Report No. DODIG-2017-104



# INSPECTOR GENERAL

U.S. Department of Defense

JULY 20, 2017



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

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# **Results in Brief**

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

#### July 20, 2017

### **Objective**

We determined whether the Army, Air Force, and the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD[AT&L]) implemented the recommendations from Report No. DODIG-2015-013, "Military Housing Inspections – Republic of Korea," October 28, 2014.

### **Findings**

In our 2014 report, we discussed our inspection of 13 military installations in the Republic of Korea, where we identified 646 deficiencies for fire protection, electrical systems, environmental health and safety, and housing management, which posed a risk to the health, safety, and well-being of warfighters and their families. Our prior report made various recommendations for corrective action.

In this followup inspection, we determined that the Army and Air Force had partially implemented the following recommendations from our prior report.

- Conduct an effective root cause analysis and perform corrective actions for all 646 deficiencies identified.
- Ensure that the deficiencies do not exist in other housing units.
- Ensure that the inspection, maintenance, and repair programs are in compliance with applicable codes and standards for fire protection systems, electrical systems, and environmental health and safety.

#### Findings (cont'd)

- Ensure that sufficient, qualified resources are assigned and available to inspect and verify that all housing buildings and units are in compliance with fire protection requirements, electrical requirements, and environmental health and safety requirements.
- Ensure that housing management policies are implemented and procedures are followed.

The Army and Air Force collectively reported that 600 out of 646 (92 percent) deficiencies documented in Report No. DODIG-2015-013 were corrected as of August 2016. We followed up on 251 deficiencies at 6 of the 13 installations previously inspected and we found that the Army corrected only 135 of 217 (62 percent) and the Air Force corrected only 12 of 34 (35 percent) of the 251 deficiencies. In addition to reinspecting the same housing units we inspected in 2014, we inspected 47 additional housing units to determine whether similar deficiencies existed in those units. We found that similar deficiencies were found in additional housing units similar to those we identified in our 2014 inspection.

In response to the recommendation in our previous report, the Army indicated that it had a proposed corrective action plan to ensure that inspection, maintenance, and repair programs comply with applicable codes and standards. Similarly, the Air Force indicated it is actively engaged in corrective actions and will continue progress until all necessary corrective actions are complete. However, despite significant efforts by the Army and Air Force, based on the followup findings noted above we concluded that the Army and Air Force did not fully comply with applicable codes and standards for inspection, maintenance, and repair programs.

In response to our June 2016 Request for Information, the Army and Air Force stated that qualified resources were available and assigned to inspect and verify that military housing units were in compliance with fire protection, electrical, and environmental health and safety requirements. However, the number of deficiencies identified during our followup inspection indicates that sufficient resources were not applied.



# **Results in Brief**

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

#### Findings (cont'd)

As a result, we determined that the Army and Air Force did not fully implement the recommendations from Report No. DODIG-2015-013. These recommendations while resolved remain open, and we will continue to monitor the DoD's response to these recommendations until corrective actions are completed.

Finally, the Office of the USD(AT&L) nonconcurred with recommendations from our prior report to issue mold and radon assessment and mitigation guidance in the **Overseas Environmental Baseline Guidance Document.** We disagreed with their response and requested that management reconsider our recommendations and provide us additional comments. In response to our request for followup information in June 2016, the Deputy Assistant Secretary of Defense for Basing, responding for the USD(AT&L), stated that his office was in the process of developing and issuing DoD guidance by October 2017 to resolve inconsistencies among the Military Services for assessing, remediating, and preventing mold; and, assessing and mitigating radon. Therefore, the recommendations are resolved but remain open. We will close these recommendations once we verify that the new DoD policy includes appropriate guidance for assessing, remediating, and preventing mold and assessing and mitigating radon.

### Recommendation

In addition to the recommendations made in our 2014 report, we also recommend that the Secretaries of the Army and Air Force involve U.S. Forces Korea and other entities, such as the Army Installation Management Command and the Air Force Installation and Mission Support Center, to perform oversight and provide guidance on addressing and closing Finding A of this report.

### Management Comments and Our Response

The Deputy Assistant Secretary of the Army for Installations, Housing and Partnerships, agreed and stated that the Army Installation Management Command (IMCOM) has been involved in inspecting and correcting deficiencies and will continue to work with IMCOM Pacific Region (IMCOM-P) to perform oversight and monitor the progress of corrective actions. The estimated date of completion for all identified actions is September 30, 2018.

The Deputy Assistant Secretary of the Air Force for Installations agreed and stated that her office will engage and work closely with the Air Force Installation and Mission Support Center and U.S. Forces Korea to perform oversight and provide guidance to the installations, advocate for the necessary funds, and monitor progress until all necessary corrective actions identified in Finding A are completed. The estimated date of completion for all identified actions is September 30, 2018.

The Chief of Staff, U.S. Forces Korea, agreed and stated that U.S. Forces Korea will highlight this issue as a commander's concern and will request followup responses from the Army and Air Force to rapidly implement the recommendations.

Therefore, the recommendation is resolved but will remain open. We will close this recommendation once we verify that it has been implemented. Further, we will close all recommendations from the previous report after receiving and analyzing information showing that appropriate corrective actions were completed for all 646 deficiencies, or after receiving a mitigation plan or acceptance of risk memorandum signed by the Commander, U.S. Forces Korea, or higher.

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

#### **Recommendations Table**

Management	Recommendations Unresolved	Recommendations Resolved*	Recommendations Closed
USD(AT&L)	None	DODIG-2015-013, D.2.a and D.2.b	None
Secretary of the Army	None	DODIG-2017-104 Recommendation; DODIG-2015-013, A.a-c, B, C, D.1, E	None
Secretary of the Air Force	None	DODIG-2017-104 Recommendation; DODIG-2015-013, A.a-c, B, C, D.1, E	None

\*Recommendation numbers correspond with the numbers in Report No. DODIG-2015-013, "Military Housing Inspections – Republic of Korea," October 28, 2014.

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

July 20, 2017

#### MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION, TECHNOLOGY, AND LOGISTICS ASSISTANT SECRETARY OF THE AIR FORCE (FINANCIAL MANAGEMENT AND COMPTROLLER) INSPECTOR GENERAL, DEPARTMENT OF THE ARMY COMMANDER, UNITED STATES FORCES KOREA

SUBJECT: Followup on DoD OIG Report No. DODIG-2015-013, "Military Housing Inspections – Republic of Korea," October 28, 2014 (Report No. DODIG-2017-104)

We are providing this report for your information and use. This is a followup on DoD Office of Inspector General Report No. DODIG-2015-013, "Military Housing Inspections – Republic of Korea," October 28, 2014. We found that the Army and Air Force had not fully implemented the recommendations from our previous report, and that the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics is implementing the recommendations from our previous report. We conducted our inspection in accordance with the "Quality Standards for Inspection and Evaluation," published by the Council of the Inspectors General on Integrity and Efficiency.

We considered management comments on the draft of this report when preparing the final report. DoD Instruction 7650.03 requires that recommendations be resolved promptly. Comments from the Deputy Assistant Secretary of the Army for Installations, Housing, and Partnerships; Deputy Assistant Secretary of the Air Force for Installations; and the Chief of Staff, U.S. Forces Korea, addressed the specifics of the recommendation. Therefore, no further comments are required.

We appreciate the courtesies extended to the staff. Please direct questions to Mr. Timothy Lamb at (703) 604-9150 (DSN 664-9150).

Randolph R. Stone Deputy Inspector General Policy and Oversight

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## Introduction

#### **Objective**

We determined whether the Army, Air Force, and the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD[AT&L]) implemented the recommendations in Report No. DODIG-2015-013, "Military Housing Inspections - Republic of Korea," October 28, 2014. See the Appendix for our scope and methodology.

#### Background

On October 28, 2014, we issued Report No. DODIG-2015-013, "Military Housing Inspections – Republic of Korea" identifying 646 deficiencies in fire protection, electrical systems, environmental health and safety, and housing management at 11 Army and 2 Air Force installations in the Republic of Korea. These deficiencies posed a risk to the health, safety, and well-being of warfighters and their families. The inspections were conducted in the Republic of Korea (ROK) because of the strategic realignment of installations in the Pacific and the transition of United States Forces Korea (USFK) elements from United States Army Garrison (USAG) Yongsan to Camp Humphreys. USAG Yongsan is located in Seoul and Camp Humphreys is located approximately 40 miles south of Seoul in Pyeongtaek. Camp Humphreys is the site of the largest ongoing construction and transformation project in the history of the Department of Defense.<sup>1</sup>

From September 19, 2016, to October 6, 2016, we performed onsite followup inspections at 6 of the 13 installations previously inspected. We conducted interviews with garrison commanders, the base civil engineer, Department of Public Works (DPW) staff, housing management staff, building managers, Airmen Dorm Leaders (ADLs), maintenance personnel, and occupants. See the table on the next page for a list of installations previously inspected in 2014 and the installations selected for onsite followup in 2016.

<sup>&</sup>lt;sup>1</sup> On March 22, 2016, US Army Environmental Command Public Affairs reported that the expansion of Camp Humphreys is \$10 billion-plus, and includes more than 600 new facilities and the demolition of more than 250 buildings. The current military and civilian workforce, excluding family members, will increase from 7,300 to an estimated 28,800 personnel in an area that expanded from 1,210 acres to 3,623 acres.

Installations Inspected in 2014	Installations Selected for Followup Inspection in 2016
Area I: USAG Camp Red Cloud	
Camp Bonifas	
Camp Casey	Yes
Camp Hovey	
Camp Jackson	
Camp Red Cloud	Yes
Camp Stanley	
Area II: USAG Yongsan	Yes
Area III: USAG Humphreys	Yes
Area IV: USAG Daegu	
Camp Carroll	
Camp Henry	
Camp Walker	Yes
Area V: Osan Air Base	Yes
Area VI: Kunsan Air Base	

*Table. U.S. Installations in ROK Selected for Inspection in 2014 and Onsite Followup in 2016* 

#### Summary of DoD OIG Report No. DODIG-2015-013

In 2014, we issued DoD Office of Inspector General (OIG) Report No. DODIG-2015-013. We inspected 13 military installations in the ROK for fire protection, electrical systems, environmental health, and housing management deficiencies. We inspected accompanied units (family housing), unaccompanied units (barracks and dormitories), mechanical rooms, and common areas. We also interviewed installation personnel, evaluated maintenance records, and examined programs. As a result of our inspection, we found 646 deficiencies affecting the health, safety, and well-being of warfighters and their families. Included in this total were 11 critical deficiencies which were documented in two notices of concern (NOCs) requiring immediate action.

Specifically, DoD OIG Report No. DODIG-2015-013 identified the following deficiencies for the ROK installations:

- Installations had inadequate resources and a lack of diligence to inspect, maintain, and repair housing facilities.
- Installation personnel did not ensure that fire protection systems were properly installed, periodically inspected, and maintained.

- Installation personnel did not ensure that electrical systems were properly installed, periodically inspected, and maintained.
- Installation personnel did not adhere to environmental regulations or best practices to ensure the health and safety of occupants regarding mold and radon.
- Housing management systems were not fully implemented and procedures were not always followed by installation personnel.

Our 2014 inspections covered approximately 12 percent of occupied housing buildings. We inspected these facilities for compliance with applicable DoD and Federal environmental health and safety policies and standards. These policies and standards included United Facilities Criteria, National Fire Protection Association (NFPA), National Electrical Code, and environmental standards.<sup>2</sup>

#### **Recommendations and Agreed-Upon Management Actions**

In Report No. DODIG-2015-013, we recommended that the Secretaries of the Army and Air Force:

- Conduct an effective root cause analysis and perform corrective actions for all 646 deficiencies identified.
- Ensure that these deficiencies do not exist in other housing units.
- Ensure that inspection, maintenance, and repair programs are in compliance with applicable codes and standards for fire protection systems, electrical systems, and environmental health and safety.
- Ensure that sufficient, qualified resources are assigned and available to inspect and verify that all housing buildings and units are in compliance with fire protection requirements, electrical requirements, and environmental health and safety requirements.
- Ensure housing management policies are implemented and procedures are followed.

Army and Air Force officials responded and agreed with our recommendations and stated that they would monitor the progress as the applicable installations work towards resolving the issues identified in the report.

Additionally, we recommended that the USD(AT&L) issue mold and radon assessment and mitigation guidance in the Overseas Environmental Baseline Guidance Document (OEBGD). The Acting Deputy Under Secretary of Defense for Installations and Environment, responding for the USD(AT&L), initially

<sup>&</sup>lt;sup>2</sup> See Appendix D of Report No. DODIG-2015-013, "Military Housing Inspections – Republic of Korea," October 28, 2014, for a list of criteria used for the 2014 inspections.

nonconcurred with our recommendations. He stated that modifying the OEBGD by creating standards for application outside the United States that do not have application inside the United States would undermine the purpose of the OEBGD and effectively apply differing standards outside the United States from those applied inside the United States. However, he stated that his office would facilitate sharing of lessons learned across the Military Services to ensure each of the Military Services' practices are fully informed. We disagreed with the response and requested that management reconsider our recommendations and provide us additional comments. Official comments were not received until we requested information for this followup inspection.

# **Finding A**

### The Army and Air Force Partially Implemented Recommendations From Report No. DODIG-2015-013, "Military Housing Inspections – Republic of Korea"

The Army and Air Force partially implemented the following recommendations from Report No. DODIG-2015-013.

- Conduct an effective root cause analysis and perform corrective actions for all 646 deficiencies identified.
- Ensure that these deficiencies do not exist in other housing units.
- Ensure that inspection, maintenance, and repair programs are in compliance with applicable codes and standards for fire protection systems, electrical systems, and environmental health and safety.
- Ensure that sufficient, qualified resources are assigned and available to inspect and verify that all housing buildings and units are in compliance with fire protection requirements, electrical requirements, and environmental health and safety requirements.
- Ensure housing management policies are implemented and procedures are followed.

As of August 2016, the Army reported to us that 494 of 505 (98 percent) of the deficiencies identified had been corrected or were in the process of being corrected. The Air Force reported to us that 106 of 141 (75 percent) of the deficiencies identified had been corrected. We followed up on 251 of 397 deficiencies at 6 of the 13 installations previously inspected.<sup>3</sup> We validated that the Army corrected only 135 of 217 (62 percent) and the Air Force corrected only 12 of 34 (35 percent) of the 251 deficiencies.

Although actions were taken to correct some of the previously identified deficiencies, the Army and Air Force corrective action plans did not effectively correct all deficiencies noted in our 2014 inspection and lessons learned were not extended to other units. The continued existence of the deficiencies found during our followup inspection indicates that the efforts involved to ensure compliance with all applicable fire, electrical, and environmental health and safety requirements were not adequate and that sufficient resources were not applied.

As a result, we determined that the Military Departments did not fully implement the recommendations in Report No. DODIG-2015-013.

<sup>&</sup>lt;sup>3</sup> There was a total of 646 deficiencies at the 13 locations we inspected in 2014. Of those 646 deficiencies, 397 are from the six locations we selected for followup inspection.

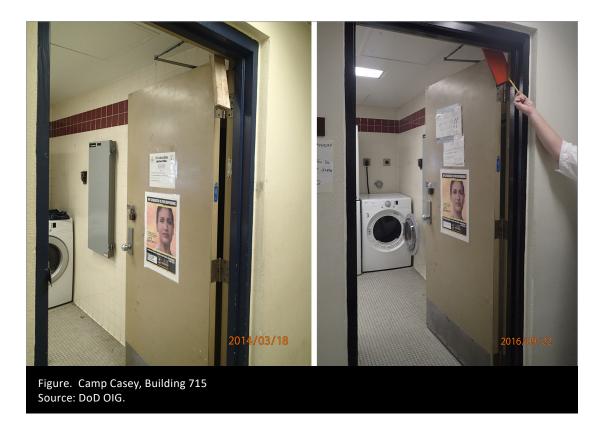
#### **Root Cause Analysis Was Not Always Effective**

In response to our prior report, Army and Air Force officials provided several root causes for the deficiencies noted during the 2014 inspection. The primary reasons cited were:

- inadequate preventive maintenance inspection and performance programs;
- inherent facility design flaws;
- facilities scheduled to close since the 1990s but still in use;
- large number of Army facilities constructed in the late 1950s/1960s without any modernization projects;
- lack of a trained or certified workforce; and
- poor quality workmanship, lack of oversight, or both.

Despite the efforts of the Army and Air Force to identify the root causes for the deficiencies identified in 2014, the deficiencies continued to exist in 2016. For example, in 2014, we identified a systemic concern with non-compliant corridor doors, exit stair doors, and laundry room doors. Stair fire doors are required to be fire-rated, should not be propped open, and should have well-functioning door closers, as required by NFPA 101.<sup>4</sup> The intent is to protect the means of egress and allow building occupants time to evacuate safely. If fire doors are blocked or wedged open, they will not function as designed to protect the building and its occupants. In Report No. DODIG-2015-013, we identified a laundry room door in a barracks building at Camp Casey, as propped open and improperly fire-rated. During our 2016 followup inspection, we identified the deficiency continued to exist, despite being reported as corrected. See the figure.

<sup>&</sup>lt;sup>4</sup> The Life Safety Code Handbook (NFPA 101) has several applicable sections depending on the classification and type of building. For example, NFPA 101, section 29.3.6.2.3., states, "[d]oors that open onto exit access corridors shall be self-closing and self-latching." Also, section 8.3.4.1., states, "[e]very opening in a fire barrier shall be protected to limit the spread of fire and restrict the movement of smoke from one side of the fire barrier to the other."



Other instances documented in Report No. DODIG-2015-013 related to improper or lack of equipment grounding in the 2014 inspections. For example, we found during the 2014 inspection, missing or disconnected ground wires for three hot water circulating pumps in a mechanical room in Building 1532 at USAG Yongsan. For the 2016 followup inspection, USAG Yongsan reported this deficiency was corrected. However, during our followup inspection we found that one of the three pumps did not have a connected ground wire. Therefore, the deficiency was only partially corrected even though it was reported as corrected. We also identified several instances in the 2014 report where we found improperly installed or damaged dryer vent transition ducts, and improper storage in exit stairwells. These deficiencies continued to exist during our 2016 followup even though they were reported as corrected.

The identification of the same health and safety deficiencies during this followup inspection indicates that the underlying root causes were not fully identified in order to eliminate these deficiencies completely. For example, Osan Air Base identified the root cause of fire doors not self-closing, not self-latching, or being propped open as a lack of enforcement of policy and procedure by the dormitory leaders. To mitigate the issue, Osan Air Base housing management emphasized continuous communication and enforcement by the dormitory leaders, however, the deficiency continues to exist, because doors that are not self-closing or not self-latching is a maintenance issue and not a training issue. Therefore, we

concluded that if the installation had conducted an effective root cause analysis and implemented a corrective action plan as recommended, these deficiencies would have been corrected in 2014, as reported.

In addition, we found both the Army and the Air Force's root cause analyses and corrective action planning were performed at the installation level. The ROK has a high transient population; military personnel at the installation level, to include unaccompanied housing management leadership and staff, rotate within a year of arriving. These short tour lengths (12 months or less) lead to frequent turnover and reduced continuity. Lack of continuity can hinder the ability to implement long-term viable solutions to resolve facility-related deficiencies. Therefore, the regional installation commands, such as the Army Installation Management Command and the Air Force Installation and Mission Support Center, can be vital installation resources that can provide that continuity.<sup>5</sup> Furthermore, the inclusion of a regional installation resource, in either an oversight role or working group role, could be beneficial in providing continuity and leveraging lessons learned and best practices across multiple installations.

# Deficiencies Similar to Those Identified in 2014 Existed in Other Housing Units

The 2014 inspections documented 646 deficiencies in only 12 percent of the occupied housing buildings. Report No. DODIG-2015-013 recommended that installations perform a comprehensive check to ensure that the deficiencies do not exist in housing units that were not included in the 2014 inspection. In its management response, the Army stated that specific actions were taken to ensure noted life, safety, and health deficiencies do not exist in other housing units. The Air Force stated that it was reviewing all housing units to ensure that the deficiencies do not exist in other housing or dorm units.

In 2016, in addition to reinspecting the same housing units we inspected in 2014, we conducted an inspection of 47 additional housing units to determine whether similar deficiencies existed in those units and found that similar deficiencies did exist in other housing units. Specifically, 73 deficiencies were found in additional housing units similar to those we identified in our 2014 inspection.

<sup>&</sup>lt;sup>5</sup> The Army Installation Management Command (IMCOM) manages day-to-day infrastructure and support programs on Army installations.

The Air Force Installation and Mission Support Center (AFIMSC) serves as the single intermediate-level headquarters responsible for providing installation and mission support capabilities to the various Air Force installations and major commands.

For example, in Report No. DODIG-2015-013, we identified a lack of ground fault circuit interrupters (GFCI) receptacles as a systemic issue throughout all 13 installations. In 2016, at USAG Yongsan, we found that one-third of the laundry rooms and water coolers reinspected did not have GFCI protection.<sup>6</sup> We also found three additional instances lacking GFCI protection in laundry rooms that had not been inspected previously. As another example from the 2014 inspection, we found at Camp Walker that inappropriate material was used for dryer exhaustion transition ducts. In 2016, while inspecting additional housing units not included in the 2014 inspection, we found two buildings with the same deficiency.

Based on the 2016 followup inspection, we found that even if actions were taken to correct the previous deficiencies, the corrective action plans did not effectively correct all deficiencies previously noted in the 2014 inspection and were not extended to other units.

### Army and Air Force Efforts Are Ongoing to Improve Compliance with Fire Protection, Electrical Systems, and Environmental Health and Safety Requirements

In response to our recommendation in Report No. DODIG-2015-013, the Army and Air Force indicated that its efforts are ongoing to ensure that inspection, maintenance, and repair programs continue to comply with applicable codes and standards.<sup>7</sup> For example, USAG Yongsan and USAG Daegu (Camp Walker) initiated contract actions to address the previously noted deficiencies. Specifically, USAG Yongsan contracted a life, health, and safety inspection of all housing assets and awarded follow-on contracts to ensure satisfactory correction of deficiencies identified in the 2014 inspections. For example, the 2014 inspections identified a critical deficiency related to a faulty fire alarm system leaving the occupants, in one of the barracks building at USAG Yongsan, without any means of fire detection or notification. During our followup in 2016, we confirmed that the fire alarm issue was corrected under the USAG Yongsan contract. In addition, the USAG Yongsan contract executed several fire protection improvements. As a result, we found every fire alarm system that we inspected at USAG Yongsan was fully operational. Similarly, USAG Daegu also programmed funding to perform inspections to determine whether the life, health, and safety deficiencies identified in 2014 existed in other facilities throughout the garrison. USAG Daegu stated that

<sup>&</sup>lt;sup>6</sup> A GFCI is a fast-acting circuit breaker designed to provide protection to personnel and property by disconnecting electric power in the event that a short circuit or return current imbalance is detected.

<sup>&</sup>lt;sup>7</sup> See Appendix D of Report No. DODIG-2015-013, "Military Housing Inspections – Republic of Korea," October 28, 2014, for a list of codes and standards used for the 2014 inspections.

some work on the inspections and repairs was completed, but it acknowledged, and we verified, that significant work remained to be completed, and efforts were underway to obtain funding to address similar deficiencies in other buildings.

In Report No. DODIG-2015-013 we identified a lack of translation (English to Korean) of standards, codes, procedures, and instructions, and their implementation. USAG Yongsan made efforts to correct this issue by ensuring its newly hired electric branch supervisor was knowledgeable of the National Electric Code and applicable requirements as well as being fluent in the English and Korean language. The supervisor was able to conduct appropriate oversight by ensuring work completed by the Korean national workforce met applicable codes and requirements.

To address a lack of inspection oversight identified in our previous report, Osan AB formed a dedicated dormitory maintenance team to inspect dorms, maintain equipment, and perform repairs as needed. The team works directly with the ADLs to correct dormitory maintenance issues on-the-spot, or in a timely manner, without the ADLs having to submit a work order and wait for the repairs to be completed by DPW personnel based on the priorities of the installation.

We found that the Army and the Air Force have awarded contracts, implemented in-house workforce improvements, and addressed a lack of maintenance oversight. However, during the reinspection, we continued to identify similar deficiencies as those identified in 2014. Therefore, despite significant efforts, the Army and the Air Force should continue to improve compliance with all applicable fire, electrical, and environmental health and safety requirements as recommended in Report No. DODIG-2015-013.

### Sufficient Resources Are Not Always Available to Verify Compliance With Fire Protection, Electrical, and Environmental Health and Safety Requirements

Our 2014 report recommended that the Army and Air Force ensure that sufficient, qualified resources are available and assigned to inspect and verify that all housing buildings and units are in compliance with requirements for fire protection, electrical, and environmental health and safety.

The Deputy Assistant Secretary of the Army for Installation, Housing and Partnerships responded to our 2016 Request for Information and indicated that the Army corrected 144 of 150 (96 percent) fire deficiencies, 133 of 136 (98 percent) electrical deficiencies, and 19 of 24 (79 percent) environmental health and safety deficiencies. However, during our followup inspection, we found that the Army corrected only 66 of 105 (63 percent) fire deficiencies, 53 of 85 (62 percent) electrical deficiencies, and 9 of 23 (39 percent) environmental health and safety deficiencies.

The Chief, Housing Management Division, Air Force Installation and Mission Support Center Detachment 2, responding to our 2016 Request for Information for the Air Force, stated that the Air Force corrected 27 of 38 (71 percent) fire deficiencies, 16 of 28 (57 percent) electrical deficiencies, and 6 of 7 (85 percent) environmental health and safety deficiencies. However, during our followup inspection, we found the that Air Force corrected only 9 of 20 (45 percent) fire deficiencies, 3 of 6 (50 percent) electrical deficiencies, and none of the 7 environmental health and safety deficiencies.

In response to our June 2016 Request for Information, the Army and Air Force stated that qualified resources were available and assigned to inspect and verify that military housing units were in compliance with fire protection, electrical, and environmental health and safety requirements, the number of deficiencies still not corrected indicates that there were not sufficient resources available.

#### Implementation of Housing Management Policies and Procedures Requires Additional Leadership Focus

In Report No. DODIG-2015-013, we recommended that the Army and Air Force ensure that housing management systems and processes are fully implemented and followed at all installations. In addition to ensuring compliance with housing policies, this also includes improving processes for tracking service calls and work orders through completion, ensuring that inspections and maintenance are conducted as required, and analyzing historical work order information for trends and lessons learned to improve housing management programs. The Army agreed with our recommendation and stated that primary and alternate barracks managers attend monthly Department of Public Works-sponsored training, which covers topics such as designated barracks manager responsibilities, service calls or work orders submission, regulatory requirements, and other required procedures in the building manager's guide. The Air Force also agreed with our recommendation and indicated that it revitalized its Airmen Dorm Leader program to include guidance on roles and responsibilities and mandatory facility management training. The Air Force also stated that ADLs conduct daily walkthroughs to ensure that residents are following policies and procedures.

We followed up on 14 housing management deficiencies at the 6 selected installations and verified that 7 out of 14 deficiencies that we followed up on were corrected (50 percent).

At USAG-Humphreys, Camp Red Cloud, and Camp Walker, we found that the First Sergeants Barracks Program (FSBP) continues to suffer from a lack of continuity between incoming and outgoing building managers.<sup>8</sup> In addition, mission requirements may relegate the building manager responsibilities to a lower priority. For example, we interviewed four primary building managers at Camp Casey and Camp Red Cloud. Three of the four building managers interviewed stated that they had not received the building manager training; and, one building manager could not produce a copy of the building manager handbook or identify the website location of the handbook. As a result, we determined that command leadership did not ensure that building managers were held accountable for the execution of their assigned duties and responsibilities.

At Osan AB, a shortfall in ADL staffing levels continues to be a problem and limits the ADLs ability to effectively perform their assigned duties. This deficiency was identified in 2014. During the followup inspection, the number of ADLs on staff still did not meet Air Force instructions.<sup>9</sup> At the time of the followup inspection, Osan Air Base had 22 ADLs on staff. This results in a ratio of one ADL per 219 rooms, which exceeds the Air Force maximum limit of one ADL per 145 rooms. As a result, the understaffed ADLs are not able to perform all duties as outlined in their Air Force Job Qualification Standard.

#### Conclusion

Although the majority of the 2014 deficiencies were corrected, the Army and Air Force reported a higher number of corrected deficiencies than we validated. Additionally, although actions were taken to correct some of the previously identified deficiencies, the Army and Air Force corrective action plans did not effectively correct all deficiencies noted in our 2014 inspection and were not extended to other housing units. The continued existence of the deficiencies found during our followup inspection indicates that the efforts involved to ensure compliance with all applicable fire, electrical, and environmental health and safety requirements were not adequate and that sufficient resources were not applied. Therefore, despite significant efforts, the Army and Air Force need to make a deliberate, consistent, and enduring effort across the USFK installations to correct the deficiencies and ensure all housing units are in compliance with all applicable fire, electrical, and environmental health and safety requirements as recommended in Report No. DODIG-2015-013.

<sup>&</sup>lt;sup>8</sup> The First Sergeants Barracks Program (FSBP) is the Army barracks management partnership between Mission Commanders and the Installation Management Command (IMCOM). Under this program, IMCOM provides unaccompanied housing personnel facilities while the mission units manage property for their soldiers.

<sup>&</sup>lt;sup>9</sup> Air Force Instruction 32-6005, 51st Fighter Wing Supplement, dated January 19, 2012, "Civil Engineering – Unaccompanied Housing Management," paragraph 2.1.2, states that one ADL is responsible for a minimum of 50 rooms up to 145 rooms.

All previous recommendations to the Secretaries of the Army and Air Force in the 2014 report are resolved, but remain open. We will close each recommendation after receiving and analyzing information showing that appropriate corrective action was completed. For any corrective action that is cost prohibitive or impractical, we will close the recommendation upon receipt and review of a mitigation plan or acceptance of risk memorandum signed by the Commander, U. S. Forces Korea, or higher.

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

In addition to the recommendations made in our 2014 report, we also recommend that the Secretaries of the Army and Air Force involve U.S. Forces Korea and other entities, such as the Army Installation Management Command and the Air Force Installation and Mission Support Center, to perform oversight and provide guidance on addressing and closing Finding A of this report.

#### Department of the Army Comments

The Deputy Assistant Secretary of the Army for Installations, Housing and Partnerships, agreed and stated that the Army Installation Management Command (IMCOM) has been involved in inspecting and correcting deficiencies and will continue to work with IMCOM Pacific Region (IMCOM-P) to perform oversight and monitor the progress of corrective actions. The estimated date of completion for all identified actions is September 30, 2018.

#### Department of the Air Force Comments

The Deputy Assistant Secretary of the Air Force for Installations responding for the Air Force, agreed and stated that her office will engage and work closely with the Air Force Installation and Mission Support Center and United States Forces Korea to perform oversight and provide guidance to the installations, advocate for the necessary funds, and monitor progress until all necessary corrective actions identified in Finding A are completed. The estimated date of completion for all identified actions is September 30, 2018.

#### United States Forces Korea Comments

The Chief of Staff, U. S. Forces Korea, agreed and stated that U. S. Forces Korea will highlight this issue as a commander's concern and will request followup responses from the Army and Air Force to rapidly implement the recommendations.

#### Our Response

Comments from the Army, Air Force, and U.S. Forces Korea addressed all specifics of the recommendation; therefore, the recommendation is resolved but will remain open. We will close this recommendation once we verify that it has been implemented. Further, we will close all recommendations from the previous report after receiving and analyzing information showing that appropriate corrective actions were completed for all 646 deficiencies, or after receiving a mitigation plan or acceptance of risk memorandum signed by the Commander, U.S. Forces Korea, or higher.

## **Finding B**

### USD(AT&L) Is Implementing Mold and Radon Assessment and Mitigation Guidance

In response to Report No. DODIG-2015-013, the Office of the USD(AT&L) nonconcurred with the recommendation to issue mold and radon assessment and mitigation guidance in the Overseas Environmental Baseline Guidance Document. However, in response to our June 2016 request for followup information, the Deputy Assistant Secretary of Defense for Basing, responding for the USD(AT&L), stated that his office was performing a thorough review of DoD guidance for all DoD-controlled housing worldwide, and planned to develop DoD guidance by October 2017 to resolve inconsistencies among the Military Services in the handling of mold and radon issues.

### Report No. DODIG-2015-013 USD(AT&L) Recommendations

Report No. DODIG-2015-013 recommended that the USD(AT&L) should include guidance in the Overseas Environmental Baseline Guidance Document (OEBGD) for (1) the control and remediation of mold and (2) radon evaluation and mitigation in military housing facilities.<sup>10</sup>

In 2014, in response to our report, the Acting Deputy Under Secretary of Defense for Installations and Environment, responding for USD(AT&L), nonconcurred with our recommendations to include such guidance in the OEBGD. He stated that modifying the OEBGD by creating standards for application outside the United States that do not have application inside the United States would undermine the purpose of the OEBGD and effectively apply differing standards outside the U.S. from those applied inside the United States. However, he stated that his office would facilitate sharing of lessons learned across the Military Services to ensure each Military Services' practices are fully informed.

We disagreed with the response from USD(AT&L) and noted that during our inspection we found that Army and Air Force personnel did not effectively implement mold control and remediation, and radon mitigation due to a lack of guidance for overseas installations. We requested that management reconsider our recommendations and provide us additional comments.

<sup>&</sup>lt;sup>10</sup> The purpose of DoD 4715.05-G, "Overseas Environmental Baseline Guidance Document," May 1, 2007, is to provide criteria and management practices to be used by the DoD for establishing overseas environmental requirements, called "Final Governing Standards."

In response to our request for followup information in June 2016, the Deputy Assistant Secretary of Defense for Basing, responding for the USD(AT&L), stated that his office was performing a thorough review of DoD guidance for all DoD-controlled housing worldwide, to determine if policy is needed to address a significant health risk or to improve consistency in program execution across the DoD.

For mold control and remediation, he stated that his office found some minor inconsistencies in Military Service guidance for assessing, remediating, and preventing mold in DoD-controlled housing. Furthermore, he stated that his office was drafting guidance to resolve these inconsistencies.

For radon evaluation and mitigation, the Deputy Assistant Secretary of Defense for Basing stated that his office met with the Environmental Protection Agency and the Military Services, and was developing guidance to address inconsistencies in radon evaluation and mitigation across the Military Services.

A representative in the Office of the USD(AT&L) stated that the planned completion date for guidance on mold and radon is October 2017.

#### **Summary**

USD(AT&L) did not agree to implement our recommendations in Report No. DODIG-2015-013. However, in response to our June 2016 request for followup information, the Deputy Assistant Secretary of Defense for Basing stated that his office was in the process of issuing DoD guidance to resolve inconsistencies among the Military Services for: (1) assessing, remediating, and preventing mold, and (2) assessing and mitigating radon.

Therefore, the recommendations are resolved but remain open. We will close these recommendations once we verify that the new DoD policy includes appropriate guidance for assessing, remediating, and preventing mold; and assessing and mitigating radon.

# Appendix

### Scope and Methodology

We conducted this followup inspection from July 2016 through May 2017 in accordance with the "Quality Standards for Inspection and Evaluation," published by the Council of the Inspectors General on Integrity and Efficiency in January 2012. 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, conclusions and recommendations based on our inspection objectives.

To accomplish our objective, we:

- requested an update from USD (AT&L) and the Military Services (Army and Air Force) before the reinspection on the status of deficiencies and the status of the implementation of our recommendations in the 2014 report;
- selected 6 installations from the 13 originally inspected, specifically targeting locations with the most serious (based on quantity of critical) or largest numbers of deficiencies;
- reinspected the six installations and determined the status of previously identified deficiencies;
- where possible, inspected other locations in addition to the locations previously identified to determine if the deficiencies had been corrected at other locations, using criteria identified in each of the deficiencies from the previous report; and
- analyzed relevant documents and conducted interviews with housing personnel.

### **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 subject matter experts in the areas of fire protection engineering, electrical system safety, and industrial hygiene.

#### **Prior Coverage**

The DoD Office of Inspector General (DoD OIG) has issued eight reports from July 2013 to October 2016 related to health and safety inspections of DoD facilities at various locations around the world, documenting deficiencies in fire protection systems, electrical system safety, and environmental health and safety. Unrestricted DoD OIG reports can be accessed at http://www.dodig.mil/pubs/index.cfm.

#### DoD OIG

Report No. DODIG-2017-004, "Summary Report – Inspections of DoD Facilities and Military Housing and Audits of Base Operations and Support Services Contracts," October 14, 2016

We summarized and analyzed previous DoD OIG health and safety inspections of DoD-occupied facilities and military housing and evaluated policy and guidance regarding health and safety requirements for DoD-occupied facilities. We found that the average number of deficiencies per building was consistent regardless of location. For instance, we found an average of two to three electrical and fire protection deficiencies for each building inspected, and one environmental health and safety deficiency for every two buildings inspected. The pervasiveness of fire protection, electrical system, and environmental health and safety deficiencies was the most significant trend that we observed.

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

We identified a total of 538 deficiencies that could affect the health, safety, and well-being of the warfighters. The majority of the deficiencies identified during the inspections resulted from insufficient inspection, inadequate maintenance, lack of an effective maintenance and inspection plan, and ineffective project oversight.

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

We 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.

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

We identified a total of 389 deficiencies that could affect the health, safety, and well-being of the warfighters and their families. The majority of deficiencies identified during our inspections resulted from improper installation, insufficient inspection, and inadequate maintenance of housing facilities.

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

We identified a total of 316 deficiencies that could affect the health, safety, and well-being of warfighters and their families. Of the total deficiencies, 131 were fire protection system, 168 were electrical system, and 17 were environmental health and safety.

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

We inspected DoD military housing in Republic of Korea for compliance with DoD and Federal environmental health and safety policies and standards. The majority of the 646 deficiencies (violations of code) identified during our inspection were attributed to insufficient inspection, maintenance, and repair of housing facilities.

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

We inspected DoD military housing in Japan for compliance with DoD and Federal environmental health and safety policies and standards. The majority of the 1,057 deficiencies (violations of code) identified during our inspection were attributed to insufficient inspection, maintenance, and repair of housing facilities.

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

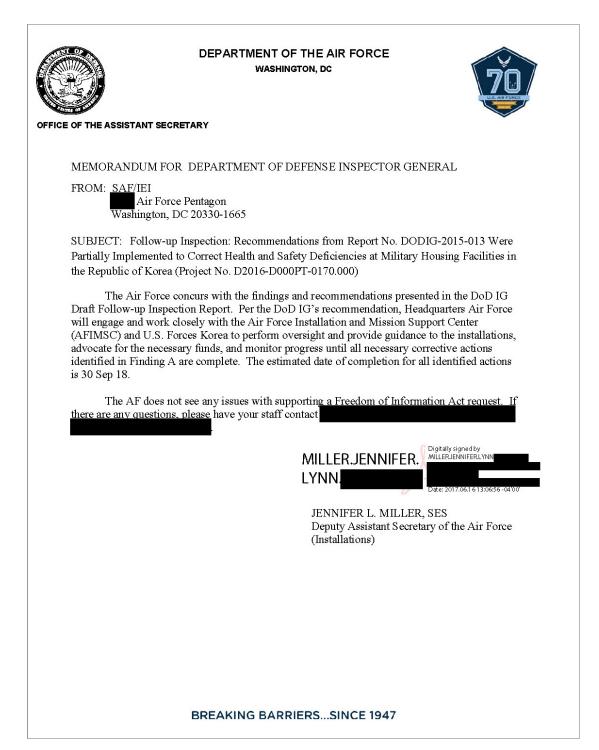
We determined whether electrical and fire suppression systems in selected facilities in Afghanistan are in compliance with the National Electrical Code, Unified Facilities Criteria, and the National Fire Protection Association Standards. We found a lack of consistent adherence to standards as evidenced by 1,089 findings. Also, Garrison commands lacked qualified Government or dedicated contractor electricians, fire alarm, or fire suppression technicians on their staffs to perform inspection, testing, and maintenance.

# **Management Comments**

# Department of the Army

	DEPARTMENT OF THE OFFICE OF THE ASSISTANT SECRETAR INSTALLATIONS, ENERGY AND EN 110 ARMY PENTAGON WASHINGTON DC 20310-07	Y OF THE ARMY VIRONMENT
SAIE-IHP		JUL 0 6 2017
MEMORANDUM FO Drive, Alexandria, V		nt Of Defense, 4800 Mark Center
Were Partially Imple	up Inspection: Recommendations emented to Correct Health and Sa the Republic of Korea (Project N	
1. My staff has revi	ewed the subject report and we c	oncur with Recommendation A.
inspecting and correct (IMCOM-P) has taken been directed to corr progress for correct		he Director IMCOM Pacific Region f corrective actions. IMCOM has perform oversight and monitor endation A. Estimated date of
3. The POC for this	action is	
	Deputy A	CRAMER ssistant Secretary of the Army ations, Housing and Partnerships)

#### **Department of the Air Force**



### **United States Forces Korea**

HEADQUARTERS, UNITED STATES FORCES KOREA UNIT #15237 APO AP 96205-5237 0 8 JUN 2017. FKCS MEMORANDUM FOR Deputy Inspector General Policy and Oversight SUBJECT: Official Draft Report - Followup Inspection: Recommendations From Report No: DODIG-2015-013 Were Partially Implemented to Correct Health and Safety Deficiencies at Military Housing in the Republic of Korea (Project No. D2016-D000PT-0170.000) 1. United States Forces Korea (USFK) appreciates the opportunity to review the Department of Defense Inspector General (DODIG) draft report. The draft report's finding states, "The Army and Air Force partially implemented recommendations from Report Number DODIG-2015-013, Military Housing Inspections - Republic of Korea, October 28, 2014." We concur with that finding as well as its associated recommendations. 2. USFK will highlight this issue as a Commander's concern and request Department of the Army and Department of the Air Force follow up responses to rapidly implement the report's recommendations. Point of Contact for this action is the command Inspector General, 3 MICHAEL A. MINIHAN Major General, USAF Chief of Staff

# Acronyms and Abbreviations

AB	Air Base
ADL	Airmen Dormitory Leader
AFIMSC	Air Force Installation and Mission Support Center
CIGIE	Council of the Inspectors General on Integrity and Efficiency
DPW	Department of Public Work
FSBP	First Sergeants Barracks Program
GFCI	Ground Fault Circuit Interrupter
IMCOM	Installation Management Command
NFPA	National Fire Protection Association
NOC	Notice of Concern
OEBGD	Overseas Environmental Baseline Guidance Document
OIG	Office of Inspector General
ROK	Republic of Korea
USAG	United States Army Garrison
USD(AT&L)	Under Secretary of Defense for Acquisition, Technology, and Logistics
USFK	United States Forces Korea



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