between the fire alarm systems and the fire department in all the buildings at KASOTC. The fire alarm systems at KASOTC were set up to send a notification message to the fire alarm panel at the front gate, and when notified, the guard would call the fire department. However, the

fire alarm panel at the front gate was nonfunctional and many of the connections with the building fire alarm systems did not exist. In the event of fire, none of the KASOTC fire alarm systems were capable of notifying the front gate or a supervising station (such as the fire department).

We also found an office building surrounded by concertina wire and blocked with a security trailer and concrete, thus preventing fire department access. This could cause a significant delay for the fire department in responding to an emergency or fire.

We found six facilities that were not equipped with fire alarm systems, three facilities with fire alarm systems that were completely off or out of service, and three facilities with partially-functioning fire alarm systems (see Figure 7).

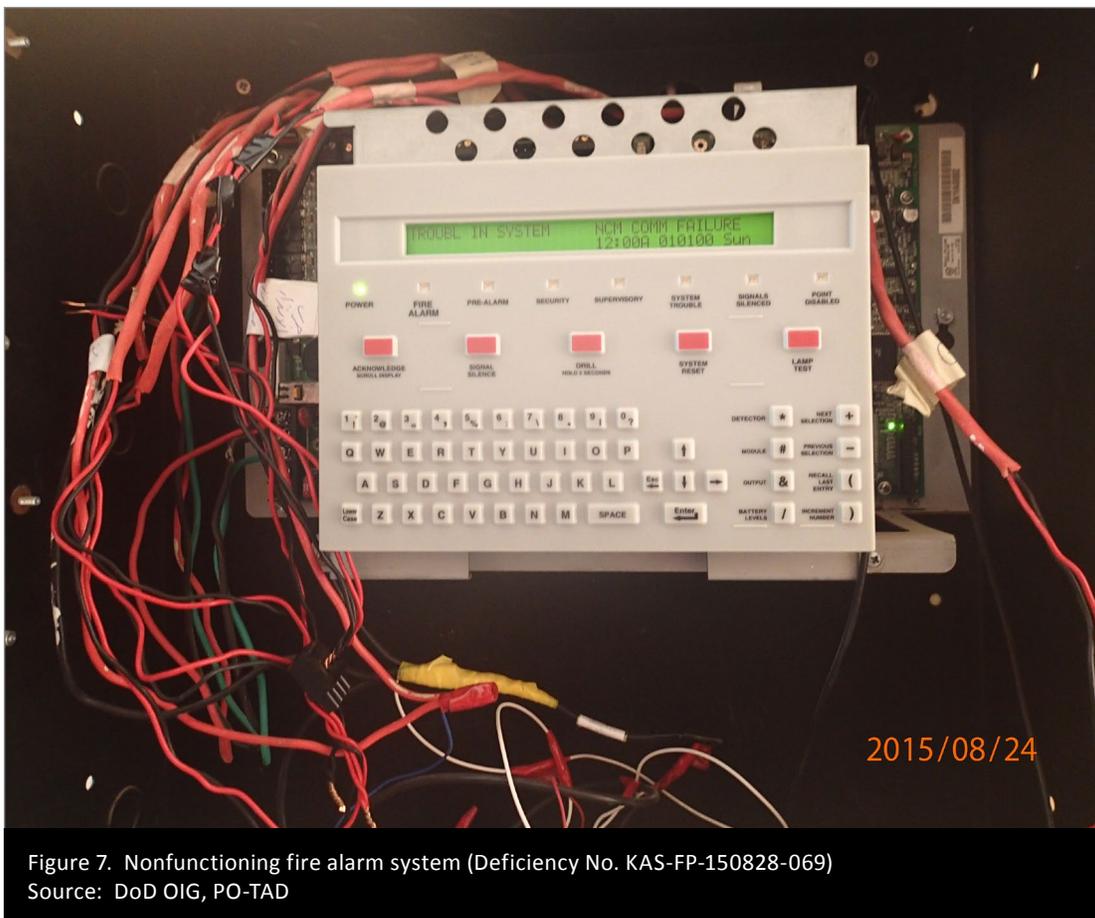


Figure 7. Nonfunctioning fire alarm system (Deficiency No. KAS-FP-150828-069)
Source: DoD OIG, PO-TAD

There were two sleeping quarters that did not have smoke alarms or smoke detectors. Some sleeping quarters were equipped with smoke detectors connected to partially or nonfunctioning fire alarm systems. None of the KASOTC buildings,



Figure 8A. Fire hydrant obstructed and inaccessible by concertina wire (Deficiency No. KAS-FP-150828-137)
Source: DoD OIG, PO-TAD

including the sleeping quarters, were equipped with automatic sprinkler protection systems. The lack of automatic sprinkler coverage could permit fires to grow unchecked.

We found fire hydrants that were blocked by concertina wire, buried in concrete, placed below the ground surface, and/or tapped as a nonfire-related source of water (see Figures 8A and 8B). Also, there was a lack of fire hydrants in close proximity to several buildings.



Figure 8B. Fire hydrant buried in concrete and tapped (Deficiency No. KAS-FP-150828-034)
Source: DoD OIG, PO-TAD

These compromised fire hydrants could significantly delay or prevent firefighter response in the event of fire.

Carbon dioxide (CO₂) fire extinguishers were improperly used for sleeping quarters. CO₂ fire extinguishers would not suppress fire properly, and could displace oxygen and harm occupants. We also found fire extinguishers throughout the base that were not inspected monthly, or did not display any evidence that the required 6-year maintenance had been performed.

For fire suppression systems, we found that none of the fume hoods in the dining facility kitchen were equipped with fire suppression systems. Grease fires from cooking equipment would not be contained and suppressed, and could endanger the occupants of the dining facility. Also, the dining facility kitchen equipment used natural gas, but there were no gas fuel shutoff valves connected to the building or the stoves. It is required by code that all sources of fuel and electrical power to appliances that produce heat automatically shut off in the event of fire.



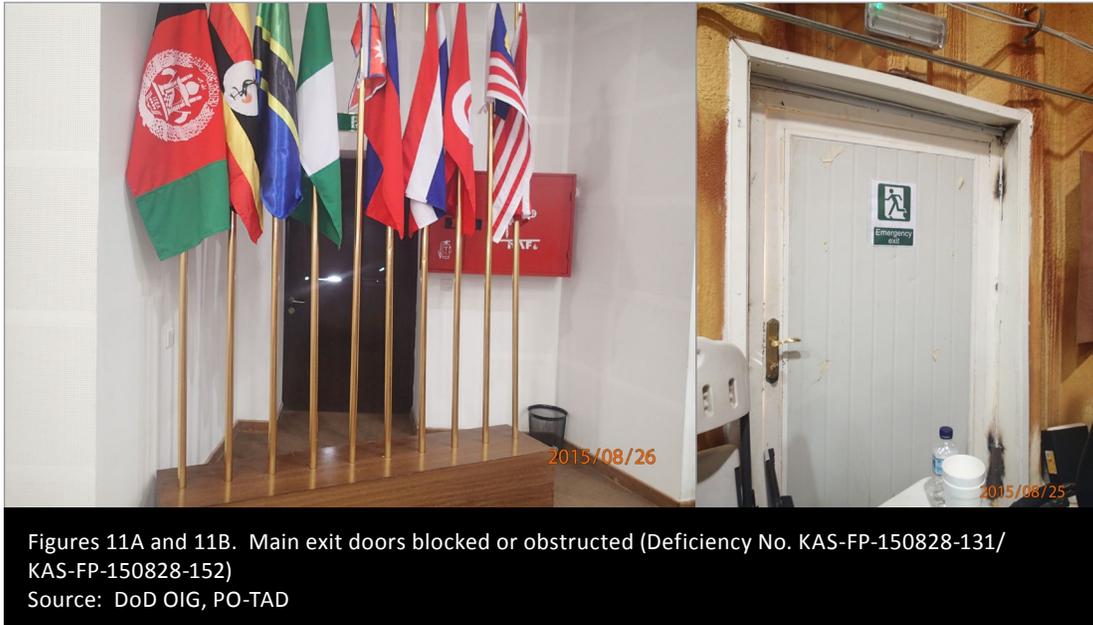
We found that four sleeping quarters had flammable foam insulation on the walls and ceiling that was not encapsulated, and that seven facilities had used non-fire-rated plywood to construct corridor walls and fire exit doors (see Figure 9). We burned a piece of the spray foam used on the walls and the ceiling and found that it produced a thick black smoke when burning. The use of flammable materials could compromise the means of egress through these corridors and could create toxic smoke in the event of a fire.

Means of egress available for instant use by tenants and residents are required by NFPA 101. Inadequate means of egress could prevent occupants from being able to escape in the event of a fire, leading to injury or death. In accordance with NFPA standards, provided locks shall not require the use of a key, tool, or special knowledge or effort for operation from the egress side. However, the means of egress were inadequate and numerous egress issues violated this standard. For instance, we found that the exit doors of many of the buildings had improper types of locks that could not be unlocked from the inside without the use of a key, which violates NFPA 101 standards.

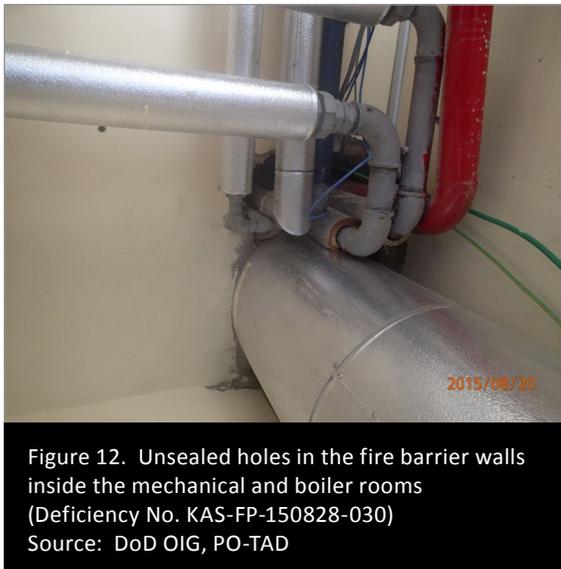
We also found that many doors from sleeping rooms required the use of a key to exit. The locked doors could potentially prevent a person from escaping in the event of an emergency (see Figure 10).



We found rear exits obstructed or blocked, which could slow the occupants' exit during a fire (see Figures 11A and 11B).



Throughout KASOTC, we found self-closing, fire-rated doors propped open and/or missing self-closure mechanisms, which could allow the rapid spread of fire and smoke throughout the building possibly rendering the exit hallway unusable. Also, many buildings had insufficient exit signage and inoperable emergency lighting, trip hazards over thresholds, and items stored underneath fire exit stairways, compromising the proper fire rating. Mechanical rooms



with diesel fuel equipment did not have carbon monoxide (CO) detection devices or exhaust fan systems. These issues impair the occupants' ability to be made aware of an emergency and safely exit the building in the event of an emergency. We also found numerous unsealed fire wall penetrations due to cable conduits routed through unsealed holes in fire barrier walls in mechanical and boiler rooms, creating a means for fire and smoke to propagate throughout the building (see Figure 12).

Throughout the base, the stairwell guards and handrails were improperly installed. The stairwell guards had gaps that were too large and the handrails were too short. Occupants could fall over or fall through a guardrail from a great height.

On one of the egress routes, we found drop-offs in excess of 30 inches without guardrails. Occupants could fall over the ledge and injure themselves (see Figure 13).



Figure 13. Drop-offs in excess of 30 inches without guardrails (Deficiency No. KAS-FP-150828-097)
Source: DoD OIG, PO-TAD

KASOTC did not provide the minimum fire protection systems to ensure the safety of the warfighters. None of the buildings of the U.S. military-occupied facilities at KASOTC requiring automatic sprinkler protection systems were equipped with automatic sprinkler protection systems.

In addition, self-closing doors were propped open, and many doors were not fire-resistance rated as required. These disabled or otherwise ineffective fire doors could trap tenants and residents in their rooms in the event of an emergency or fire. We also found throughout the base a lack of exit signage and inoperable emergency lightings, trip hazards, blocked escape route, and exit doors opening in the opposite direction of the egress.

Recommendations, Management Comments, and Our Response

Recommendation B

We recommend that the Commander, U.S. Army Central:

- 1. Conduct a root-cause analysis and implement a corrective action plan for all fire protection deficiencies identified in this report.**
- 2. Create and execute a plan for ongoing inspection and maintenance of all U.S. military-occupied facilities at the King Abdullah II Special Operations Training Center and other locations where Commander, Combined Joint Operations Center-Jordan (CJOC-J) provides BOS-I. Ensure inspection and maintenance of these locations complies with applicable fire protection codes.**

United States Army Central Comments

The Commander, USARCENT, concurred and stated that he supports the Commander, CJOC-J's March 2, 2016, memorandum about the work being performed to correct all the remaining deficiencies. The Commander, CJOC-J indicated in his memo that a root-cause analysis identified a requirement for a fire and electrical inspection capability in KASOTC. The requirement was filled by a TF POWER representative, who immediately began prioritizing, repairing, and inspecting repairs to all deficiencies. He noted that of the 154 fire protection deficiencies identified, 27 had been corrected, 61 will be corrected via modification to the BLS contract, effective March 30, 2016, and that they would submit waiver requests for 66 deficiencies along with safety mitigation measures. These waiver requests will be submitted for faults where appropriate corrective actions would be cost prohibitive or impede the operational mission of the occupying unit. Furthermore, he stated that Armed Forces-Jordan (ARFOR-J) Engineers (ENG) had implemented a plan to inspect all facilities in Jordan occupied by Title 10 forces for which USARCENT has base operation support and inspection (BOS-I) responsibility every 3-6 months with status briefed to the Commander, ARFOR-J on the 1st and 3rd Sunday of every month.

Our Response

Comments from the Commander, USARCENT, partially addressed the specifics of the Recommendation B.1. The comment by the Commander, ARFOR-J that they will submit waiver requests for 66 fire protection deficiencies where appropriate corrective actions would be cost prohibitive or impede the operational mission of the occupying unit was not fully explained and supported. We understand that

KASOTC is operated and maintained under a BLS contract, and the Commander, USCENTCOM, is granted authority by DFARS 246.270-3 to waive compliance with UFC 1-200-01 when it is “impracticable to comply with such standards under prevailing operational conditions.” However, we believe that all of deficiencies found are safety related issues and create hazardous environment for the health and life of the occupants. Rectifying these deficiencies will eliminate the hazard, but with mitigation the hazards remain. Consequently, the occupants are still potentially exposed to the unsafe environments. For example, in the event of a filter or belt fire in the HVAC units, duct smoke detectors installed will automatically stop the HVAC fan upon detecting the presence of smoke. With the waiver, the HVAC units will not shut down, and smoke will be distributed throughout the facility, creating a hazardous situation for occupants. Also, we believe that rectifying these deficiencies would not be expensive nor interrupt the operational mission. Neither USARCENT nor USCENTCOM responses provided adequate evidence to support a justification of the DFARS waivers for the 66 fire protection deficiencies. Therefore, we request USCENTCOM, in coordination with the Commander, USARCENT, to provide the cost estimate for the corrective actions, and the statements on how implementing of these corrective actions will interrupt the mission operation.

The Commander, CJOC-J’s plan for ongoing inspections and maintenance with oversight by AFFOR-J ENG and a TF POWER representative fully addressed the specifics of Recommendation B.2. We revised our Recommendation B.2 in the draft report from “other locations under the Commander, U.S. Army Central” to only include “other locations where the Commander, Combined Joint Operations Center-Jordan (CJOC-J) provides base operations support and inspection (BOS-I),” based on the USARCENT response.

Finding C

KASOTC Radiological Assessment

The overall mean radiation dose at KASOTC was determined to be 0.76 mSv per year. At these levels, there are no demonstrable radiation-induced health effects. The Health Physics Society supports the establishment of an acceptable dose of radiation of 1mSv/yr above the annual natural radiation background. At this dose, risks of radiation-induced health effects are either nonexistent or too small to be observed.

Our radiological assessment determined the annual individual dose from background radiation measurements at KASOTC (See Appendix B for objectives and methodology).

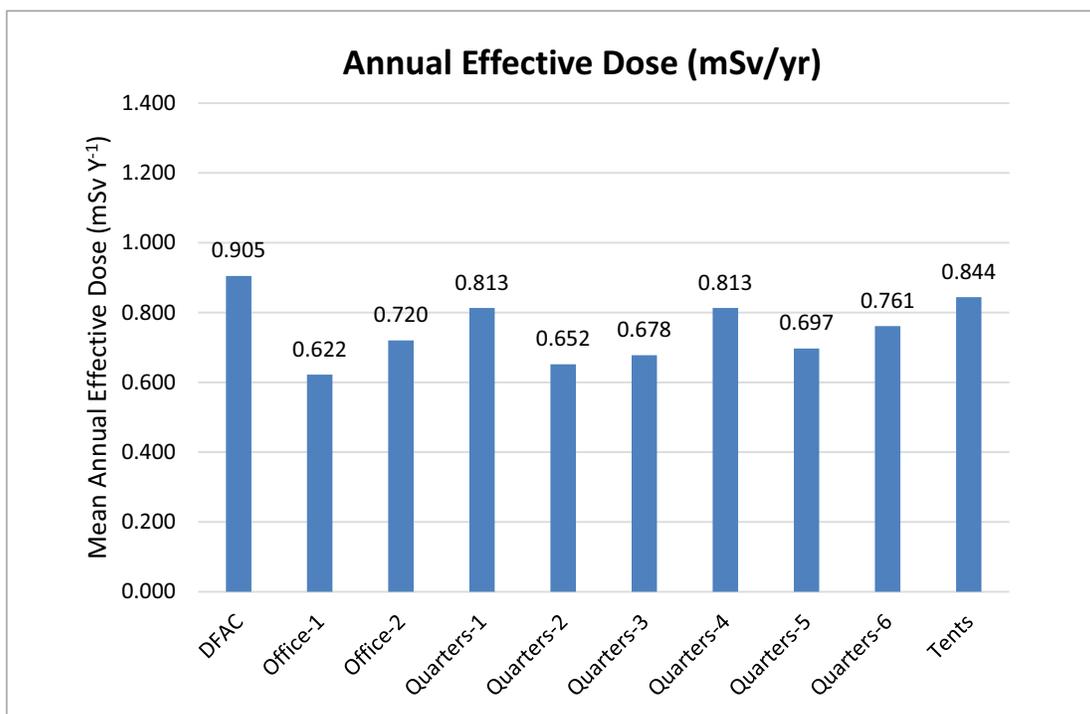
For the radiological assessment, the determined annual individual dose from background radiation measurements from building materials at KASOTC was comparable to the average annual background radiation dose individuals receive from external radiation in the United States (less than 1.0 mSv).

Survey Results

The mean individual dose value was determined from indoor and outdoor ambient radiation exposure measurement at each facility. All calculations were done on an exposure rate basis and summed over a 365-day period to estimate the individual yearly dose. Static measurements were taken in millisievert (mSv) per minute, then hourly rates were calculated and multiplied by 8,760 hours per year (24 h d⁻¹ x 365 d yr⁻¹). To simplify the calculations, and as a general approximation, conversions and weighting factors were assumed to be uniform for all calculations to conservatively determine individual effective dose values. For this assessment, equivalent dose is equal to effective dose. Indoor and outdoor occupancy weighting factors were also applied to determine the individual annual effective dose.

The determined annual mean effective dose values for each location inspected are shown graphically in Figure 14. Determined mean values were all less than a 1.0 mSv annual effective dose. The overall mean dose was determined to be 0.76 mSv. The results of this assessment suggest that the mean effective dose an individual receives from external background radiation in one year while assigned to KASOTC is less than 1.0 mSv. Currently, there are no regulatory dose limits from external, naturally occurring background radiation exposure.

Figure 14. Estimated annual mean effective dose for individual at KASOTC



Source: Bureau of Medicine and Surgery, Department of the Navy

However, the Environmental Protection Agency (EPA), the U.S. Nuclear Regulatory Commission (NRC), and health physicists generally agree on limiting a person's exposure to background radiation to about 1 mSv per year from all sources. Exceptions are occupational, medical, or accidental exposures. The NRC regulates the effective dose to individual members of the public from licensed operation to less than 1 mSv in a year above background radiation. The EPA generally limits exposures to the public from a specific source to levels under 1 mSv. The Health Physics Society (HPS) agrees with these dose limits.

Recommendation

No recommendation made.

Response to USCENTCOM Comment on Criteria

United States Central Command Comments

Although not required to comment, the Chief of Staff for the Commander of USCENTCOM stated that ARFOR-J developed and implemented an aggressive corrective action plan for deficiencies identified as the most critical in the report. The Chief of Staff also stated that the ARFOR-J has taken a proactive approach to correcting the noted deficiencies by inspecting facilities, modifying BLS contracts, and implementing appropriate risk mitigation strategies to rectify the existing 286 deficiencies. However, while agreeing that our findings are violations of our inspection criteria (UFC 1-200-01, “General Building Requirements”), USCENTCOM non-concurs with the criteria we used for the inspection, stating that the UFC 1-201-02, “Assessment of Existing Facilities for Use in Military Operations,” is the appropriate criteria for inspecting facilities at KASOTC.

Our Response

We disagree with USCENTCOM’s assertion. UFC 1-201-02, which provides assessment guidelines for evaluating existing facilities for potential use in military operations, was published in June 2014 as a guide for warfighters to assess the life safety and habitability of existing facilities for potential occupancy by DoD personnel in support of military operations. At the time of our inspection, the facilities at KASOTC were not existing facilities to be evaluated for potential occupancy. They were constructed as permanent facilities, built for the KASOTC mission, and had been occupied by U.S. Forces since 2009. Thus, we logically concluded that the general criteria for inspection of fire protection and electrical system safety found in UFC 1-200-01 were valid for the inspection of the U.S. military-occupied facilities at KASOTC.

The criteria found in UFC 1-200-01 provide a general baseline for identification of deficiencies that impact life, health, and safety. Our inspection, performed August 18-29, 2015, provided the command with a comprehensive and thorough assessment of health and safety risks based on the UFC standards required.

Our companion audit report, “U.S. Army Central and U.S. Army Contracting Command–Rock Island Need to Improve Facility Maintenance at King Abdullah II Special Operations Training Center,” (Project No. DODIG-2016-065) found that the

2010 DFARS clause 252.246-7004, which implements public law¹², was mistakenly omitted from the BLS contract and recommended that it be included. This clause required the implementation of C.F.R. 252.246-7004, "Safety of Facilities, Infrastructure, and Equipment for Military Operations," in solicitations and contracts for the construction, installation, repair, maintenance or operation of facilities, infrastructure, or for equipment configured for occupancy or planned for use by DoD military or civilian personnel during military operations. C.F.R. 252.246-7004 requires that the facilities, infrastructure, and equipment acquired, constructed, installed, repaired, maintained, or operated under contract comply with UFC 1-200-01. This DFAR aligned with our inspection at KASOTC to ensure compliance with UFC 1-200-01 standards.

The Executive Director, ACC-RI, in his response to the DoD OIG companion audit report, agreed with the oversight and omission and amended the BLS contract to include the contract clause on March 24, 2016. The agreement to add the clause further strengthens our position that the criteria used for the KASOTC inspection, UFC 1-200-01, was appropriate even though the requirement to be in compliance with UFC 1-200-01 was not included in the KASOTC BLS contract. The results of our inspection will also be useful as a baseline as ACC-RI and ARCENT implement the recommendations made in the audit report and continue to monitor the contract maintenance services performed at KASOTC under the BLS contract.

¹² Public Law 111-84, "National Defense Authorization Act for Fiscal Year 2010," Section 807, "Policy and Requirements to Ensure the Safety of Facilities, Infrastructure, and Equipment for Military Operations."

Appendix A

Scope and Methodology

We conducted the onsite physical inspection from August 19-29, 2015. We limited our inspection of KASOTC to U.S. military-occupied facilities. We inspected to applicable UFC standards as previously discussed in this report in accordance with the Council of the Inspectors General on Integrity and Efficiency, “Quality Standards for Inspection and Evaluation.” Those 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 also conducted a radiation survey of facilities and construction materials at KASOTC. The objective was to determine whether current ambient (background) radiation levels due to the building materials pose unacceptable health risk concerns to DoD personnel living and working in U.S. military-occupied facilities.

This project focused on the physical inspection of the U.S. military-occupied KASOTC facilities and did not evaluate any government contract administration policies or services.

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 in the areas of electrical system safety, fire protection engineering, radiation, and quality assurance. SMEs were certified in their associated field.

Prior Coverage

During the last 5 years, the Department of Defense Office of the Inspector General (DoD OIG) issued several reports discussing military housing inspections. Unrestricted DoD OIG reports can be accessed at <http://www.dodig.mil/pubs/index.cfm>.

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 B

Radiological Assessment Objective and Methodology

Prepared by Bureau of Medicine and Surgery

Objective

The objective of this assessment was to determine whether current ambient (background) radiation levels due to building materials pose unacceptable health risk concerns to DoD personnel living and working in U.S. military-occupied facilities in KASOTC, Jordan.

Scope and Methodology

We measured ambient radiation levels of indoor and outdoor areas, including contact surface measurements of building materials in U.S. military-occupied facilities and living quarters. More than 100 static and systematic (dynamic) radiation survey measurements were taken in 10 facilities and living quarters and adjacent outdoor areas. Soil, air, food, or water radio-analysis was not within the scope of this inspection. Consequently, the radiological assessment does not include any contribution from internal uptake of radioactive materials, such as through ingestion and inhalation.

The survey instruments are shown in Figures 15-18 below.



Figure 15. FLUKE 451P ionization chamber
Source: Bureau of Medicine and Surgery, Department of the Navy



Figure 16. SAIC IM-265/PDQ with DT 680 Beta-Gamma probe
Source: Bureau of Medicine and Surgery, Department of the Navy



Figure 17. SAIC AN/PDQ-5, with DT 681 Alpha probes
Source: Bureau of Medicine and Surgery, Department of the Navy



Figure 18. FLIR identiFINDER Gamma Spectrometer
Source: Bureau of Medicine and Surgery, Department of the Navy

Survey measurements were based on the following methods and approaches:

- static integrated external radiation exposure measurements of ambient gamma radiation levels of indoor buildings and living quarters and adjacent outdoor areas;
- systematic scanning survey of ambient beta and gamma radiation levels of indoor buildings and living quarters and adjacent outdoor areas;
- contact surface measurements of alpha radiation of building materials (ceramic tiled floors and walls, and granite counters/table tops); and
- isotopic analysis of ambient radiation levels and of building materials.

According to the Health Physics Society, building materials will have different radiation levels, depending on the natural radioactive substances and the source of the material.

Appendix C

Inspection Standards and Criteria

Federal Laws and Standards

Occupational Safety and Health Act of 1970, Section 19, “Federal Agency Safety Programs and Responsibilities”

Federal Regulation Notice 29 CFR Standard 1910, “Basic Program Elements for Federal Employees - Occupational Safety and Health Programs”

Executive Order 12196, “Occupational Safety and Health Programs for Federal Employees”

Federal Fire Prevention and Control Act of 1974

DoD Policies and Standards

DoD Instruction (DoDI) 6055.01, “DoD Safety and Occupational Health (SOH) Program,” October 14, 2014

DoD Instruction (DoDI) 6055.05, “Occupational and Environmental Health,” November 11, 2008

DoD Instruction (DoDI) 6055.06, “DoD Fire and Emergency Services (F&ES) Program,” December 21, 2006

DoD Instruction (DoDI) 4165.63, “DoD Housing,” July 21, 2008

DoD Directive (DoDD) 4715.1E, “Environmental Safety and Occupational Health,” March 19, 2005

DoD 4165.63-M, “DoD Housing Management,” October 28, 2010

Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum, “Department of Defense Unified Facilities Criteria,” May 29, 2002

Unified Facilities Criteria

UFC 1-200-01, “General Building Requirement,” Change 1, September 1, 2013

UFC 1-202-01, “Host Nation Facilities in Support of Military Operations,” September 1, 2013

UFC 3-410-01, “Heating, Ventilating, and Air Conditioning Systems,” Change 1, October 1, 2014

UFC 3-520-01, "Interior Electrical Systems," Change 2, July 1, 2012

UFC 3-560-01, "Electrical Safety, O&M," Change 5, April 14, 2015

UFC 3-600-01, "Fire Protection Engineering for Facilities," Change 3, March 1, 2013

UFC 3-601-02, "Operation and Maintenance: Inspection, Testing, and Maintenance of Fire Protection Systems," September 8, 2010

National Fire Protection Association Standards

Electrical Criteria

NFPA 70, "National Electrical Code (NEC)," 2014 Edition

Fire Protection Criteria

NFPA 1, "Fire Code Handbook," 2012 Sixth Edition

NFPA 10, "Standard for Portable Fire Extinguishers," 2010 Edition

NFPA 13, "Standard for the Installation of Sprinkler Systems," 2013 Edition

NFPA 13D, "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes," 2013 Edition

NFPA 13R, "Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies," 2013 Edition

NFPA 25, "Standard for the Inspection Testing and Maintenance of Water-Based Fire Protection System," 2011 Edition

NFPA 80, "Standard for Fire Doors and Other Opening Protective," 2016 Edition

NFPA 101, "Life Safety Code," 2015 Edition

NFPA 720, "Standard for Installation of Carbon Monoxide Detection," 2012 Edition

General Environmental Health and Safety Criteria

AR 420-1, "Army Facilities Management," August 24, 2012

Appendix D

Sample of the Deficiency Form

 <div style="text-align: center; background-color: black; width: 150px; height: 20px; margin: 0 auto 20px auto;"></div> <p style="text-align: center;">DOD Office of the Inspector General TAD EVALUATION RECORD</p> 		
DIRECTED TO (ACTIVITY/LOCATION) KASOTC / Jordan	PROJECT KASOTC Facility Inspection	CONTROL NUMBER KAS-FP-150828-047
DODIG EVALUATOR Fire Protection Team Lead Fire Protection SME		SUBMITTAL DATE Aug 28, 2015
PERSON(S) CONTACTED / TITLE/ORG [REDACTED] Fire Inspector/USAF		CLAUSE # NFPA 101 Section 7.2.1.5.1 NFPA 101 Section 7.2.1.5.3
		MANAGEMENT REVIEW Signature/Date: _____
ABSTRACT Many doors in the means of egress have locks.		
DETAILED DESCRIPTION OF CONDITION Many doors in the means of egress in Accommodations(ACOM) 1 have locks. Doors in the means of egress, including any doors in the corridors and doors into stairways, are required to be available for use at any time. Photos FP_P82102215 and FP_P8210243 show examples of key-use dead bolt latches used on egress doors.		
EFFECT Doors could be locked and occupants could lose access to a means of egress during a fire.		
RECOMMENDATION Remove the locks in all doors in the means of egress of ACOM 1.		
CRITERIA NFPA 101 (2015) Section 7.2.1.5.1, Locks, Latches, and Alarm Devices: Door leaves shall be arranged to be opened readily from the egress side whenever the building is occupied. NFPA 101 (2015) Section 7.2.1.5.3, Locks, Latches, and Alarm Devices: Locks, if provided, shall not require the use of a key, a tool, or special knowledge or effort for operation from the egress side.		
OBJECTIVE EVIDENCE Photos FP_P82102215 and FP_P8210243 are attached electronically to this finding form.		
		1 of 1
<div style="background-color: black; width: 100%; height: 20px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 100%; height: 20px;"></div>		
IG-TAD FORM 10. August 12, 2014		

Appendix E

Notice of Concern and Management Responses

United States Army Central



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

September 17, 2015

MEMORANDUM FOR COMMANDER, UNITED STATES CENTRAL COMMAND
COMMANDER, UNITED STATES ARMY CENTRAL

SUBJECT: Notice of Concern – Inspection of United States Occupied Military Facilities at
King Abdullah II Special Operations Training Center
(Project No. D2015-D0001P1-0227)

As the Lead Inspector General for Operation INHERENT RESOLVE, the Office of the Inspector General (OIG), DoD, performed safety inspections of U.S. military occupied facilities at the King Abdullah II Special Operations Training Center (KASOTC) August 18 – 29, 2015. This project was performed in accordance with the OIG’s oversight responsibilities as described in Section 8L of the Inspector General Act of 1978, as amended.

The OIG identified significant safety issues that require your immediate attention. Overall, we identified more than 154 fire protection and 132 electrical 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 most critical deficiencies requiring immediate corrective action.

DoD Instrucion 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 KASOTC 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

Systemically, we found sleeping quarters and work areas constructed with flammable materials (without sprinkler systems and smoke detectors), and faulty and disabled fire alarms. There was also a systemic lack of structural and equipment electrical grounding throughout all facilities, lightning protection equipment had been installed improperly and ineffectively, and other significant issues creating potential for fire or electrocution. Additionally, most emergency means of egress were compromised by inward opening doors, and improperly locking and/or blocked exits. Although the OIG DoD understands the inherent danger in military operations, we do not view the identified safety issues as acceptable risks in the KASOTC training environment.

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

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



United States Army Central (cont'd)

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 October 15, 2015. We will include copies of your comments in our official report. If possible, send a portable document format (.pdf) file containing your comments to [REDACTED]

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



Randolph R. Stone
Deputy Inspector General
Policy and Oversight

cc:
Under Secretary of Defense for Acquisition, Technology and Logistics
Assistant Secretary of the Air Force (Financial Management and Comptroller)
Commander, U.S. Special Operations Command
Army Inspector General

United States Army Central (cont'd)



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

Attachment

KASOTC Notice of Concern Critical Deficiencies

Fire Protection

- Fire alarms in the buildings [REDACTED] did not report to a supervising station (i.e. fire department). The fire alarm systems at KASOTC were set up to report to the fire alarm panel at the front gate, but that connection did not exist. (KAS-FP-150828-013)
- [REDACTED], used as sleeping quarters, did not have smoke alarms install; the fire alarm control panels also did not exist for these buildings. (KAS-FP-150828-136, KAS-FP-150828-146)
- [REDACTED] buildings were used as sleeping quarters; the installed smoke detectors were connected to alarm control panels that were either completely off or not functioning. (KAS-FP-150828-088, KAS-FP-150828-096, KAS-FP-150828-109, KAS-FP-150828-110)
- [REDACTED] building is a sleeping quarter; the installed smoke detectors were connected to a fire alarm control panel that was completely out of service. (KAS-FP-150828-069)
- [REDACTED] building fire alarm control panel was out of service. (KAS-FP-150828-027)
- [REDACTED] buildings were equipped with automatic sprinkler protection systems, in particular the sleeping quarters. Lack of sprinkler coverage could permit fires to grow unchecked. (KAS-FP-150828-054, KAS-FP-150828-068, KAS-FP-150828-079, KAS-FP-150828-087, KAS-FP-150828-095, KAS-FP-150828-104, KAS-FP-150828-113, KAS-FP-150828-139, KAS-FP-150828-148, KAS-FP-150828-154)
- [REDACTED] building was surrounded by razor barbed wire and blocked with concrete preventing fire truck access. (KAS-FP-150828-006)
- Fire hydrants were blocked by razor barbed wire outside the [REDACTED] building; buried in the concrete or placed below the ground surface outside the [REDACTED] building; and did not exist for [REDACTED]. (KAS-FP-150828-137, KAS-FP-150828-034, KAS-FP-150828-102, KAS-FP-150828-112)
- Exit doors and frames of [REDACTED] buildings were not fire rated and were constructed with flammable materials, increasing the spread of smoke and flames throughout the building. (KAS-FP-150828-122, KAS-FP-150828-126, KAS-FP-

United States Army Central (cont'd)

150828-132, KAS-FP-150828-134, KAS-FP-150828-138, KAS-FP-150828-142, KAS-FP-150828-144)

- [REDACTED] was equipped with exit doors with lock usage on both sides; and missing closure mechanisms that could allow the rapid spread of fire and smoke throughout the building possibly rendering the exit hallway unusable. (KAS-FP-150828-070, KAS-FP-150828-071, KAS-FP-150828-072, KAS-FP-150828-077)

Electrical

- The water circulator pump for the latrine across from the [REDACTED] had cut and missing ground conductors which could increase the risk of shock and electrocution. (KAS-EL-150828-23)
- The [REDACTED] Building, compressors 2/3/4 had voltage between their metal equipment enclosures and ground. (KAS-EL-150828-129)
- [REDACTED], the height of equipment on their roof compromised the lightning protection systems. (KAS-EL-150828-50, KAS-EL-150828-31, KAS-EL-150828-122)
- [REDACTED] building equipment grounds were cut or not used, which could increase the risk of fire, equipment damage, or possible electrocution. (KAS-EL-150828-112, KAS-EL-150828-80, KAS-EL-150828-104, KAS-EL-150828-19)
- [REDACTED] were all missing the main electrical panel bonding jumper, increasing the risk of possible electrocution. (KAS-EL-150828-46, KAS-EL-150828-51, KAS-EL-150828-59, KAS-EL-150828-68, KAS-EL-15028-113, KAS-EL-150828-9, KAS-EL-150828-24, KAS-EL-150828-78, KAS-EL-150828-89, KAS-EL-150828-105, KAS-EL-123)
- [REDACTED] had fluorescent light ballasts that were overheating, which caused discoloration of the light fixtures and charring of light fixture wires increasing the risk of fire. (KAS-EL-150828-108)
- [REDACTED] circuit breakers had improperly sized conductors installed which could increase the risk of fire. (KAS-EL-150828-102, KAS-EL-150828-116, KAS-EL-150828-25, KAS-EL-150828-5, KAS-EL-150828-125, KAS-EL-150828-26)
- [REDACTED] bathrooms used non wet-rated light fixtures. Accommodation 3 bathrooms light fixture wiring were exposed. The L2 latrine of [REDACTED] and bathroom 4108 of [REDACTED] had light fixtures were missing a lens. (KAS-EL-150828-47, KAS-EL-150828-60, KAS-EL-15028-35, KAS-EL-150828-69, KAS-EL-150828-14, KAS-EL-150828-62, KAS-EL-150828-76, and KAS-EL-150828-29, KAS-EL-150828-98)

United States Army Central (cont'd)

- [REDACTED] had exposed and energized wires not installed in the junction boxes. (KAS-EL-150828-74, KAS-EL-150828-82, KAS-EL-150828-92, KAS-EL-150828-97, KAS-EL-150828-85)
- The [REDACTED] laundry room had a fan connected to an electrical receptacle using only bare wires. Additionally, the receptacle was hanging by a coat hanger and no equipment ground conductor was connected to the electrical system. The deficiency posed an increased risk of fire. (KAS-EL-150828-2)

United States Central Command



UNITED STATES CENTRAL COMMAND
CENTCOM FORWARD - JORDAN
APO AE 09315

CJDC

09 October, 2015

MEMORANDUM THRU COMMANDER, UNITED STATES ARMY CENTRAL
FOR UNITED STATES CENTRAL COMMAND

SUBJECT: Response to the DoD IG Notice of Concern (NOC) – Inspection of United States Occupied Military Facilities at King Abdullah II Special Operations Training Center (KASOTC)

1. Purpose: Provide a response to the 20 fire and electrical safety concerns outlined in the DoD IG NOC (enclosure 1).

2. Response:

a. The Basic Life Support Contracting Officer Representative (BLS COR) identified seven deficiencies (E1-2, 4-9) that can be resolved without a contract modification. The NOC has been provided to KASOTC Inc. Task Force Protect Our Warfighters and Electrical Resources (TF POWER) in conjunction with the COR has developed a status tracker with recommended mitigations. This status tracker is attached (enclosure 2). TF POWER and the BLS COR track progression of corrective actions and conduct weekly walkthroughs with KASOTC Inc. After each walkthrough, the BLS COR submits or updates work orders for each of the deficiencies identified, and schedules follow-up walkthroughs to re-evaluate the listed areas of concern.

b. The BLS COR identified nine deficiencies (E-3, FP 2-6, 9-11) that will require a contract modification. The BLS COR is developing a contract modification in support of improved fire and electrical safety procedures and standards for KASOTC BLS. The BLS COR will submit this contract modification to ARCENT NLT 1 NOV 15, to correct these deficiencies.

c. The BLS COR identified one deficiency (FP12) that will likely require a waiver due to high cost or impracticality. For the faults associated with this deficiency a mitigation strategy has been, or will be, developed and submitted in conjunction with the waiver request. The waivers for all deficiencies identified in the DoD IG inspection will be submitted to ARCENT for approval no later than 30 days after receipt of the final DoD IG inspection report.

United States Central Command (cont'd)

CJDC

SUBJECT: Response to the DoD IG Notice of Concern (NOC) – Inspection of United States Occupied Military Facilities at King Abdullah II Special Operations Training Center (KASOTC)

d. The BLS COR recommended that three deficiencies (FP1, 7-8) be re-evaluated by the DoD IG, as they are not considered discrepancies in accordance with applicable regulatory guidance (Unified Facilities Criteria 1-201-02).

3. Resources Required: No external personnel support is required at this time. The Fire and Electrical safety team at KASOTC consists of the TF POWER team to provide the technical oversight; the BLS COR, along with subject matter experts, to provide contractual guidance and submit work orders to track deficiencies listed; and KASOTC Incorporated who will be responsible for correcting the deficiencies provided to them through work orders. This will be sufficient to support current requirements. However, for specific faults, reach back professional engineer assistance will be required to develop sufficient mitigation strategies and will be requested through the ARCENT Engineer as needed.

4. The point of contact for this memorandum is the CF-J Engineer at [REDACTED]

- 2 Encls
- 1. DoD IG NOC
- 2. DoD IG NOC Mitigations

WALRATH.DANIEL [REDACTED]
[REDACTED]
DANIEL R. WALRATH
Brigadier General, USA
Director, CENTCOM Forward-Jordan

United States Central Command (cont'd)



UNCLASSIFIED

UNITED STATES CENTRAL COMMAND
OFFICE OF INSPECTOR GENERAL
7115 SOUTH BOUNDARY BOULEVARD
MACDILL AIR FORCE BASE, FLORIDA 33621-5101

29 January 2016

MEMORANDUM FOR OFFICE OF INSPECTOR GENERAL, DEPARTMENT OF DEFENSE

SUBJECT: Response to the DODIG Notice of Concern – Inspection of United States Occupied Military Facilities at King Abdullah II Special Operations Training Center (KASOTC)

Ref: (a) DODIG Notice of Concern – Inspection of United States Occupied Military Facilities at King Abdullah II Special Operations Center (Project No. D2015-D000PT-0227), 17 September 2015.

1. Reference (a) requested U.S. Army Central (ARCENT) provide a response and proposed corrective action for significant safety issues identified during the subject inspection of KASOTC.
2. Enclosed is the ARCENT response memorandum provided via separate correspondence directly to DODIG on 14 October 2015.


DUANE T. RACKLEY
GS-15
Executive Director

Attachment:

TAB A: ARCENT Memo – Response to the DoD IG Notice of Concern (NOC) – Inspection of United States Occupied Military Facilities at King Abdullah II Special Operations Training Center (KASOTC), 09 October 2015

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DoD OIG, PO

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

October 30, 2015

MEMORANDUM FOR COMMANDER, UNITED STATES ARMY CENTRAL
DIRECTOR, CENTCOM FORWARD – JORDAN

SUBJECT: ARCENT and CENTCOM Forward–Jordan October 9, 2015, Response to OIG DoD
Notice of Concern – Inspection of United States Military Occupied Facilities at King
Abdullah II Special Operations Training Center

In reference to the subject response, we agree with most of the actions taken to correct the critical deficiencies identified in our Notice of Concern (NoC). As you requested, we re-evaluated the deficiencies you questioned, but maintain that all recommendations regarding the electrical and fire protection system deficiencies are correct. The followings are our detailed rationale for the re-evaluated deficiencies.

- **Bonding Jumper Deficiencies (NoC Response Ref. E-3).** CENTCOM Forward–Jordan (CF-J) requested we re-evaluate as the bonding requirement is not listed per British standards. We reviewed and cross-referenced with British standards and found that both standards, 2014 NEC Article 250.24 (B) and the 2008 BS 7671, requires bonding either at the service disconnect enclosure or at the transformer. Our concern is the possible lack of bonding jumpers at either location. Therefore, we maintain that our recommendations regarding the bonding jumper deficiencies are correct until ARCENT can verify bonding jumpers are properly installed.
- **Fire Protection.** CF-J requested we re-evaluate the requirement to report to the supervising station (e.g. fire department) (NoC Response Ref. FP 1) as this requirement is not listed per UFC 1-201-02. CF-J also asked us to re-evaluate the deficiencies regarding the accessibility to the building and fire hydrants by the fire department (NoC Response Ref. FP 7-8). We reviewed the UFC 1-201-02 and maintain that this criterion is not applicable to KASOTC. This UFC, however, is meant as a guide for soldiers, with no engineering background, to quickly evaluate if a facility is safe to occupy. It provides the procedures for expedient assessment of existing facilities to ensure the minimum standards for health and safety. It is not meant to be used as inspection criteria for the fire protection system of the facilities occupied for extended periods of time. Thus, we maintain our recommendations for ARCENT and CF-J to implement the corrective actions to ensure fire truck access to

DoD OIG, PO (cont'd)

the building and fire hydrants, and for fire alarm system automatic reporting to the supervising station.

- Other. CF-J did not address the corrective actions concerning the energized air conditioner compressor enclosures at the [REDACTED] building and the lightning protection systems height deficiency identified in our NoC (Deficiencies Numbers, KAS-EL-150828-31, KAS-EL-150828-50, KAS-EL-150828-122, and KAS-EL-150828-129).

Please respond to this memorandum by November 15, 2015. We thank you for your prior comments and appreciate your quick response. Please note that the NoC and all related official correspondence will be included and printed in our report. If you have any further questions, please contact [REDACTED]



Randolph R. Stone
Deputy Inspector General
Policy and Oversight

cc:
Commander, United States Central Command
Inspector General, Department of the Army

Management Comments

United States Central Command



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UNITED STATES CENTRAL COMMAND
OFFICE OF THE CHIEF OF STAFF
7115 SOUTH BOUNDARY BOULEVARD
MACDILL AIR FORCE BASE, FLORIDA 33621-5101

26 February 2016

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL
(ATTN: MR. STONE)

SUBJECT: Response to DODIG D2015-D000PT-0227 Draft Report U.S. Military-Occupied Facilities Inspection – King Abdullah II Special Operations Training Center

Ref(s): (a) DODIG D2015-D000PT-0227 Draft Report “U.S. Military-Occupied Facilities Inspection – King Abdullah II Special Operations Training Center”
(b) Joint Publication 3-34, Joint Engineer Operations, 06 January 2016

1. The USCENTCOM team appreciates the time, effort, and technical expertise that Department of Defense Inspector General (DODIG) regularly provides for facility inspections. These inspections have been useful in identifying and correcting deficiencies across our area of responsibility. USCENTCOM shares the common goal of keeping our people safe while conducting military operations overseas. Army Forces-Jordan (ARFOR-J) developed and implemented an aggressive corrective action plan for deficiencies identified as the most critical in Reference (a). ARFOR-J has taken a proactive approach to correcting noted deficiencies, inspecting facilities, modifying base life support (BLS) contracts, and implementing appropriate risk mitigation strategies to rectify the existing 286 shortfalls.

2. USCENTCOM performed a technical review of the DODIG Draft Report as requested by USCENTCOM Inspector General. While we agree the DODIG findings are violations of the criteria specified in Reference (a), we non-concur with the Unified Facilities Criteria (UFC) used for the inspections at the King Abdullah II Special Operations Training Center (KASOTC). The appropriate UFC for the facilities U.S. service members occupy at KASOTC is UFC 1-201-02 *Assessment of Existing Facilities for Use in Military Operations*.

3. UFC 1-201-02 provides procedures for assessing life safety and habitability aspects of existing facilities for occupancy by DoD personnel in support of military operations. KASOTC is owned by the Jordanian government but managed by a private company, KASOTC Incorporated. U.S. forces on KASOTC pay for the use of space and services through the KASOTC BLS contract and are not authorized to execute repairs to the facilities or construction except for immediate danger to life, health, or safety. Furthermore, the KASOTC BLS contract is renewed annually due to the undetermined duration of the existing mission. USCENTCOM stands behind UFC 1-201-02 as the

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correct facilities criteria for existing facilities for use in military operations like at KASOTC. This UFC will alter the outcome of the aforementioned inspection resulting in 63 fewer COCOM-level waivers.

4. It is imperative to discuss this further and seek agreement before other DODIG inspections of existing or non-permanent facilities in the future. We will contact the DODIG office if additional clarification is required.

5. My point of contact for the matter is [REDACTED], available by phone at [REDACTED] or by electronic mail at [REDACTED]


TERRY FERRELL
Major General, U.S. Army

Copy to:
CCJ4
CCIG
ARCENT

2

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United States Army Central



DEPARTMENT OF THE ARMY
UNITED STATES ARMY CENTRAL
1 GABRESKI DRIVE
SHAW AIR FORCE BASE, SC 29152-5202

ACCG

MEMORANDUM THRU Commander, United States Central Command (USCENTCOM),
7115 South Boundary Boulevard, MacDill Air Force Base, Florida 33621-5101

FOR Department of Defense (DoD) Inspector General (IG), 4800 Mark Center Drive,
Alexandria, Virginia 22350-1500

SUBJECT: Response to the DoD IG Draft Report-Inspection to United States Occupied
Military Facilities at King Abdullah II Special Operation Training Center (KASOTC)

1. Purpose: The DoD IG Official Draft Report requests United States Army Central (USARCENT) to comment on recommendations A1, A2, B1, and B2 that are recommendations 1 and 2 in the Combined Joint Operations Center – Jordan (CJOC-J) memorandum.

2. Background: On 21 JAN 16, the DoD IG published a draft report in regards to Project No. D2015-D000PT-0227, a fire and electrical inspection of KASOTC (JUL 15). The buildings on KASOTC were funded by the U.S. Government and built from 2004-2008 to Jordanian specifications in order to support the creation of a regional Special Operations Training Center.

3. Conclusion: USARCENT concurs with the DoD IG findings and recommendations. USARCENT concurs and supports the CJOC-J memorandum on the work being performed to correct all remaining deficiencies.

4. The point of contact for this memorandum is [REDACTED]

- 2 Encls
1. CJOC-J Response Memorandum
2. Official Draft Report

A handwritten signature in blue ink that reads "Michael X. Garrett".
MICHAEL X. GARRETT
Lieutenant General, USA
Commanding

Combined Joint Operations Center-Jordan and Army Forces - Jordan



UNITED STATES ARMY CENTRAL COMMAND
HEADQUARTERS, COMBINED JOINT OPERATIONS CENTER-JORDAN AND
ARMY FORCES - JORDAN
APO AE 09315

CJCG

02 March 2016

MEMORANDUM THRU COMMANDER, United States Army Central (USARCENT), Shaw Air Force Base, South Carolina 29152

FOR United States Central Command (USCENTCOM), 7115 South Boundary Boulevard MacDill AFB, Florida 33621

SUBJECT: Response to the Department of Defense (DoD) Inspector General (IG) Draft Report Inspection of United States Occupied Military Facilities at King Abdullah II Special Operations Training Center (KASOTC)

1. Background: The buildings on KASOTC were funded by the U.S. government and built from 2004-2008 to Jordanian specifications in order to support the creation of a regional Special Operations Training Center. KASOTC is owned by the Jordanian government but managed by a private company, KASOTC Incorporated. The U.S. forces on KASOTC pay for the utilization of space and services through the KASOTC base life support contract and are not authorized to execute repairs to the facilities or construction except for immediate danger to life, health, or safety. On 21 JAN 16 the DoD IG published a draft report in regards to Project No. D2015-D000PT-0227, a fire and electrical inspection of KASOTC (JUL 15). The DoD IG inspection identified a total of 286 deficiencies that could affect the health, safety, and well-being of warfighters: 154 related to fire protection and 132 related to electrical systems. Listed below are the DoD IG's recommendations for both fire protection system deficiencies and electric system deficiencies:

a. Recommendation 1: Conduct a root cause analysis and implement a corrective action plan for all 286 deficiencies identified in this report.

b. Recommendation 2: Create and execute a plan for ongoing inspection and maintenance of all U.S. facilities at the KASOTC and other locations under Commander, USARCENT. Ensure inspection and maintenance of these locations complies with applicable electrical and fire protection safety codes and standards.

2. The purpose of this memorandum is to provide feedback to the DoD IG on their inspection in regards to the response to their findings for inclusion in their final report.

3. Response to DoD IG Recommendation 1 and Recommendation 2:

a. A root cause analysis has identified a requirement for a fire and electrical inspection capability in KASOTC. In fact, in July 2014, USARCENT had previously identified the need for a fire and electrical inspection capability in Jordan and resourced Combined Joint Operations Center-Jordan (CJOC-J) with Task Force Protect Our Warfighters and Electrical Resources (TF POWER). This seven man team provides the knowledge and expertise to conduct inspections and immediate repairs needed to ensure the life, health, and safety of U.S. Title 10 forces in

Combined Joint Operations Center-Jordan and Army Forces - Jordan (cont'd)

CJCG

SUBJECT: Response to the DoD IG Draft Report – Inspection of United States Occupied Military Facilities at King Abdullah II Special Operations Training Center (KASOTC)

Jordan. This capability was initially filled by four person team from USARCENT until the request for forces was filled in MAR 15. The TF POWER team provides support to all U.S. forces in Jordan for which USARCENT executes base operations support and integration.

b. TF POWER immediately began to prioritize repairs to ensure the life, health and safety of forces on KASOTC upon the identification of deficiencies by the DoD IG Inspection Team. TF POWER repaired or inspected repairs for all faults that they determined were an immediate risk to the life, health, or safety of personnel on KASOTC within two weeks of the completion of the inspection.

c. The Armed Forces-Jordan (ARFOR-J) Engineers (ENG) and TF POWER implemented a plan to inspect all facilities in Jordan occupied by Title 10 forces for which USARCENT has BOS-I every 3-6 months in order to ensure compliance with the Unified Facilities Criteria. The status of identified faults is briefed to the Armed Forces-Jordan (ARFOR-J) Commanding General on the 1st and 3rd Sunday of every month as a part of an existing battle rhythm event.

4. ARFOR-J ENG and TF Power produced a spreadsheet to track all the deficiencies identified by DoD IG. The deficiencies identified in this inspection have been categorized into three areas with their current status. These three areas are listed below (see enclosure 1 for summary).

a. Corrected/Working (See enclosure 2): 82 electrical and 27 fire safety deficiencies have been corrected for a total of 93 faults corrected. There are a total of 3 faults that are still pending repair with open work orders to KASOTC.

b. Contract Modification Required (See enclosure 3): There are 45 electrical and 61 fire deficiencies, for a total of 119 faults that will require modification to the KASOTC base life support contract in order for them to be corrected. The current BLS has insufficient control measures; however the required changes to the contract have been submitted in conjunction with the option year two contract proposal and are expected to go into effect at the beginning of the option year two on 30 MAR 16.

c. Waiver Requests (See enclosure 4): There are 5 electrical and 66 fire safety deficiencies, for a total of 71 faults, for which ARFOR-J will submit waiver requests. These requests will be submitted, in conjunction with safety mitigation measures, for faults which the appropriate corrective measures would be cost prohibitive or impede the operational mission of the occupying unit.

5. The point of contact for this memorandum is the [REDACTED]



[REDACTED]
BG, USA
Commanding

4 Encls

1. DoD IG Deficiency Summary
2. Corrected/Working Deficiencies
3. Contract Modification Deficiencies
4. Waiver Request Deficiencies

Acronyms and Abbreviations

AF	Air Force
AFCI	Arc-Fault Circuit Interrupter
AFI	Air Force Instruction
USARCENT	United States Army Central
CF-J	Central Command Forward-Jordan
CO₂	Carbon Dioxide
DoD OIG	Department of Defense Office of the Inspector General
GFCI	Ground Fault Circuit Interrupter
HVAC	Heating, Ventilation, and Air Conditioning
KASOTC	King Abdullah II Special Operations Training Center
MNS	Mass Notification System
mSv	milisievert
NEC	National Electrical Code
NFPA	National Fire Protection Association
NOC	Notice of Concern
OIG	Office of Inspector General
SME	Subject Matter Expert
TAD	Technical Assessment Directorate
UFC	Unified Facilities Criteria
USCENTCOM	U.S. Central Command



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U.S. DEPARTMENT OF DEFENSE

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For more information about DoD IG reports or activities, please contact us:

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congressional@dodig.mil; 703.604.8324

Media Contact

public.affairs@dodig.mil; 703.604.8324

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