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Evaluation of Operations and Management of Arlington and Soldiers' and Airmen's Home National Military Cemeteries

INTEGRITY **★** INDEPENDENCE **★** EXCELLENCE





Evaluation of Operations and Management of Arlington and Soldiers' and Airmen's Home National Military Cemeteries

May 20, 2019

Objective

This is one of two reports evaluating the operations and management of military cemeteries under the control of the Military Departments.

This report evaluates the operations and management of Army National Military Cemeteries (ANMC), consisting of Arlington National Cemetery (ANC) and the U.S. Soldiers' and Airmen's Home National Cemetery (SAHNC). Specifically we:

- verified completion of actions taken by the ANC in response to recommendations from the previous report, DODIG-2014-026, "Assessment of Arlington and Soldiers' and Airmen's Home National Cemeteries," December 20, 2013, (Revised May 20, 2019);
- evaluated gravesite accountability, including the reliability of information technology systems used to schedule, account for, and accurately document burials at the ANC and SAHNC;¹
- reviewed execution and oversight of contract support for the ANC and SAHNC;
- reviewed implementation of Army responsibilities in title 10, United States Code, chapter 446, "Army National Military Cemeteries," specifically the responsibilities assigned to the Executive Director of ANMC; and

Findings (cont'd)

• examined the causes of the wide range of wait times for pending interments and inurnments at the ANC.

Our other report, DODIG-2019-084, "Evaluation of the Operations and Management of Military Cemeteries," May 20, 2019, summarizes the operations and management at the remaining 36 military cemeteries located on current and former military installations inside and outside the United States.

Background

In 2010, public and congressional concerns about the management and operations at the ANC resulted in the enactment of Public Law 111-339, "Reports on Management of Arlington National Cemetery," which directed the Secretary of the Army to inspect the ANC annually, from 2011 to 2013. The Army Inspector General conducted these inspections, which verified whether cemetery officials had corrected deficiencies and observations identified in 2010 and 2011, identified additional issues regarding cemetery operations, and recommended related corrective actions. The Secretary of the Army forwarded the reports to Congress, and the Army took actions in response.

In 2010, the Secretary of the Army established the position of Executive Director of Army National Military Cemeteries and assigned the incumbent the authority for development, operation, management, administration, and oversight of the ANC and SAHNC. This authority previously belonged to the Commander of the Military District of Washington.

Congress codified this change in section 591 of Public Law 112-81, "The National Defense Authorization Act for Fiscal Year 2012." This law amended title 10, United States Code, by inserting chapter 446, "Army National Military Cemeteries," and requiring digitization of all ANC burial records.

In 2011 the ANC staff developed the ANC Research Tool to complete baseline accountability at ANC as required by Public Law 111-339. The ANC staff validated records

¹ This report uses the term "burial" to include all remains interred (casket or urn in a grave plot) or inurned (urn placed in a columbarium niche). Burials are distinct from memorials, which contain no remains.



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Background (cont'd)

of burial at the ANC and migrated them into the ANC burial system of record, the Interment Services System. In 2012, the ANC redesigned Interment Services System with a web-interface that allows public access (ANC Explorer).

ANC personnel developed the ANMC Research Tool in 2013. They applied lessons learned from the ANC Research Tool to the SAHNC and the other Army cemeteries to validate records of burials. ANC personnel completed that effort in August 2018.

The ANC staff is replacing the Interment Services System with the Enterprise Interment Services System. This update includes six modules: Burial Request, Admin, Marker Ordering, Reporting and Dashboard, Resources and Scheduling, and Quality Assurance. ANC staff fielded the Burial Request module in July 2018, eliminating the manual transfer of information between databases and closing out the remaining open recommendation from our 2013 report.

ANC fielding of the remaining modules of the Enterprise Interment Services System during FYs 2019 and 2020 will result in that system becoming the sole system of record for ANC, SAHNC, and all Army cemeteries.

Findings

Our prior report on the ANC and SAHNC included 14 recommendations related to cemetery operations, funding, and appearance. We determined that, as of September 2018, management had taken appropriate action to close all of these recommendations.

In this evaluation, we concluded that gravesite accountability existed if:

- the names of people buried in the cemetery appeared in the ANC database,
- burial locations for individuals listed in the database corresponded to that individual's gravesite, and

• visitors with the correct name or location of an individual could find that individual's memorial or burial site.

In late 2018, the ANC was the final resting place for over 375,000 decedents and had over 67,000 available spaces. We evaluated a random sample of 553 burials and 145 available spaces at the ANC.

We found no gravesite accountability errors in the records. Specifically, we verified gravesite locations, names, and dates between the ANC Interment Services System database and the ANC public website, and we verified that the database and website were accurate by observing the actual gravesites.

However, we identified 69 potential discrepancies in the ANC records that did not affect gravesite accountability, in which one or more of the data elements were inconsistent among the Interment Services System database, the website, and the gravesite. For example, the first name of the decedent on the grave marker and in the records was spelled differently. ANC officials were aware of all but 5 of these 69 discrepancies. When we identified these five additional discrepancies, ANC officials resolved them by applying their business rules to update the Interment Services System database.

The SAHNC remains an active cemetery and is the burial location for more than 14,000 veterans. Our evaluation of a random sample of 290 burials and 62 available spaces at the SAHNC found 5 errors affecting gravesite accountability in its records. In two cases, the name of the decedents in our sample was not on the grave marker at the corresponding location in the cemetery. According to information in the database, the missing names belonged to family members who died in 1942 and 1943. In two other cases, what were coded as empty plots in the database contained decedents. Cemetery officials were aware of the burials, but had



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Findings (cont'd)

not yet placed headstones or temporary markers at the gravesites. In the fifth instance, the location of the decedent in the database did not match the location of the headstone.

We also evaluated four information technology systems that support ANMC gravesite accountability: Remedy Case Management, Interment Services System, ANC Mapper Geographical Information, and ANC Explorer. These systems support the scheduling, conduct, and tracking of burials throughout the cemeteries. We evaluated whether there was agreement among the data stored in these systems. We also examined the data consistency with physical gravesites. In addition, we reviewed ANC staff data entry procedures. We concluded that these systems were sufficiently reliable for establishing and maintaining gravesite accountability.

We also evaluated the Army's implementation of its responsibilities of cemetery management codified in title 10, United States Code, chapter 446, "Army National Military Cemeteries," which includes burial policy, oversight, and the assignment of the Executive Director and Superintendent. We determined that the Army has not issued updated versions of Army Regulation 290-5 and Army Pamphlet 290-5, assigning and detailing responsibilities for the operation and management of Army cemeteries. Delays in issuing these policies hinder full implementation of United States Code provisions applicable to the ANMC.

We did not identify any areas of concern regarding contract support at the ANMC cemeteries. The ANC used a Contract Support Element and Mission Installations Contracting Command at Fort Belvoir, Virginia, to manage 46 ongoing contracts related to operations and management of the ANC. Two full-time onsite contracting officers and 30 trained contract officer representatives performed oversight. By observation of the cemetery and review of contract documentation, we determined that the contractors were supporting ANC and SAHNC operations as required.

Finally, in this evaluation, we determined that the wait time for a burial at the ANC can take from 6 to 49 weeks from the initial request until the actual service. We also determined that eligibility criteria affects the potential total number of burials, while the advancing age and mortality of the veterans of World War II, Korea, and Southeast Asia conflicts affects the frequency of burial requests. In addition, family responsiveness and decisions regarding the type of honors often can lengthen the time from burial request to burial service. While the ANC system for scheduling and conducting burials efficiently manages the 3,471 open burial requests, the root cause for extended wait times is eligibility criteria that results in a volume of requests that exceed the resources available on a daily basis for the conduct of burials.

Recommendations

We recommend that the ANMC Executive Director:

- implement and field the quality assurance module in the Enterprise Interment Services System, the future sole system for all Army cemeteries, to adjudicate for accuracy all data merged from the ANC Research Tool, the ANMC Research Tool, and the current Interment Services System;
- ensure timely and proper commemoration (designation of the burial site with a temporary or permanent marker) of all decedent burials in accordance with policy;
- direct a census review of SAHNC burial sites during transition from the ANMC Research Tool to the Enterprise Interment Services System to ensure the accurate and complete transfer of information; and



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Recommendations (cont'd)

• finalize and publish the updated drafts of Army Regulation 290-5, "Army Cemeteries," and Army Pamphlet 290-5, "Administration, Operation, and Maintenance of Army Cemeteries," to fully implement the United States Code provisions applicable to operations of the ANC and SAHNC.

Management Comments and Our Response

The ANMC Executive Director agreed with our recommendations. The Executive Director described the deliberate adjudication process for data anomalies associated with the quality assurance module to be included in the Enterprise Interment Services System, scheduled for fielding during FY 2020. The Executive Director also stated that the Enterprise Interment Services System will become the sole system to address discrepancies at both national cemeteries and all other Army cemeteries. The quality control module embedded in this system is intended to address discrepancies in historic records that are not fully resolved by placing those records in a status intended for resolution. The Executive Director also stated that the Code of Federal Regulations, the draft Army Regulation 290-5, and Department of the Army Pamphlet 290-5 are in final stages of coordination and should be published by summer 2019.

The fielding of the Enterprise Interment Services System, if implemented as described by the Executive Director, meets the intent of our first three recommendations and the publishing of updated guidance meets the intent of the fourth. Therefore, the recommendations are resolved but remain open. We will close these recommendations once the ANC fields the Enterprise Interment Services System and the Executive Director completes publication of the draft Army Regulation290-5 and Department of the Army Pamphlet 290-5 for use by Army cemeteries.

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

Recommendations Table

Management	Recommendations Unresolved	Recommendations Resolved	Recommendations Closed	
Executive Director, Army National Military Cemeteries	None	A, B.1, B.2, D	None	

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

- Unresolved Management has not agreed to implement the recommendation or has not proposed actions that will address the recommendation.
- **Resolved** Management agreed to implement the recommendation or has proposed actions that will address the underlying finding that generated the recommendation.
- **Closed** OIG verified that the agreed upon corrective actions were implemented.





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

May 20, 2019

MEMORANDUM FOR EXECUTIVE DIRECTOR, ARMY NATIONAL MILITARY CEMETERIES

SUBJECT: Evaluation of Operations and Management of Arlington and Soldiers' and Airmen's Home National Military Cemeteries (Report No. DODIG-2019-083)

We are providing this report for your information. We conducted this evaluation from November 2017 through September 2018 in accordance with the "Quality Standards for Inspections and Evaluations," published in January 2012 by the Council of the Inspectors General on Integrity and Efficiency.

We considered management comments when preparing the final report. Comments from the Executive Director of Army National Military Cemeteries addressed all the specifics of the recommendations and conformed to the requirements of DoD Instruction 7650.03; therefore, we do not require additional comments.

We appreciate the cooperation and assistance received during this evaluation. Please direct any questions to Mr. George Marquardt at (703) 604-9159 (DSN 664-9159) or e-mail <u>George Marquardt@dodig.mil</u>.

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Introduction

In response to a 2013 congressional directive, the DoD Office of Inspector General evaluated military cemeteries under the control of the Military Departments. The evaluation resulted in report DODIG-2014-026, "Assessment of Arlington and Soldiers' and Airmen's Home National Cemeteries," published on December 20, 2013, (Revised May 20, 2019). This report, covering the two national military cemeteries, Arlington National Cemetery (ANC) and the United States Soldiers' and Airmen's Home National Cemetery (SAHNC), is a followup evaluation to that prior report.

A companion report, Report No. DODIG-084-2019, "Evaluation of Operations and Management of Military Cemeteries," May 20, 2019, provides the results of our evaluation of operations and management of military cemeteries under the control of Military Departments.

Objective

This evaluation focuses on the operations and management processes and procedures at the Army National Military Cemeteries (ANMC). Specifically we:

- evaluated gravesite accountability, including the reliability of information technology systems used to schedule, account for, and accurately document burials at the ANC and SAHNC;²
- reviewed execution of contract support for the ANC and SAHNC;
- reviewed implementation of Army responsibilities in title 10, United States Code, chapter 446, "Army National Military Cemeteries," specifically the responsibilities assigned to the Executive Director of the ANMC;
- examined the causes for the wide range of wait time from request to burial service for interments and inurnments at the ANC; and
- followed up on recommendations from Report No. DODIG-2014-026, "Assessment of Arlington and Soldiers' and Airmen's Home National Cemeteries," December 20, 2013, (Revised May 20, 2019).

Appendix A contains further detail on the scope and methodology used to evaluate the objective of this project.

² This report uses the term "burial" to include all remains interred (casket or urn in a grave plot) or inurned (urn placed in a columbarium niche). Burials are distinct from memorials, which contain no remains.

Background

The Army has been the steward of the ANC since 1864. By the end of 2017 the ANC contained the graves of more than 400,000 former service members and eligible family members. It is an active cemetery supporting up to 30 burials a day. The SAHNC was also created during the Civil War, providing burial sites for more than 14,000 veterans. Today, it is an active cemetery offering a final resting place for residents of the Armed Forces Retirement Home. These two national cemeteries are under the stewardship of the Army, led by an Army designated Executive Director under the executive authority of the Secretary of the Army.

In 2010, public allegations and congressional concerns about the management and operations of the ANC led to an inspection by the Army Inspector General, which identified problems related to operations and management of the cemetery, and recommended corrective action. Although the Army took action, Congress passed, and on December 22, 2010, the President signed, Public Law 111-339, "Reports on Management of Arlington National Cemetery," which required the Secretary of the Army to inspect the ANC for three consecutive years (2011-2013). The Army Inspector General conducted those inspections on behalf of the Secretary of the Army, who then reported the results to Congress. See Appendix A for further detail on these inspections.

The Secretary of the Army published Army Directive 2010-04 establishing the position of Executive Director of the Army National Cemeteries program and assigning authority for development, operation, management, administration, and oversight of the ANC and SAHNC to the Executive Director. Congress codified this change, issuing section 591 of Public Law 112-81, "The National Defense Authorization Act for Fiscal Year 2012." This law amended title 10, United States Code, and inserted chapter 446, "Army National Military Cemeteries." This section established the ANMC, consisting of the ANC and the SAHNC, and assigned authority for their development, operation, management, administration, and oversight to the Secretary of the Army. This authority previously belonged to the Commander of the Military District of Washington.

The 2012 Act also required the conversion of all records related to interments and inurnments at the ANC to a digital format by June 1, 2012. The ANMC Executive Director stated that the Army developed the ANC Research Tool in 2011 in response. The Army designed the tool to accomplish baseline accountability at ANC and correct data related to historical interments before transferring the data into the Interment Services System (ISS), the system of record at the ANC. In 2012, the ANC redesigned ISS with the ability to certify complete records and a web-interface to allow public access (ANC Explorer). The Executive Director further explained

that in 2013, ANC personnel fielded the ANMC Research Tool. The Army used the ANMC Research Tool to scan and validate records at the SAHNC and other Army military cemeteries, finalizing that effort in August 2018.

The ANC staff described their continued efforts to address database inaccuracies during the fielding of the Enterprise Interment Services System. This update to the ISS includes six modules: Burial Request, Admin, Marker Ordering, Reporting and Dashboard, Resources and Scheduling, and Quality Assurance. In July 2018, the ANC fielded the Burial Request module, which eliminated the manual transfer of information from the Case Management Resolution System to the ISS. This action consequently completed action on the last open recommendation from our 2013 report.

The ANMC Executive Director also explained ANC plans to field the five remaining modules incorporating all records from the ANC Research Tool and the ANMC Research Tool into the Enterprise Interment Services System before the end of FY 2020. At that time, the Enterprise Interment Services System will be the sole system of record for the ANC, SAHNC, and all other Army military cemeteries.

Definition of Accountability

For the purpose of this project, we determined that gravesite accountability existed if:

- the names of people buried in the cemetery appeared in the database;
- burial plots for the individuals listed in the database corresponded to the correct gravesites; and
- visitors seeking graves could find specific buried or memorialized individuals if the visitors have the correct names or locations.

Each burial had three possible final outcomes with regard to accountability—a gravesite accountability error, a discrepancy, or a pass.

- We considered a burial to be a gravesite accountability error if the name in the database did not correspond to the identified grave in the cemetery, or the gravesite was in a location different from the one shown in the ISS database.
- We considered a burial to contain a potential discrepancy if one or more of the data elements were inconsistent among the ISS database, the public website, and the actual gravesite. For example, the date of birth or death on the public website did not match the date on the headstone. If a potential discrepancy was unknown to ANMC management or not resolved according to published business rules and documented in ANC records, we recorded it as an actual discrepancy.

• We considered a burial a pass (accountability established) if there was no error or discrepancy, or if the discrepancy found was known to ANC, resolved in accordance with its published business rules, and documented in ANC records.

We initially considered all data mismatches to be potential discrepancies. We adjudicated each one with ANMC database managers, passing those they were aware of provided they had correctly applied their published business rules to address these discrepancies. For example, we found a decedent whose marker had a middle initial, but the record of burial form did not have a middle initial, resulting in a potential discrepancy. We reviewed the decedent's records and found documents in which the family requested that the middle initial be placed on the marker. We did not consider this to be a discrepancy as ANC officials followed their business rules which allows family members with the status of Primary Next of Kin to request changes to markers at the time of order. Also, mismatches resulting from different data on a headstone and in the only document in the database, in accordance with the business rules, will remain unresolved unless someone comes forward with further dispositive evidence.³ This is unlikely for older burials.

These definitions apply to Findings A and B of this report.

³ The ANC accountability business rules define dispositive evidence as authoritative information from preapproved sources that will allow database managers to change entries thereby fixing specific discrepancies.

Finding A

Accountability of Burials at the Arlington National Cemetery

We reviewed a sample of 553 gravesites based on reports generated from the ISS database of record for burials at the ANC. We verified locations, names, and dates between the ANC databases, the public website, and the physical markers within the cemetery. Our evaluation of 553 burials found no errors in gravesite accountability.

However, we identified 69 potential discrepancies among the data fields. After adjudication with ANC database managers, we determined that ANC officials were unaware of 5 of the 69 discrepancies: an incorrect spelling of a first name, 2 records missing photos, and 2 duplicate records. In addition, one inaccurate record, known to ANC managers, should have been deleted from the database. These discrepancies did not compromise gravesite accountability as the decedent was in the database, the location was correct, and an individual seeking the grave could visit it given the correct name or location.

Criteria

- 1. Government Accountability Office Report No. GAO-09-680G, "Assessing the Reliability of Computer-Processed Data," July 2009. The team used the methodology in the Government Accountability Office report to determine whether the data extracts from the Interment Services System provided by ANC staff met the intended purposes for our evaluation of gravesite accountability.
- 2. Arlington National Cemetery Business Rules, May 2017, Version 4. In accordance with ANC policy, ANC analysts use the ANC Business Rules to establish accountability by comparing available information in cemetery records. According to the business rules, the goal is consistency across trusted sources for three critical components: location of the markers, information displayed on the marker, and information in available records. We reviewed these rules and applied them to the discrepancies we identified in our statistical samples.

Discussion

We asked the ANC staff to run a report of burials and available spaces from the ISS database, sorted by the date of interment. At our request, the ANC provided the list in three groups:

- burials from 1864 through March 1, 2013 [Report One],
- burials from March 2, 2013, through November 1, 2017, plus available spaces [Report Two], and
- burials for the entire period with no recorded date of interment [Report Three].⁴

As shown in Figure 1, the list of burials from 1864 to March 1, 2013 [Report One] included 314,466 names, while the more recent list of burials from March 2, 2013 to November 2017 and available spaces as of November 2017 [Report Two], contained 32,423 names plus 67,365 available spaces. Burials with no date of interment [Report Three] identified 31,789 burials from 1864 to 2015 that were not captured in Reports One and Two.





Source: The DoD OIG.

For our review, we generated a statistically valid, random sample from each of the three reports. The samples contained 553 burials: 280, 66, and 207 respectively.⁵ The first two samples allowed us to analyze separately the burials before and after March 2, 2013. Report Two also generated a statistically valid, random sample of 145 available spaces.

⁴ We split the database of burials to allow for a comparison between data on burials made prior to and after the publication of Report No. DODIG-2014-026, "Assessment of Arlington and Soldiers' and Airmen's Home National Cemeteries," December 20, 2013.

⁵ A statistically valid sample yields an accurate and reliable result by considering the impacts of statistical parameters for accuracy [confidence level and margin of error] and reliability [precision rate].

For each sampled burial from Reports One and Two, we verified that the data (decedent's name, location in the ANC, and the dates of birth, death, and interment) in the reports from the ISS, on the ANC Explorer public website, and at the actual gravesite were consistent. For available spaces in our Report Two sample, we verified that the location was empty. For each sample burial from Report Three, we verified the consistency of the data in the reports from the ISS and on the ANC Explorer public website by viewing front and back photos of headstones.

Concurrent with our physical observation of our sample of gravesites, we randomly selected 201 additional burials from over 70 interment sections and 9 inurnment courts and the niche wall at the ANC. These 201 burials were not in our accountability samples. We recorded the location and full name of the decedent, as copied from the headstone or plaque, and traced these burials back to the database. We found two discrepancies and no accountability errors in this sample.

In the first case, the decedent's last name was misspelled. The ANC database manager verified the correct spelling from source documents and corrected the database on the spot. The second identified inconsistency was a burial with information on the ANC public website, but not the universe of burials provided to us by the ANC (Report One). The verification of the location and name in the database showed that the individual was missing from Report One because there was no interment date associated with the record. From this, we discovered that the database of burials provided by the ANC did not represent the entire universe of burials at the ANC. We requested that the ANC provide us the universe of burials in its database with no date of interment. As a result of this request, the ANC identified 31,789 additional burials without dates of interment. This became Report Three, described above. With the addition of the burials contained in Report Three, we concluded that the database was complete and sufficiently reliable for us to achieve our objective. See Appendix A, Methodology, for further discussion.

Analysis of Report Samples

Applying our accountability definitions and methodology to the samples yielded the following results:

- Our evaluation of all three samples of burials found no gravesite accountability errors. For all 553 burials, the name in the database corresponded to the identified grave in the cemetery and the location of the gravesite matched that shown in the ISS.
- Our evaluation of the samples from all three reports found 69 potential discrepancies, none of which affected gravesite accountability. Of the 69 potential discrepancies we identified, 5 had not been previously identified by ANC staff and had not been documented in accordance with

their business rules, and one inaccurate record marked for deletion. We discuss the 6 discrepancies and remaining 63 potential discrepancies later in this finding.

Reports	Burial Sample Size	Available Spaces Sample Size	Gravesite Accountability Errors	Available Spaces Errors	Non-Gravesite Accountability Discrepancies	
Report One	280	NA	0	NA	42	1
Report Two	66	145	0	0	13	0
Report Three	207	NA	0	NA	14	5
Total	553	145	0	0	69	6

Table 1. ANC Database Discrepancies

Source: The DoD OIG.

Analysis of Potential Discrepancies

The sample from Report One contained 280 burials and 42 potential discrepancies. After adjudication between the team and ANC database officials a single discrepancy remained, the only one of which ANC officials were unaware. The discrepancy was an incorrect spelling of the first name of a spouse ("Marguerite" should have been "Marquerite"). The incorrect spelling appeared in the ISS database, while the latter, correct, spelling appeared on the headstone and in the supporting records. We observed ANC database managers correct this record.

The sample from Report Two contained 66 burials and 13 potential discrepancies. After adjudication between the team and ANC database officials, no discrepancies remained. In addition, the Report Two sample contained available spaces. Our observations confirmed, as expected, that all of those spaces were empty.

The sample of Report Three contained 207 burials and 14 potential discrepancies. After adjudication with ANC database managers five discrepancies remained four of which ANC database managers were previously unaware, and one long-standing known discrepancy that had not been corrected.

The four previously unidentified discrepancies were two records without photos of the marker and two burials with duplicate records. We determined that the two duplicate records were the result of the digitization of old records, the merging of multiple databases, and the current database controls that purposefully prohibit the deletion of records. While the ISS assigned unique identification numbers to both records, the name of the decedent and the location in the cemetery was the same for both records, allowing for location of the correct gravesite containing the buried remains.

The long-standing known discrepancy involved a record in which the decedent was initially memorialized (that is, commemorated without remains), then was interred in 2006 after the recovery of his remains. Both records remained in the ISS database. While the record of memorial was marked for deletion, we categorized it as a discrepancy because the record was marked for deletion more than 10 years ago but still remained in the database.

ANC quality assurance staff stated that the record remained in the database pending action by the Army Data Analytics Group because system permissions prevented ANC staff from deleting records. The Army Data Analytics Group is external to the ANC and is authorized to remove records from the database. This external control was established to prevent inadvertent deletion of records that would result in the permanent loss of information.

The ANC is also developing and fielding the Enterprise Interment Services System, an update to the ISS. ANC Quality Assurance personnel explained that this update will include enhanced cyber security and will eliminate the manual transfer of information from the Case Management Resolution System to the ISS, reducing the opportunity for human errors. Additionally, ANC staff intends to resolve discrepancies in historic records by fielding a Quality Assurance module within the Enterprise Interment Services System. ANC staff stated that this module is projected for release in June 2019 and fielding of the Enterprise Interment Services System with all enhancements is expected by FY 2020.

Conclusion

A statistically valid, random sample of 553 burial sites at the ANC contained no gravesite accountability errors. Similarly, a statistically valid, random sample of 145 plots that were reported to be available (empty) proved to be accurate. Our review of the 553 burials from all sections of the cemetery yielded 69 potential discrepancies. ANC staff were unaware of five of these 69, which consisted of:

- one spelling error,
- two duplicate records, and
- two records without photos of the grave markers.

In addition, one record marked for deletion over 10 years ago remained in the database. ANC staff were aware of this issue.

While the database contains these previously unidentified discrepancies, none of them affected gravesite accountability. Furthermore, these types of discrepancies across the universe of burials at ANC would not affect gravesite accountability. Nor would they prevent a visitor from locating a specific buried or memorialized individual, if the visitor had the correct name or gravesite location.

Recommendations, Management Comments, and Our Response

Recommendation A

We recommend that the Executive Director, Army National Military Cemeteries, implement and field the Quality Assurance module in the Enterprise Interment Services System, the future sole system for all Army cemeteries, to adjudicate for accuracy all data merged from the Arlington National Cemetery Research Tool, the Army National Military Cemeteries Research Tool, and the current Interment Services System.

Executive Director Comments

The ANMC Executive Director agreed with Recommendation A. The Executive Director's response included technical clarification on the ANC and ANMC Research Tools covering the two systems' differences and intended purposes. Additionally, the Executive Director described the deliberate adjudication process for data anomalies associated with the quality control module included in the Enterprise Interment Services System, scheduled for fielding during FY 2020. She stated that this module will address discrepancies in historic records by placing those records in a segmented status intended for resolution.

Our Response

Comments from the ANMC Executive Director, fully addressed Recommendation A; therefore, the recommendation is resolved, but remains open. We will close this recommendation once the ANC completes fielding of the Enterprise Interment Services System. We acknowledge that fielding the capabilities as described in the Executive Director's response above will also address Recommendation B.2 by providing a similar resolution of records in unresolved status at the SAHNC. Additionally, we considered and incorporated the technical comments made by the ANMC to our draft report in this final report.

Finding B

Accountability of Burials at the Soldiers' and Airmen's Home National Cemetery

We reviewed a random sample of 352 burials from all sections of the Soldiers' and Airmen's Home National Cemetery. Our evaluation of all samples revealed five errors in accountability. The accountability errors consisted of:

- two instances from the 1940s in which names of deceased family members were in the database but not included on the grave markers,
- two instances of burials in which the names of deceased service members were in the database and no grave marker existed in the cemetery, and
- one instance in which the location of a gravesite in the database, generated in 2012, did not match the physical location of the grave in the cemetery.

This occurred because at the time of the burial cemetery officials did not ensure placement of proper markers to identify decedents and ensure gravesite locations were correct in the system of record.

As a result, visitors seeking those graves would not be able to find the memorialized individuals. Also, five errors in the sample indicate the potential for additional accountability errors in the rest of the burial locations at the SAHNC.

Criteria

- 1. Government Accountability Office Report No. GAO-09-680G, "Assessing the Reliability of Computer-Processed Data," July 2009. The team used the methodology in the GAO report to determine whether the data extracts from the Interment Services System provided by ANC staff met the intended purposes for our evaluation of gravesite accountability. See Appendix A, Methodology, for more information on how this report was used for our evaluation.
- 2. Arlington National Cemetery Accountability Business Rules, May 2017, Version 4. In accordance with ANC policy, ANC analysts use the ANC Business Rules to establish accountability by comparing available information in cemetery records. According to the business rules, the goal is consistency across trusted sources for three critical components: location of the markers, information displayed on the marker, and information in available records. We reviewed these rules and applied them to the discrepancies we identified in our statistical samples.

Discussion

ANMC manages the SAHNC. In response to our request, ANMC provided a report of burials at the SAHNC from the ANMC Research Tool and plots from the ANC Mapper in the following groups:

- burials from the initial burial in 1864 through November 1, 2017 (13,643 total), and
- available spaces (1,282 total).

We used the data extracted from the ANMC Research Tool database, the official system of record for the SAHNC, as the basis for our analysis.

For our review we observed 352 gravesites. We generated a statistically valid, random sample containing 290 names of decedents buried at the SAHNC.⁶ For each sampled burial, we verified that the data (decedent's name, location in the SAHNC, and dates of birth and death) in the report from the ANMC Research Tool and the actual gravesite were consistent. We also conducted a check of available spaces and existing headstone markers (not in our sample), selecting 62 markers and empty plots at random from all sections of the cemetery. We verified these 42 burials and 20 available spaces against the data provided by ANMC to test the data for completeness.

Analysis of Report Samples

We found five errors in the two samples.

- The sample of 290 burials contained three accountability errors. In two cases, the name of the decedent was not on the grave marker at the corresponding location in the cemetery. According to information in the database, both missing names belonged to widows of veterans. In the third case, the location of the decedent in the database did not match the location of the headstone. The database showed that a decedent, interred in 1863, was in section D, plot 4591 when the grave marker is actually located in section H, plot 4591.
- The sample of 42 randomly selected burials for the completeness test contained two cases in which there were no headstones or markers in the cemetery while the database included records that indicated that decedents had been buried in those two unmarked plots.

In addition, we reviewed 20 empty locations to ensure that decedents were not buried where no marker existed in the cemetery. We found that 2 of the 20 available locations randomly selected had a record of a burial in the ANMC

⁶ A statistically valid sample yields an accurate and reliable result by considering the impacts of statistical parameters for accuracy [confidence level and margin of error] and reliability [precision rate].

Research Tool database, but they were both missing a grave marker. The cemetery staff ordered headstones for these two plots. As of November 2018, one headstone was already set and the other headstone is pending delivery.

In four of the five errors described above, decedents were not commemorated. ANC officials took measures to address the errors. As of September 2018, prior to reporting our results, ANC officials stated that they conducted a search for decedents who were not commemorated and ordered replacement headstones for the individuals mentioned above. They officials stated that they were prepared to set and photograph the new grave markers once received. Finally, the ANC took action to update the decedent record in the database, changing the location from section D to the correct interred location in section H, plot 4591.

Analysis of Potential Discrepancies

We also found 8 potential discrepancies in the sample of 290 burials, none of which affected gravesite accountability. We adjudicated the 8 potential discrepancies to 6 by conducting a review of the records in the ANMC Research Tool database. Both of the adjudicated cases were name mismatches. ANC officials corrected one in accordance with their business rules, correcting the spelling of the name of the decedent by updating the entry in the database. The second was a middle initial requested by the next-of-kin and included on the gravesite marker, but not in the database. This is not a discrepancy under the ANC business rules, as the rules allow changes to the marker by next of kin, even though official documentation does not show the decedent's middle initial.

Of the six validated discrepancies:

- Two discrepancies were name mismatches between the headstone in the cemetery and the database. For example, a decedent's last name was spelled "Stinehour" on the marker but "Stinehoun" in the database. Supporting records show that the spelling on the headstone is correct.
- One discrepancy was a mismatched date of death between the headstone and the database. The headstone showed November 19, 1921 but the database stated November 9, 1921. In this case, supporting records confirmed that the date in the database was correct.
- Three discrepancies involved illegible headstones, meaning we could not read the information on the headstone in order to match it against the record in the database. The ANC business rules define markers that are unreadable due to age and overall wear as discrepancies.

We shared this information with ANC database managers so they could take these cases for action in accordance with their business rules. ANC personnel also stated that they plan to review all burial data anomalies identified during the transition from the ANMC Research Tool database to the Enterprise Interment Services System.

Finally, in addition to the three grave markers in our sample deemed illegible, eight others were difficult to read, and we noted numerous additional markers not in the sample that also were illegible or difficult to read. ANC officials stated that they began replacing all illegible headstones beginning in November 2018. ANC officials stated that they plan to order replacement headstones by cemetery section in phases to not overburden the National Cemetery Administration, the supplier of all replacement government markers for eligible decedents, with replacing all of the unreadable (or illegible) headstones at once.

Conclusion

We found five accountability errors during our evaluation of 352 sample gravesites. These errors indicate that there may be other accountability errors in the total gravesite population at the SAHNC. Cemetery managers report that they have taken measures to identify and replace missing or illegible gravesite markers at the SAHNC. However, pending completion of the transition of the records from the Cemeteries Research Tool database to the Enterprise Interment Services System, there is still potential that a cemetery visitor may find it difficult to locate a decedent who has an illegible marker or is buried in a different location than listed in the database of record.

Recommendations, Management Comments, and Our Response

Recommendation B.1

We recommend that the Executive Director of Army National Military Cemeteries ensure timely and proper commemoration (designation of the burial site with a temporary or permanent marker) of all decedent burials, in accordance with policy.

Executive Director Comments

The ANMC Executive Director, agreed with Recommendation B.1. The Executive Director clarified changes in the managing and marking of locations from the earliest burials at the cemetery and burial locations today. She described the execution of SAHNC accountability by ANC officials completed in August 2018, verifying 13,685 cases and identifying 875 actions for resolution.

Our Response

Comments from the ANMC Executive Director, fully addressed Recommendation B.1; therefore, the recommendation is resolved, but remains open. We will close the recommendation once ANC officials complete resolution of the 875 identified actions.

Recommendation B.2

We recommend that the Executive Director of Army National Military Cemeteries direct a census review of SAHNC burial sites during transition from the Cemetery Research Tool to the Enterprise Interment Services System to ensure the accurate and complete transfer of information.

Executive Director Comments

The ANMC Executive Director, agreed with Recommendation B.2. The Executive Director stated they launched an enhanced version of the ANC Research Tool in 2013 as the ANMC Research Tool and used the tool to complete a 100 percent validation of SAHNC cemetery records in August 2018. The Executive Director explained that ANC personnel will continue to use the Interment Services System for burials until SAHNC historic records are migrated to the Enterprise Interment Services System, which is planned for September 2019. Additionally, the Executive Director explained the future fielding of a deliberate adjudication process for data anomalies resulting from implementation of the quality control module in the Enterprise Interment Services System during FY 2020. The Executive Director stated that this module will address those discrepancies in historic records which are not fully resolved, by placing those records in a segmented status intended for resolution within the Enterprise Interment Services System.

Our Response

Comments from the ANMC Executive Director, fully addressed Recommendation B.2; therefore, the recommendation is resolved, but remains open. We will close the recommendation once ANC officials field the Enterprise Interment Services System. The management response also included technical comments to our draft report that we considered and incorporated in this final report.

Finding C

Reliability of Information Technology Systems

We found that the information technology systems supporting burial requests, scheduling, and execution, and gravesite accountability at the ANC and SAHNC were reliable.

We determined this by:

- verifying data among the information subsystems, checking data on 553 gravesites against burial markers, and finding no errors in gravesite accountability;
- adjudicating 69 potential discrepancies identified from the review of 553 burials and 145 available spaces by applying established ANC business rules, which resulted in 5 previously unidentified discrepancies, none of which affected gravesite accountability; and
- observing processes used by ANC personnel to ensure integrity of the data within the information subsystems.

The agreement among data in the ISS database, ANC Explorer, and ANC Mapper system, combined with the team's physical inspection of gravesites, validated the reliability of the data in the information technology systems used by the ANMC.

Discussion

Description of Information Technology Systems at the ANMC

ANC personnel have used the ISS to schedule burials and coordinate services since 2003. During the digitization effort from 2011, ANC officials copied ANC burial records in the ISS and the Department of Veterans Affairs' Burial Operation Support System to the ANC Research Tool. ANC staff stated that they then used the ANC Research Tool to establish baseline accountability and scrub the data for historical interments, adjudicating discrepancies before transferring the data back into the ISS, the ANC system of record. In addition, beginning in 2013, ANC staff used the ISS as the system of record for all new burials at the SAHNC.

The information technology used at the ANC consists of the Remedy Case Management System to track calls and requests by the general public and three systems that work together by sharing data: the ISS (mentioned above), the ANC Mapper Geographic Information System, and the ANC Explorer website application. The Joint Service Provider Service Desk, or call center, is the focal point for all public communications with the ANC. The call center is the first contact between ANC cemetery representatives and a family member requesting information about the burial of a decedent. Upon receiving a request, a call center representative enters the information into the Remedy Case Management System. ANC staff stated that, as of July 2018, burial requests are entered into the Burial Request module of the ISS.

Remedy Case Management System

The ANC and the SAHNC use the Remedy system to file and track requests or inquiries about decedents interred and inurned at those two cemeteries. The system assigns a unique case number, which allows ANC officials to track requests to final disposition.

Through the Call Center's use of the Remedy system, family members can notify the ANC of, and request changes to, information that needs to be corrected in the database or on a grave marker. Family members and the general public can also request cleaning of headstones or request photos of headstones for the public website through the call center. The ANC tracks and monitors all requests to resolution through the Remedy system.

Cases in which an individual requests to have information changed on a marker or in a record, the ANC requires dispositive documentation and a signed request from the next-of-kin in order to update the record in the ISS.⁷ After the quality control analyst confirms such documentation, the analyst starts a 12-step process to update the record in the ISS. Before placing the order for a new marker, a marker quality control analyst reviews all information on a marker preview to ensure that the information on the replacement headstone (when one is warranted) is correct.

Interment Services System

The ISS is the ANMC system of record that contains available documentation on all burials and memorials at the ANC, and new burials at the SAHNC.⁸ ANC staff stated that until June 2018, schedulers transferred necessary data and documentation for eligible decedents from the Remedy system to the ISS. After release of the Burial Request module, the Call Center inputs the data and documentation directly into the ISS. The Call Center representatives request documentation from family members necessary to determine eligibility for burial at the ANC, such as a death certificate and proof of next-of-kin. After receiving all required documents a call

⁷ The ANC accountability business rules define dispositive evidence as authoritative information from preapproved sources that will allow database managers to change entries, thereby fixing specific discrepancies.

⁸ ANC officials imported data for SAHNC burials pre-2012 into the ISS database from the ANMC Research Tool.

center employee marks the case "assigned," and ANC schedulers are able to access the case. At this point, ANC schedulers determine the eligibility of the decedent, based on the information within the ISS.

For cases in which the staff confirms eligibility, the assigned scheduler transitions the case status to "pending approval," and contacts the family to discuss, among other things, the type of burial, the level of honors, and the content of the marker. Cases in which the decedent is determined to be ineligible, a senior scheduler explains the circumstances to the family and refers them to the cemetery services of the Department of Veterans Affairs or a private cemetery. To begin the burial scheduling process, schedulers create a record for each case in the ISS and update the records through the completion of burials, including adding digital photographs of the grave marker. During the process, schedulers access the ANC Mapper Geographic Information System to set a burial location.

ANC Mapper Geographic Information System

The ANC Mapper Geographic Information System generates a digital map showing the location of every burial site at the ANC, including available (empty) spaces. The digital map produced by the Mapper Geographic Information System:

- allows schedulers and operations personnel to identify available spaces to assign current burials;
- helps ANC personnel to locate gravesites and niches within the cemetery;
- helps cemetery representatives assign burial locations that ensure adequate distance between concurrent ceremonies, thereby maintaining the dignity of the ceremonies and the privacy of family members and friends attending each service; and
- supports the ANC Explorer website application by feeding updated information in real-time to the website.

ANC Explorer

ANC Explorer is a web-based, mobile application that enables families, visitors, and the public to locate gravesites, events, or other points of interest throughout the ANC. Individuals can access the application at the self-service kiosks at the ANC, via personal computers, or by downloading it to smartphones. ANC Explorer combines information from the ISS and the ANC Mapper Geographical Information System, and allows the real-time electronic flow of information between those two systems and ANC Explorer. After accessing the site, an interested person can search for a decedent by name or location, and receive directions to the desired gravesite location. The application shows front-and-back pictures of the grave marker; the decedent's branch of service; and if available the dates of birth, death, and interment.

Determining the Reliability of Information

The reliability of the ANC information technology systems is critical to determine gravesite accountability and to ensure the accuracy of burial records. ANC officials generated reports from the ISS and Mapper databases, listing the gravesite locations, names, and dates of interment. The OIG team used these reports to create our statistical samples to evaluate gravesite accountability. We then used the ISS database to add the dates of birth and death for each name in our sample which we verified by observing the gravesite markers.

In addition to analyzing a sample of burial sites throughout the cemetery to determine gravesite accountability, the team observed:

- schedulers reviewing case files, while a lead scheduler explained the transfer of information from the Remedy system to the ISS;
- application of information technology systems used to ensure the correct location and decedent's information during the opening of a gravesite;⁹ and
- database managers while they corrected discrepancies in the ISS database identified by the OIG team.

While conducting fieldwork to determine accountability of burial sites throughout the cemetery, as described in Finding A, the team also:

- accessed the ISS to validate data gathered from physical observation, by checking information in the database using a sample of 553 burials against burial markers, finding no errors in gravesite accountability;
- used established ANC business rules to adjudicate 69 potential discrepancies identified from the review of 553 burials and 145 available spaces down to 5 previously unidentified discrepancies; and
- used the ANC Explorer application on computer and mobile devices to find all 553 burial locations and associated markers in our samples, allowing the team to validate the accuracy of the ANC Explorer website and mobile device applications.

As discussed in Finding A, we verified data among the subsystems, visually observed gravesites in our samples, and checked the accuracy of gravesite locations in the cemetery. The results of that review demonstrated the functionality of the systems and the integrity of the database.

Conclusion

The agreement among data in the Remedy, ISS database, ANC Mapper, and ANC Explorer systems, combined with the team's physical inspection of gravesites, validated the reliability of the information contained in the technology systems.

⁹ The opening of a gravesite refers to a nine-step procedure as outlined in the ANC Standard Operating procedure for excavation and closing of first interments.

Finding D

Incomplete Implementation of Regulations Assigning Responsibilities to the Executive Director

The Secretary of the Army and the ANMC Executive Director have not fully implemented the provisions of title 10, United States Code, chapter 446, "Army National Military Cemeteries," because they have not published updated Army Regulation 290-5, "Army Cemeteries," and the supporting Department of the Army Pamphlet 290-5, "Administration, Operation, and Maintenance of Army Cemeteries."

According to ANC officials, changes to criteria for post cemeteries requested by Army commands and a review by the White House Regulatory Task Force delayed final approval of existing draft regulations.

As a result, until the Secretary of the Army approves and implements the draft guidance, the Army will not be in full compliance with title 10, United States Code, chapter 446, "Army National Military Cemeteries." Additionally, there was confusion among installation Cemetery Responsible Officials on whether or not to comply with unsigned requirements.

Criteria

- 1. Title 10, United States Code, chapter 446, "Army National Military Cemeteries." This section of the United States Code establishes the ANMC as the ANC and the SAHNC, and outlines Army authority and responsibility for management and operations of the cemeteries.
- 2. Army Directive 2010-04, "Enhancing the Operations and Oversight of the Army National Cemeteries Program," June 10, 2010. This Directive established the role of ANMC Executive Director and severed the command relationship between the Army Military District of Washington and Arlington National Cemetery.
- 3. Secretary of the Army Memorandum, "Enhancing the Administration, Operations and Maintenance of Military Cemeteries Under the Jurisdiction of the United States Army," April 17, 2012. The memorandum appointed the Executive Director, Amy National Cemeteries as the functional proponent for policies and procedures for all military cemeteries under Army jurisdiction.
- 4. General Order No. 2014–74, "Establishment of The Army National Military Cemeteries", November 21, 2014. This order executes part of the requirements of title 10, United States Code, chapter 446, "Army National Military Cemeteries," specifically ANMC.

- 5. General Order No. 2014–75, "Designation of Arlington National Cemetery and Soldiers' and Airmen's Home National Cemetery as a Direct Reporting Unit," November 21, 2014. This order designates the ANC and the SAHNC as direct reporting units of the ANMC.
- 6. Army General Order No. 2017-01, "Assignment of Functions and Responsibilities Within Headquarters, Department of the Army," January 5, 2017. This order assigns duties to the ANMC Executive Director that are specified in title 10, United States Code, chapter 446, "Army National Military Cemeteries." It also delegates responsibility for developing eligibility policies for interment, inurnment, and removal of remains from ANMC to the ANMC Executive Director.
- 7. Army Regulation 290-5, "Army National Cemeteries," September 1, 1980. This regulation establishes the authority and assigns the responsibility for the operations and maintenance of the ANC and SAHNC as a civil works activity of the Department of the Army.
- 8. Department of the Army Pamphlet 290-5, "Administration, Operation, and Maintenance of Army Cemeteries," May 1, 1991. This pamphlet guides the discharge of duties for accomplishment of the overall Army cemeteries mission.

Discussion

In June 2010, Secretary of the Army Directive 2010-04 established the role of ANMC Executive Director and severed the command relationship between the Military District of Washington and the ANC. This was later reflected in Public Law 112-81, "The National Defense Authorization Act for Fiscal Year 2012," which authorized the establishment of the ANMC, consisting of the ANC and the SAHNC. Title 10, United States Code, chapter 446, "Army National Military Cemeteries," implemented six sections from Public Law 112-81 (sections 4721–4726), and one section from Public Law 113-66 (section 4727).

The Secretary of the Army issued a memorandum, on April 17, 2012, appointing the Executive Director of the Army National Cemeteries Program, as the functional proponent for policies and procedures pertaining to the administration, operation, and maintenance of all military cemeteries under the jurisdiction of the Army. This memorandum directed the Executive Director, "to immediately review, develop and update and, as appropriate, to standardize, consolidate, and promulgate all pertinent policies in a single, comprehensive regulation under the proponency of the Executive Director."

Implementation of Title 10, United States Code, Chapter 446

The Secretary of the Army is meeting the intent of the requirements of title 10, United States Code, chapter 446, "Army National Military Cemeteries."

Section 4721

- **Requirement.** Authority and responsibilities of the Secretary of the Army. This section requires the Secretary of the Army to develop, operate, manage, administer, oversee, and fund the ANMC, defined as the ANC and SAHNC. This section states that the Secretary must prescribe such regulations and policy to administer the cemeteries and submit an annual budget to Congress. This section also requires the digitization of ANC interment and inurnment records by June 1, 2012.
- Implementation. Army General Order 2014-74 established the ANMC as a Secretariat element within Headquarters, Department of the Army. The General Order also assigns the ANMC Executive Director as the principal adviser to the Secretary of the Army on all matters related to Army cemeteries. Army General Order 2014-75 designates the ANC and SAHNC as direct reporting units of the ANMC. Each year, the ANC submits its budget justifications and estimates to fund the administration, operation, maintenance, and construction of the cemetery by budget code. Additionally, ANC officials digitized all paper records related to interments and inurnments at the ANC into the Cemeteries Research Tool in 2011. These actions satisfy the requirements of 10 U.S.C. § 4721.

Section 4722

- **Requirement.** Interment and inurnment policy. This section assigns the Secretary of the Army, with approval of the Secretary of Defense, responsibility for establishing policy and procedures for interment and inurnment eligibility and responsibility for determining exceptions to that policy and the removal of remains from the ANC and the SAHNC.
- **Implementation**. Army General Order 2017-01 assigns responsibility for developing eligibility policy for interment, inurnment, and disinterment to the ANMC Executive Director. Final approval remains with the Secretary of the Army. The updated Army Regulation 290-5 includes these procedures, and when published will meet the intent of 10 U.S.C. § 4722.

Section 4723

• **Requirement.** Advisory committee on the ANC. This section directs the Secretary of the Army to appoint an advisory committee on the ANC to make periodic reports and recommendations to the Secretary. The Secretary then must submit the advisory committee's reports and recommendations to congressional defense committees and the committees on veteran's affairs.

Implementation. The Advisory Committee on ANC was officially • established in October 2010 to provide independent advice to the ANC regarding planning for future development of the ANC and to protect the interests of veterans, surviving family members, and the public. Since 2012, the Advisory Committee published six reports providing recommendations. For example, the June 2017 "Annual Report of the Advisory Committee on Arlington National Cemetery," evaluated a request from a non-profit organization to erect a commemorative monument within the ANC in recognition of the Army Security Agency. The Advisory Committee recommended denial because it found the placement of the proposed monument inconsistent with the core mission of the cemetery. The Secretary of the Army concurred with the recommendation and notified the congressional defense committees and the committees on veterans' affairs in accordance with the requirements of 10 U.S.C. § 4723. The advisory committee and its actions satisfy the requirements of 10 U.S.C. § 4723.

Section 4724

- **Requirement.** Executive Director. This section establishes the position of the ANMC Executive Director, outlines the responsibilities of the position, and requires the incumbent to report directly to the Secretary of the Army.
- Implementation. Army Directive 2010-04, created the position of Executive Director of the Army National Cemeteries Program, reporting directly to the Secretary of the Army, and assigned the incumbent the responsibilities in 10 U.S.C. § 4724. As of January 2017, authorization for the position is contained in Army General Order 2017-01. The updated Army Regulation 290-5 includes the roles and responsibilities of the ANMC Executive Director, and when published will make the position permanent, satisfying the requirements of 10 U.S.C. § 4724.

Section 4725

- **Requirement.** Superintendents. This section details the experience necessary for the position of superintendent and requires cemetery superintendents to report directly to the Executive Director.
- **Implementation.** The Superintendent for the cemeteries reports directly to the ANMC Executive Director. The Superintendent assigned during our review in 2018 previously served as the Chief of Standards and Evaluation for the ANC. In addition, her official biography notes that she has experience in logistics, business process development, strategic planning, and enterprise management for information technology. Her prior position as the Chief of Standards for the ANC meets the requirements of 10 U.S.C. § 4725.

Section 4726

- **Requirement.** Oversight and inspections. This section requires the Secretary of the Army to maintain the highest quality standards through periodic inspections conducted by personnel from the Army, other Federal agencies, or civilian experts, and submit inspection reports to congressional defense committees.
- Implementation. The Secretary of the Army published two reports by the Army Inspector General on the Implementation of the Army Directive on the Army National Cemeteries Program on September 18, 2011, and September 17, 2012.¹⁰ ANMC and the Executive Director conduct periodic inspections of the ANC and SAHNC as part of their annual oversight plans. Within 30 days of the completed inspection, the Executive Director informs the Secretary of the Army of the results of the ANMC inspection and the plan to correct all identified deficiencies. The draft Army Regulation 290-5 also requires assistance visits by ANMC staff. These visits will complement ANMC training for Army personnel responsible for cemetery operations. We conclude that this oversight and the additional oversight that will be established once the draft Army Regulation is published meet the intent of 10 U.S.C. § 4726.

Section 4727

- **Requirement.** Cemetery concessions contracts. This section authorizes the Secretary of the Army to enter into any contract for transportation, interpretive, or other necessary or appropriate concession services to ensure the protection, dignity, and solemnity of the cemetery. The fees collected under such concessions are to be deposited into a special account and are available for expenditure by the Secretary of the Army to support activities at the cemeteries.
- Implementation. An ANC official responsible for resource management stated that the ANC manages concessions for the tour (shuttle) bus service. The ANC official stated that the ANC uses funds generated from the tour bus service to enhance the visitor experience. Recently, the ANC has used these funds to purchase new benches throughout the cemetery, water fountains, and new displays in the visitor center. We conclude that this concession meets the intent of 10 U.S.C. § 4727.

¹⁰ See Appendix A, Methodology–Prior Coverage, for more on these reports.
Updated Army Policy Remains in Draft

As of December 2018, Army Regulation 290-5, "Army National Cemeteries," September 1, 1980, and Army Pamphlet 290-5, "Administration, Operation, and Maintenance of Army Cemeteries," May 1, 1991, remain in effect. Both were published before 2012 (the date of Public Law 112-81) and do not contain language meeting the intent of all the requirements in 10 U.S.C. chapter 446.

However, the Army developed draft regulations that are currently in final stages of review for publication. Army representatives stated that the updated Regulation and Pamphlet have been in the approval process since the middle of 2017. They stated that the Regulation was released to the Army publications group and general counsel in April 2017, and the Pamphlet in the summer of 2017. They explained two reasons for the more-than 12-month approval process. First, Army leadership decided to add criteria for post cemeteries to the regulation, requiring a rewrite. Second, once released by the Army, approval of both documents was further delayed because of a review by the White House Regulatory Task Force, an Executive branch initiative to reduce regulations.

Our interviews with Cemetery Responsible Officials revealed that there was confusion among installations about whether they were to follow the new requirements in draft regulations. We interviewed seven Cemetery Responsible Officials at Army installations and four stated that they use the draft requirements, while the other three stated that they continued to use the signed policy from 1991. One of the four who said that they used the new, still draft, standards also stated that ANMC used the draft standards during its most recent oversight inspection of the cemetery.

Conclusion

The Secretary of the Army and the Executive Director of the ANMC have implemented almost all of the requirements of title 10, United States Code, chapter 446, "Army National Military Cemeteries," through the publication of Army General Order 2017-01, appropriately assigning roles and responsibilities for the ANMC. While there are still requirements established in United States Code that have not been met, the publication of the draft updated versions of Army Regulation 290-5 and Department of the Army Pamphlet 290-5 that we reviewed will fulfill the remaining requirements of the United States Code.

Recommendations, Management Comments, and Our Response

Recommendation D

We recommend that the Executive Director, Army National Military Cemeteries, finalize and publish the updated drafts of Army Regulation 290-5, "Army Cemeteries," and Army Pamphlet 290-5, "Administration, Operation, and Maintenance of Army Cemeteries," to fully implement the provisions of the United States Code applicable to operations of the Arlington National Cemetery and the Soldiers' and Airmen's Home National Cemetery.

Executive Director Comments.

The ANMC Executive Director, agreed with Recommendation D. The Executive Director provided clarification on ANMC's requirement to align Army policy with the requirements of title 32 of the Code of Federal Regulations, part 553, specifically with regard to eligibility criteria for all military cemeteries under the jurisdiction of the Army. She stated that the Code of Federal Regulations, the draft Army Regulation 290-5, and the draft Department of the Army Pamphlet 290-5 are in the final stages of coordination and that she expects publication by summer 2019.

Our Response

Comments from the ANMC Executive Director, fully addressed the recommendation; therefore, the recommendation is resolved, but remains open. We will close Recommendation D upon final publication of Army Regulation 290-5, "Army Cemeteries," and Army Pamphlet 290-5, "Administration, Operation, and Maintenance of Army Cemeteries." Management's response also included technical comments to our draft report that we considered and incorporated in this final report.

Finding E

Contracts Supporting Army National Military Cemeteries

We identified no areas of concern regarding contracted services for the ANC and the SAHNC.

Contract execution and support was sufficient because:

- ANC leadership established a Contracting Support Element onsite with two full-time assigned personnel supported by 30 trained Contracting Officer's Representatives (CORs), and
- CORs provided oversight and were involved with the development of performance work statements supporting cemetery related contracted services.

As a result, contracts were supporting military cemeteries operations as required.

Criteria

Federal Acquisition Regulation Part 46, "Quality Assurance." This regulation requires quality assurance surveillance of contracts by government employees (CORs) appointed and certified by contracting officers.

Discussion

The ANC has more than 200 contractors employed at any given time supporting multiple functions in all aspects of both cemeteries. As of January 2018, contractors were employed on 46 contracts supporting operations, logistics, and maintenance for the ANC and SAHNC, ranging from grounds maintenance to elevator repair.

The Mission Installations Contracting Command at Fort Belvoir, Virginia manages 28 of the 46 contracts and the other 18 contracts are managed and split across the following contracting offices:

- Joint Service Provider (four),
- Army Analytics Group (three),
- U.S. Army Corps of Engineers (five),
- Defense Logistics Agency (five), and
- Naval Facilities Engineering Command (one).

Contract Support Element

As of December 2018, an active duty military contracting officer led the ANC Contract Support Element. In addition, the ANC funds two full-time contracting officers at the Mission and Installation Contracting Command (located at Fort Belvoir) and one Quality Control and Assurance Officer (assigned to Fort Belvoir, but working full-time at the ANC). These individuals manage and oversee the contracts supporting operations and maintenance of the cemetery.

The Contracting Support Element staff is further supported by 30 CORs. The CORs are ANC government employees appointed by the Contracting Officers. The CORs receive training at the ANC and Fort Belvoir and conduct oversight and quality assurance of contract execution in accordance with Federal, Army, and ANC policy. The OIG team was briefed on ANC training of CORs. We learned from the officer in charge of the Contract Support Element that CORs receive on-the-job training from quality assurance representatives assigned to the Mission and Installation Contracting Command. He also briefed the team on the development and use of quality assurance checklists by the CORs.

We interviewed the ANC Superintendent, Deputy Superintendent, and Program Integrator who together oversee and manage the Contract Support Element at the ANC. They stated that only two of the 46 contracts were not performing as desired.

- Oversight by ANC personnel identified a lack of professionalism of personnel conducting security screenings at the cemetery entrances. In this instance, the Contracting Officer directed corrective action to the contractor and the contractor resolved the immediate issue prior to our site visit.
- ANC leaders were not satisfied with the quality of the service and visitor experience at the ANC visitor information center. They believed that how visitors obtained information at the information center could be improved and that guides to help visitors navigate the cemetery would be valuable.

ANC leaders said that they were preparing a new contract combining the requirements for security screeners and information desk employees into one contract to help improve oversight of these functions by the project manager.

Contract Execution

To followup on issues discussed with the Contract Support Element, the team observed the security screening and information desk contracted services at the ANC during visits to the cemetery. These contracts provide the services that are the public face of the ANC. We observed security screening provided at the ANC multiple times during our checks of the cemetery. We requested, and were given, directions, maps, and other hand-out materials from information services. Additionally, we interviewed contactors about their respective duties and observed them cleaning markers and excavating a gravesite for a future burial. Through our observations and interviews, we determined that the contractors were knowledgeable when implementing these contracted tasks.

Contract Oversight

The ANC oversees contracted services following the Federal Acquisitions Regulation, part 46 "Quality Assurance." This regulation, and associated program guidance, requires quality assurance surveillance of contracts by government employees (CORs) appointed and certified by contracting officers. The Chief of the Contract Support Element explained his method to ensure that contracts include a quality assurance surveillance plan. CORs use the plan and an associated surveillance schedule and checklist to review contractor performance. CORs input inspection results in the Wide Area Workflow database. Supervisors and the contracting officer review summarized quality reports in the database prior to preparing invoices for payment.

In a sample of 5 out of 46 contracts, the team evaluated the ANC's quality assurance surveillance plans and associated oversight checklists to validate that CORs are following the surveillance plans. Our evaluation of those documents supported that CORs are following and meeting the intent of the ANC contract quality assurance process. For example, we reviewed the quality assurance surveillance plan checklist to verify coverage of the scope of work and performance work statement within the ANC landscaping and gardening services contract. We also checked compliance with the performance summary standards and the method of surveillance.

The team also met with two CORs supporting ANC maintenance and operations to review the level of oversight to those contracts. The CORs stated that they had over 10 years of experience with the grounds and landscape at the cemetery. They described how they review contractor performance using the standards outlined in the performance work statement, and identified no issues with the performance of these contracts. They also explained their ability to provide input into the development of contract performance work statements through working with their colleagues in the Contract Support Element. They added that the Contract Support Element fine-tuned contract language based on updates to requirements and standards, or expansions of the cemetery.

Conclusion

The ANC leadership has established a support element to oversee contracting efforts, monitor contracts and ensure contract oversight. The ANC funds two contract officer positions at the Mission Installations Contracting Command at Fort Belvoir and one quality assurance officer position that is matrixed to the ANC staff to ensure contractor support. Additionally, the cemetery contracting officers and CORs coordinate, and have input to, the development of Performance Work Statements supporting cemetery related contracted services and conduct contract oversight. We determined that contract support and oversight was in place and contributing to mission success.

Finding F

Follow-up on Previous Report Recommendations

Report No. DODIG-2014-026, "Assessment of Arlington and Soldiers' and Airmen's Home National Cemeteries," December 20, 2013, (Revised May 20, 2019), contained 14 recommendations. The Army and ANMC management took appropriate action to close all of them, the last during the conduct of this evaluation.

ANC officials fielded the Burial Request module of the Enterprise Interment Services System, implementing a single data entry process and system for record management at the ANC. This new system removed redundancy and reduced the potential for human error by eliminating the need to enter data into multiple systems.

Discussion

To determine the status of each prior recommendation, we reviewed management comments submitted to the DoD OIG's Audit Follow-up Office. We also verified the status of prior recommendations during interviews and site visits with DoD personnel and military cemetery officials responsible for the ANC and SAHNC.

Closed Recommendations

The following is a description of the overall findings from the 2013 report and the associated actions taken by management to address the identified concerns. These actions addressed all 14 of the recommendations made in the previous report. See Appendix D for further details.

- **Finding 1** Organizational Stabilization (six recommendations). Due to a 3-year phase of frequent change, the ANC structure and processes were insufficiently mature, stable and funded to execute the complete mission set. The Office of Manpower and Budget worked with the Office of Secretary of Defense to increase the ANC Budget Control Act limit. Additionally, in 2016 the ANC received a \$10 million plus-up that ANC officials used to fund routine operations and modernize infrastructure.
- **Finding 2** Interoperability Between Record Management Systems (one recommendation). ANC information systems, specifically the Remedy system and ISS, were not integrated for efficient data management. ANC officials stated that they deployed the Burial Request module of the Enterprise Interment Services System during 2018 (see below). They further stated that the module removed redundancy and reduced the potential for human error by implementing a single data entry system for record management.

- **Finding 3** Responsiveness to Burial Requests (four recommendations). High demand for burials caused the time for ANC staff to follow up on initial requests for burial to exceed ANC standards. ANC officials described changes to the manning document and burial scheduling processes since the 2013 report. The team interviewed ANC officials concerning the system for processing burial requests and reported on the scheduling and wait times for services in this report (see Finding G).
- Finding 4 Single Interagency Standard for Grounds Maintenance (three recommendations). The ANC had no single interagency authority or standard for grounds maintenance, concession authority, or other essential services supporting the cemetery complex. The ANC addressed the challenge of a single standard for grounds maintenance by sharing the turf maintenance specifications from its contract with the National Park Service. Finally, representatives from the National Park Service and the American Battle Monuments Commission are included as non-voting members on the Cemetery Management Board, and the board coordinates with the National Park Service.

Fielding the Enterprise Interment Services System

The ANMC Executive Director reported that the Enterprise Interment Services System had been under development since February 2017, and when fully deployed, would include improved cybersecurity and operational performance. As shown in Figure 2, the project schedule includes six modules, each with its own roadmap to completion. As of December 2018, ANC officials had fielded only the Burial Request module.



Figure 2. Enterprise Interment Services System Project Schedule

Source: ANC.

Conclusion

The Army and ANMC management took appropriate action to close all recommendations from Report No. DODIG-2014-026, "Assessment of Arlington and Soldiers' and Airmen's Home National Cemeteries," December 20, 2013, (Revised May 20, 2019). The DoD OIG verified that the agreed upon corrective actions were implemented and closed the recommendations. In addition, ANC officials continued fielding the Enterprise Interment Services System.

Finding G

Wait Times to Schedule Burials at the ANC

Although the ANC has a system in place for managing requests for burial, families of eligible decedents requesting funeral honors often experience extended wait times. This occurred because:

- in 2018, there were over 21 million living veterans and dependents eligible for burial at the ANC under the current criteria, resulting in requests that exceed the capacity for daily burials;
- a family's completion of required documentation and decisions regarding the type and timing of burial service add time between request and burial;
- the advanced age of large veteran cohorts who served in major conflicts, resulted in 3,471 burial requests in process as of September 2018: 3,259 for cremation service and 212 for casketed service; and
- the size of the cemetery and the availability of ANC and Military Service resources are limited.

As a result, burial at the ANC takes from 5 to 49 weeks from the initial date of request until the service.

Criteria

Arlington National Cemetery, Funeral Scheduling Policy (Military Service Blocks and Priority), April 17, 2017. This policy outlines the priority and timeframe used to schedule funeral services at the ANC. The purpose of this policy is to ensure that military funeral honor service providers understand scheduling timeframes to avoid funeral service conflicts. According to the policy, the ANC intends to schedule services within the current month, plus 6 months (180 days) forward.¹¹

Discussion

The ANC Funeral Scheduling Policy, coordinated with the Military Services, lets ANC schedulers arrange for burial services within a 7-month window. While this allows ANC and Military Service personnel to plan, it also gives families a range of dates from which to choose. Table 2 below illustrates the six types of burial service offered by the ANC and their wait times from the date of request to the conduct of the service, as of September 2018.

¹¹ This equates to a 7-month window for scheduling burial services.

Type of Service	Pre-scheduling	Scheduling and Service Conducted	Total Wait Time
Cremation			
Full Military Funeral Honors	33 weeks	16 weeks	49 weeks
Standard Military Funeral Honors	18 weeks	4 weeks	22 weeks
Dependent Funeral Honors	18 weeks	3 weeks	21 weeks
Casket			
Full Military Funeral Honors	5 weeks	15 weeks	20 weeks
Standard Military Funeral Honors	3 weeks	2 weeks	5 weeks
Dependent Funeral Honors	5 weeks	7 weeks	12 weeks

Table 2. Types of Services at Arlington National Cemetery

Source: Arlington National Cemetery.

Table 2 shows two blocks of time—"pre-scheduling" and "scheduling and service conducted." The initial phone call to the ANC by the family initiates the "pre-scheduling" phase, which includes the time it takes the family to provide all required documentation and eligibility determination by the ANC. Once the ANC determines eligibility the case enters the "scheduling and service conducted" phase. ANC schedulers offer burial dates to the families within the next 180 calendar days. The family then may choose the type of service they prefer from those for which the decedent is eligible.

ANC staff pointed out that about 95 percent of the Veteran population lives within 75 miles of a national or state military cemetery, of which there are almost 250 nationwide. However, in spite of wait times, many veterans and their families still elect for burial at the ANC.

Factors Contributing to Extended Wait Times

Four primary factors contribute to the observed length of time from initial contact until burial service at the ANC:

• Eligibility. According to the Department of Veterans Affairs, there are over 21 million living veterans and dependents eligible for burial at the ANC under the current criteria. A large population of veterans qualify for cremation burials, making it the highest requested type of burial at the ANC. All veterans with at least one day of active service (other than training) and an Honorable Discharge are eligible for above-ground inurnment. In addition, the spouse, widow or widower, minor child, or permanently dependent children of eligible veterans are eligible for above-ground inurnment at the ANC. In contrast, eligibility for in-ground burial is restricted to service members who were killed in action on active duty, awarded qualifying medals, or retired from the Armed Forces.

- **Family Decisions.** Although the determination of eligibility by ANC schedulers can extend the "pre-scheduling" phase, the overall duration depends primarily on the responsiveness of the family. First, ANC officials stated that ANC staff will not schedule a service until the family forwards all necessary documentation. Second, once the deceased is determined eligible, the family then is allowed to choose the type of burial services from those for which their service member or veteran is entitled. For example, if the family elects Full Military Funeral Honors (a more resource intensive ceremony) over Standard Military Funeral Honors, the family will incur a longer wait.¹² The family then selects a preferred date within the scheduling window, but is not required to select the first available date. This choice again often lengthens the time until the burial service.
- Age of Veteran Cohorts. The aging population of veterans from World War II (in their 90s), the Korean Conflict (in their 80s), and actions in Southeast Asia (in their 60s and 70s) generates high demand. The ANC averages 35 new requests each day from all categories of veterans, which outpaces the ANC's 30-service per-day capacity to conduct services. In September 2018, there were 3,471 open cases in the pre-scheduling phase: 3,259 for cremation service and 212 for casketed service. As the ANC can perform 30 services per weekday, of which only 8 can be full honors ceremonies, the demand contributes to a wait time of up to 49 weeks.
- **Resources and Dispersion.** Three additional constraints determine the maximum number of services cemetery personnel can conduct in any given day.
 - Dispersion: To maintain honor and privacy for families, the ANC schedules funerals occurring at the same time in non-contiguous sections of the 624-acre cemetery. The limited number of cemetery sections open for burials further reduces the options for simultaneous services.
 - Non-personnel Resources: ANC staff explained that they have family waiting rooms, chapels, and service equipment to support 30 burials a day.
 - Military Resources: Honor guard teams are not assigned exclusively to the ANC. The military honor guards supporting the ANC also support other military ceremonies and events in the National Capital Region. Additionally, the Army provides the caisson teams that perform Full Military Funeral Honors, regardless of the decedent's

¹² Extended wait times often occur when families request the highest level of funeral honors for which the decedent is eligible, instead of the minimum level of honors required by public law and DoD policy.

branch of service. While demand depends on the eligibility of decedents and the desires of the family, the Army can conduct only eight Full Military Funeral Honors services per weekday, which does not meet the demand.

Conclusion

Burial services at the ANC can result in a 5 to 49 week wait from the initial contact to the conduct of the burial ceremony. The wait time is a function of the speed with which the family provides documentation, the selection of the type of service by the family, physical and staffing constraints at the cemetery, and the sheer number and advancing age of eligible veterans and family members. While the ANC has a functional system in place for scheduling and conducting burials at the cemetery, the ANC cannot control the eligibility criteria for burial at the ANC, which results in a volume of requests that exceed the resources available on a daily basis for the conduct of burials.

Appendix A

Scope and Methodology

We conducted this part of the evaluation from November 2017 to May 2018, in accordance with the Quality Standards for Inspection and Evaluation. We planned and performed the evaluation to obtain sufficient and appropriate evidence to provide a reasonable basis for our findings and conclusions, based on our objectives. We conducted fieldwork at the ANC and SAHNC from November 2017 to February 2018.

Scope

The overall objective of this multi-report evaluation was to review the operations and management processes and procedures at the ANC and the SAHNC and military cemeteries under the control of the Military Departments – specifically to:

- review the status and implementation of appropriate DoD, Army, Navy, and Air Force cemetery regulations;
- evaluate gravesite accountability, including the reliability of information technology systems used to schedule, plan, account for, and accurately document the remains interred or inurned at the cemeteries;
- review execution of contracts supporting military cemeteries;
- review implementation of title 10, United States Code, chapter 466, "Army National Military Cemeteries," and Headquarters, Department of the Army, General Order 2017-01, "Assignment of Functions and Responsibilities Within Headquarters, Department of the Army," with a focus on the responsibilities assigned to the Executive Director of the Army National Cemeteries Program;
- examine the causes of the wide range of wait times for pending interments and inurnments at the ANC; and
- followup on recommendations from Report No. DoDIG-2014-026, "Assessment of Arlington and Soldiers' and Airmen's Home National Cemeteries."

The ANMC are distinct from the remaining 36 military cemeteries. In addition, the ANC is the largest military cemetery (burials there exceed all other military cemeteries combined) and the most often visited (about 4 million visitors each year).

Methodology

To achieve the objective for this report, the team:

- reviewed Federal laws, regulations, and guidance related to military cemeteries, specifically title 10, United States Code, chapter 446, "Army National Military Cemeteries";
- conducted interviews with representatives from the Office of Secretary of the Army, Army National Military Cemeteries, Army General Counsel, and the staff of the ANC, and obtained supporting documentation for further analysis;
- evaluated gravesite data obtained from the ANC and SAHNC; and
- evaluated information technology systems in use by the ANC for reliability pertaining to gravesite accountability.

Evaluation of the ANC Gravesite Data

In late 2017, we requested that ANC officials provide a list of all persons buried at the ANC from the first burial in 1864, through November 1, 2017. Our request included four data elements: location, name, type of burial, and date of interment. We further requested that the ANC report the data in two sets:

- from the earliest burial to a burial date of March 1, 2013, (Report One), and
- burials that occurred from March 2, 2013 to November 1, 2017, and unused gravesites (Report Two).

We divided the data set into these two time periods to allow for an evaluation of the effectiveness of changes made by the ANC in accountability processes and procedures since the publication of report No. DODIG-2014-026. This led the ANC to generate two reports: Report One, containing 314,466 names, and Report Two, containing 32,423 more names plus 67,365 available spaces, for a total of 99,788.

We then generated statistically valid, random samples by gravesite location from both reports to assess accountability. We assumed a confidence interval of 99 percent, an error rate of 2 percent, and precision of 2.5 percent, yielding a sample size of 208 locations for Report One. While locations (gravesites) are unique, many locations contained multiple burials, spouses, children, or other eligible family members. Therefore, our sample for Report One increased by 72 to 280 records. The same parameters yielded a sample size of 208 locations for Report Two, resulting in 66 names and 145 available spaces for a total of 211 records. We checked all 491 records. (See Appendix B for a further description of the statistical analysis.) For each of the names in our sample, we:

- first, compared the sample data elements in Reports One and Two to the data contained on the ANC's public website;
- second, visited the ANC and checked each gravesite to verify that the data on headstones matched the data in Reports One and Two and on the public website; and
- third, adjudicated identified discrepancies among the elements in Reports One and Two, the public website, and the gravesites with ANC Quality Assurance officials, based on their established business rules.

Our reliability test of Reports One and Two identified that they did not represent the entire universe of burials at the ANC (see Use of Computer-Processed Data, below). We determined that Reports One and Two had not captured those burials that had no date of interment. The ANC generated a third data set (Report Three) that resulted in an additional 31,789 burials that had no associated date of interment. We again generated a statistically valid, random sample by individual buried, applying the same statistical parameters as above, to assess accountability. This sample contained 207 more burials.

For the Report Three set, we compared the sample data elements in the report to the data contained in the ANC's public website. We reviewed identified inconsistencies by accessing source documentation in the ANC Interment Services System. We then adjudicated the remaining discrepancies with ANC Quality Assurance officials, based on their established business rules.

Evaluation of the SAHNC Gravesite Data

In November 2017, we requested that ANC officials provide a list of all persons buried at the SAHNC from the first burial in 1864 through November 1, 2017—a total of 13,643 decedents. Our request included four data elements: location, name, type of burial, and date of interment.

We then generated statistically valid, random sample by gravesite location. We assumed a confidence interval of 95 percent, an expected error rate of 25 percent, and a precision of 5 percent, yielding a sample size of 283 gravesite locations. While locations (gravesites) are unique, many locations contained multiple burials, including those of spouses, children, or other eligible family members. Therefore, the total number of individual decedents in the sample was increased by 7 to 290. The team used the 290 sample of decedent information to perform the gravesite accountability evaluation. For each of the names in our sample, we:

- first, visited the SAHNC and checked each gravesite to verify that the data on headstones matched the data in the sample;
- second, we checked identified errors and discrepancies against the Army Cemeteries Research Tool database using the embedded data fields and scanned burial records resident within the system; and
- third, validated errors and discrepancies found with ANC Quality Assurance officials and ensured that immediate corrective actions were taken.

Use of Computer-Processed Data

To determine gravesite accountability, this report evaluated the Interment Services System database used by the ANC, and the ANMC Research Tool used at the SAHNC, to record burials. The reports generated by the cemetery staff materially support our findings and conclusions. We therefore tested the reliability of the databases. We applied the methodology outlined in General Accountability Office Report No. GAO-09-680G, "Assessing the Reliability of Computer-Processed Data," to determine whether the data provided by the ANC were reliable enough for our purposes.

Database Reliability Test for ANC

Reports One and Two from the ANC represented summarized data. We tested the reports for accuracy and completeness. Concurrent with our physical observation of our sample of gravesites, we randomly selected 201 additional burials from over 70 interment sections and 9 inurnment courts and the niche wall at the ANC to trace back to the database. We did so by selecting a burial not in our accountability samples and recording the location and full name of the decedent as available from the headstone or plaque.

We then verified that the data elements matched those on the ANC public website and in Reports One and Two. Initial data collection yielded inconsistencies. The ANC gave the DoD OIG Team access to the full database of digital records. We used this supporting documentation to resolve any identified name or date mismatches for each burial record. Finally, we met with ANC database managers to determine the current status of the remaining mismatches and discussed how the managers applied their business rules for adjudicating discrepancies among documents and burial markers. Two inconsistencies remained after adjudication with ANC officials. In the first case the decedent's last name was misspelled in the database. The ANC database manager verified the correct spelling from source documents and corrected the database on the spot. The second identified inconsistency was a burial with information on the ANC public website but not in Report One.

The verification of the location and name in the database showed that the individual was missing from Report One because there was no interment date associated with the record. From this, we discovered that Reports One and Two did not represent the entire universe of burials at the ANC. A further request to the ANC identified 31,789 additional burials without dates of interment. This became Report Three. With the addition of the burials contained in Report Three, we concluded that the database was complete and sufficiently reliable for us to achieve our objective.

Database Reliability Test for SAHNC

We tested the full cemetery record population for accuracy and completeness. Concurrent with our physical observation of sample gravesites, we randomly selected 62 gravesite locations, including 20 available spaces (of the 1,282 total), selecting from all sections within the SAHNC. We did so by selecting a gravesite or available site not in our accountability samples and recording the location and full name of the decedent as available from the headstone or plaque. For available spaces, we recorded the location of the site.

The test resulted in two potential mismatches among the available spaces. During adjudication using the ANC Research Tool system, two locations were confirmed as mismatches and were treated as accountability errors for the purpose of our analysis. However, we determined that the data provided by the ANC on the SAHNC were complete because all the identified mismatches existed within the record population.

Use of Technical Assistance

We consulted with the DoD OIG Quantitative Methods Division to formulate the statistical sampling methodology. The team explained our methodology, gave definitions for inconsistencies, and discussed potential limitations on projecting results to the universe of burials. The Quantitative Methods Division developed random samples and technical projections for the team's field results. The Quantitative Methods Division generated the random samples for Reports One through Three. See Appendix B for more details. Our review of a statistically valid, random sample of gravesites allowed for mathematical projection to the population of burials from which the sample was drawn. For example, applying chosen mathematical parameters, the one discrepancy in the Report One sample translates to a mathematical upper limit of 7,604 potential discrepancies in the database of 314,466 burials.¹³ However, statistical projections or confidence intervals are not very reliable or valid when the error rate is very low. Therefore, while calculated, we did not report the above projection in the body of this report.

We did not use mathematical projection to the universe of burials for the SAHNC. We based our decision on the DoD OIG Quantitative Methods Division's previous determination that probabilities are not stable when the error rates are very small.

Prior Coverage

There are seven recent reports related to gravesite accountability at the ANC: two by the DoD OIG, two by the Army Audit Agency, and three by the Army Inspector General.

DoD OIG

Report No. DODIG-2013-098, "Assessment of U.S. Military Cemeteries," June 28, 2013 (Revised May 20, 2019)

The DoD OIG determined that all interments were accounted for within the statistical sample of grave sites and that, generally, the Military Services were managing their cemeteries in an adequate manner. However, the DoD OIG found that regulation, guidance and cemetery management were inadequate. In addition, the DoD OIG determined that funding for cemetery operations remained an issue across all Military Services.

Report No. DODIG-2014-026, "Assessment of Arlington and Soldiers' and Airmen's Home National Cemeteries," December 20, 2013 (Revised May 20, 2019)

The OIG determined that Arlington National Cemetery leadership satisfactorily complied with Army Directive 2010-04. However, the OIG also found that the ANC structure and processes were insufficiently mature, stable, and funded to execute the complete ANMC mission set, the enterprise information systems used by the ANC were not integrated for efficient data management, the time for ANC staff to follow up on initial requests for burial exceeded ANC standards, and there was no single interagency authority or standard for grounds maintenance, concession authority, and other essential services that support the ANC complex.

¹³ Selected parameters for statistical analysis were a 99 percent confidence interval, 2 percent error rate, and 2.5 percent precision. See Appendix B for further discussion.

Army

Army Audit Agency Report A-2016-0100-IET, "Chain of Custody Controls Arlington National Cemetery," June 8, 2016

"The chain of custody process at ANC included controls, verification checks, and the appropriate level of procedural redundancy to ensure the correct markings and identification of gravesites. For the vast majority of burials, cemetery personnel followed proper chain of custody procedures; however, when personnel didn't follow procedures, they made errors."

Army Audit Agency Report A-2015-0098-IET, "Arlington National Cemetery – Gravesite Accountability," September 10, 2015

"This audit showed that there is sufficient assurance that Arlington National Cemetery had the controls, processes, and oversight in place to ensure accountability of burials."

Department of the Army Inspector General, "Inspection of the Army National Cemeteries Program," September 10, 2012

The inspection team concluded that the "ANCP Executive Director and Arlington National Cemetery (ANC) Superintendent have continued to correct deficiencies and observations identified in 2010 and 2011. ANC and the Soldiers' and Airmen's Home National Cemetery are now the standard for all federal cemeteries."

Department of the Army Inspector General, "Inspection of the Army National Cemeteries Program and Arlington National Cemetery," September 16, 2011

The inspection team concluded that, "significant progress has been made in all aspects of the Cemetery's performance, accountability and modernization. ANC and other Army agencies have executed their assigned tasks and setting conditions for future success."

U. S. Army Inspector General Agency, "Special Inspection of Arlington National Cemetery Final Report," June 9, 2010

The inspection team stated that its findings and recommendations were based on interviews with over a 100 military members, civilian government employees, and other individuals involved with cemetery operations. The team made 76 findings and 101 recommendations and "determined that, while staff is dedicated to accomplish the cemetery's three primary tasks of funerals, ceremonies, and tourism support, there are issues that the Army must address to improve the effectiveness of operations at ANC."

Appendix B

Summary of Quantitative Analysis–ANC

May 09, 2018 Memorandum of Results To: George Marquardt, Program Director From: Henry David Barton, Operations Research Analyst, QMD/AUD Kandasamy Selvavel, Mathematical Statistician, QMD/AUD Through: James Hartman, Director, QMD/AUD Subject: Evaluation of Operations and Management of the Military Cemeteries (Project No. D2018-D00SPO-0019.000) This memorandum documents the quantitative support that we provided for your evaluation. In it, we provide details of the quantitative plan we developed in support of your objective. Memorandum of Results Part I **QUANTITATIVE PLAN** Objective: The evaluation objective addresses gravesite accountability at the Arlington National Cemetery (ANC), including the reliability of information technology systems used to schedule burials and accurately document and account for buried remains. This memorandum covers evaluation of the population of gravesite locations at ANC. Population: The ANC management provided the project team a file containing three worksheets drawn from the ANC Interment Scheduling System. The first is an inventory of 314,466 records with interment or inurnment dates from January 01, 1864 through March 1, 2013 (Population One). The second comprises 32,424 records with interment or inurnment dates from March 2, 2013 through October 31, 2017. The third comprises 67,365 interment or inurnment locations unoccupied but available based the ANC-Mapper system as of November 2017. For purposes of the evaluation, we combined the second and third worksheets into a single group of 99,789 records (Population Two). The populations consist of individual service members and may include family members or other eligible individuals. Multiple individuals may be interred or inurned in a given location. We therefore derived our samples using locations because that provided a consistent chance of selection and avoids problems when there are multiple records for unique locations. The number of locations for Population One was 241,612, and for Population Two was 96,698. The evaluation team then reviewed all records associated with the sample locations. 1

Summary of Quantitative Analysis–ANC (cont'd)

Samples: Based on a planning error rate of two percent, precision of the estimate of 2.5 percent, and a confidence level of 99 percent, we drew simple random samples of 208 locations for each population.

Parameters: We used a 99% confidence level for calculating the statistical results of the samples.

Measures: For calculation purposes, any record with at least one discrepancy was scored "1", indicating a discrepancy; all other records were otherwise scored "0". None of the locations with multiple records contained multiple discrepancies. Had that occurred, we would have scored that location as "1" for calculation purposes.

Sample Plan: The Population One (1864-2013) and Population Two (2013-2017) samples each had 208 locations. Population One sample included 280 records and Population Two sample included 211 records.

Statistical Analysis and Interpretation – Population One: The evaluation team identified one location in the Population One sample which had one record with a discrepancy. Because of the rarity of discrepancies (1 across 208 locations involving 280 records) we elected to calculate an upper bound estimate at the 99 percent confidence level. Based on the evaluation results for the items sampled and reviewed from the population provided to QMD analysts by the evaluation team, we calculated the following statistical projection for Population One.

Table I

Estimated Maximum Number of Discrepancies Population One (1864-2013)

99 Percent Confidence Level Upper Bound

7,604

3.1%

Maximum Estimated Number of locations with Discrepancies Maximum Estimate as Percent of Population Records

We interpret the above projections as follows. We are 99 percent confident that the number of locations with discrepancies is no more than 7,604. This represents 3.1 percent of the 241,612 locations in the 1864-2013 population.

Statistical Analysis and Interpretation – Population Two: The evaluation team identified no locations with discrepancies in the sample for Population Two. In addition, over two thirds of the population (the 67,365 available locations) included no decedent data and could not possibly have a discrepancy. We therefore did not calculate a statistical projection for Population Two.

Summary of Quantitative Analysis–ANC (cont'd)

Memorandum of Results Part II

QUANTITATIVE PLAN

Objective: The evaluation objective addresses gravesite accountability at the Arlington National Cemetery (ANC), including the reliability of information technology systems used to schedule burials and accurately document and account for buried remains. This memorandum covers evaluation of the population of gravesite locations at ANC. Same as for Part I above.

Population: While verifying database reliability for ANC records in Population One the evaluation team discovered that some records had no date of interment. In order to evaluate these records the team requested, and ANC provided, an additional worksheet drawn from the ANC Interment Scheduling System containing all records from January 1, 1864 to October 31, 2017 which had no recorded date of interment. This file contained 31,798 records with no date of interment (Population Three). These records are unique from those contained in Populations One and Two.

Sample: We drew a simple random sample of 207 records from this population based on a planning error rate of two percent, precision of the estimate of 2.5 percent, and a confidence level of 99 percent.

Parameters: We used a 99% confidence level for calculating the statistical results of the samples.

Measures: For calculation purposes, any record with at least one discrepancy was scored "1", indicating a discrepancy; all other records were otherwise scored "0".

Sample Plan: The Population Three sample included 207 records.

Statistical Analysis and Interpretation: The evaluation team identified three records in the Population Three sample which had one record with a discrepancy. Because of the rarity of discrepancies (3 across 207 records) we elected to calculate an upper bound estimate at the 99 percent confidence level. Based on the evaluation results for the items sampled and reviewed from the population provided to QMD analysts by the evaluation team, we calculated the following statistical projection for Population Three.

Summary of Quantitative Analysis–ANC (cont'd) Table 2 **Estimated Maximum Number of Discrepancies** Population Three (Records with No Date of Interment) 99 Percent Confidence Level Upper Bound Maximum Estimated Number of Records with Discrepancies 1,152 Maximum Estimate as Percent of Population Records 3.6% We interpret the above projections as follows. We are 99 percent confident that the number of records with discrepancies among the 31,798 with no date of interment is no more than 1,152. This represents 3.6 percent of Population Three. The evaluation team also identified two records in the sample that were duplicates of records in Population One. Again, because of the rarity of duplication (2 across 207 locations) we elected to calculate an upper bound estimate at the 99 percent confidence level. Based on the evaluation results for the items sampled and reviewed from the population provided to QMD analysts by the evaluation team, we calculated the following statistical projection of duplicates in the database. Table 3 **Estimated Maximum Number of Duplications** Population Three (Records with No Date of Interment) 99% Confidence Level Upper Bound 887 Maximum Estimated Number of Records with Duplicates 2.8% Maximum Estimate as Percent of Population Records We interpret the above projections as follows. We are 99 percent confident that the number of records with duplicates among the 31,798 with no date of interment is no more than 887. This represents 2.8 percent of Population Three. Documentation, Presentation, and Defense of Results: This memorandum with its attachments constitutes QMD's documentation of our quantitative support for your working papers. As needed, we will respond to questions or challenges concerning the quantitative plan, analysis or results. 4

Appendix C

Summary of Quantitative Analysis–SAHNC

 From: Henry David Barton, Operations Research Analyst, QMD/AUD 111113 Kandasamy Selvavel, Supervisory Mathematical Statistician, QMD/AUD Chrough: James Hartman, Director, QMD/AUD Subject: Evaluation of Operations and Management of the Military Cemeteries (Project No. D2018-D00SPO-0019.000) Chis memorandum documents the quantitative support that we provided for your evaluation of the Soldier's and Airmen's Home National Cemetery. In it, we provide letails of the quantitative plan we developed in support of your objective. QUANTITATIVE PLAN Objective: The evaluation objective of the project is to address gravesite accountability of the Soldier's and Airmen's Home National Cemetery (SAHNC). Population: The SAHNC contains 13,398 burial locations associated with 13,624 ndividuals' remains. Parameters: The team provided the following parameters to calculate the number of ocations to sample: 95 percent confidence level, a planning error rate of 25%, with a olanning precision of five percent. This resulted in a sample size of 283 locations ussociated with 290 named individuals. Measures: The primary measures of the individuals at the sample locations are taccountability errors or discrepancies (as explained in the project methodology) for ndividuals whose remains were at the sampled locations. Sample Plan: We used a simple random sampling design for this project. After calculating the appropriate sample size using the parameters provided, we used the SAS miform random distribution function to select the random sample locations without eplacement. Sample Results: We identified errors with the grave site information at three locations hree errors in all. As no statistical estimate will be used in the report, none is provided. Ocumentation, Presentation, and Defense of Results: This memorandum with its trachements constitutes QMD's documentation of our quantitative sup	Memorandum of Results To: George Marquardt, Program Director From: Henry David Barton, Operations Research Analyst, QMD/AUD [11]PH Kandasamy Selvavel, Supervisory Mathematical Statistician, QMD/AUD Fhrough: James Hartman, Director, QMD/AUD Subject: Evaluation of Operations and Management of the Military Cemeteries (Project No. D2018-D00SPO-0019.000) This memorandum documents the quantitative support that we provided for your evaluation of the Soldier's and Airmen's Home National Cemetery. In it, we provide details of the quantitative plan we developed in support of your objective. QUANTITATIVE PLAN Objective: The evaluation objective of the project is to address gravesite accountability of the Soldier's and Airmen's Home National Cemetery (SAHNC). Population: The SAHNC contains 13,398 burial locations associated with 13,624 individuals' remains. Parameters: The team provided the following parameters to calculate the number of locations to sample: 95 percent confidence level, a planning error rate of 25%, with a plasning precision of five percent. This resulted in a sample size of 283 locations associated with 290 named individuals. Mesures: The primary measures of the individuals at the sample locations are factuality errors or discrepancies (as explained in the project methodology) for individuals whose remains were at the sampled locations. Sample Plan: We used a simple random sampling design for this project. After factualiting the appropriate sample size using the parameters provided, we used the SAS minform random distribution function to select the		
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Appendix D

Closed Recommendations From Report No. DODIG-2014-026, "Assessment of Arlington and Soldiers' and Airmen's Home National Cemeteries," December 20, 2013 (Revised May 20, 2019)

Since the publication of this report in 2013, management has taken actions allowing us to close all 14 recommendations regarding cemetery operations. Those 14 closed actions include:

Finding 1: Organizational Stabilization

Closed Recommendation 1: The Secretary of the Army should explore options to fund and allow budget growth to sustain modernization of the Arlington National Cemetery enterprise.

Action: The Office of the Secretary of Defense worked with the Office of Management and Budget to increase the ANC Budget Control Act limit from \$60.8 to \$70.8 million between the Budget Estimate and the President's Budget Submissions for FY 2016. This provides ANC the ability to submit a budget request up to \$70.8 million, beginning with FY 2016, and provides the funding and predictability required to conduct routine cemetery operations and revitalize existing infrastructure.

Closed Recommendation 2: The Executive Director, Army National Military Cemeteries should shift organizational focus from Arlington National Cemetery to the Arlington National Military Cemeteries enterprise.

Action: In 2014, the Office of the Administrative Assistant provided funding and authorization for five civilian personnel positions on the Army National Military Cemeteries Table of Distribution and Allowances to fulfill the requirements established by the Army G3. As of May 2015, all five positions have been filled and the five staff members are executing their assigned duties.

Closed Recommendation 3: The Executive Director, Army National Military Cemeteries should stabilize the Arlington National Cemetery enterprise until the effectiveness of the current organization can be assessed.

Action: The ANC hired a new Superintendent and aligned the staff under two new Deputy Superintendents (Administration and Operations). The ANC has also steadily increased its manning to more closely achieve its personnel authorization levels while also responding to normal turnover and attritions. Additionally, in

January 2015, the U.S. Army Manpower Analysis Agency conducted a follow-on manpower analysis for both the ANC and ANMC staffs which was completed on February 8, 2016.

Closed Recommendation 4: The Executive Director, Army National Military Cemeteries should assess the effectiveness of current processes and manpower levels.

Action: The Executive Director indicated that the ANC fully implemented the recommendations from the U.S. Army Manpower Analysis Agency report. The restructuring specifically included additional manpower and hiring for the cemetery administration function, the scheduling and interment services function, and new organization design under the deputy superintendent.

Closed Recommendation 5: The Executive Director, Army National Military Cemeteries should identify risks and mitigations to sustaining the Arlington National Cemetery enterprise.

Action: Sustaining the ANC at current levels of operations and standards incurs risk of mission degradation due to resource constraints. Potential overtaxing of the staff could result in higher attrition rates thus affecting the ANC's ability to maintain its high standards.

Closed Recommendation 6: The Executive Director, Army National Military Cemeteries should pursue full authorization and filling of required positions as per U.S. Army Manpower Analysis Agency manpower study documented on the Table of Distribution and Allowances.

Action: The Executive Director indicated that the ANC fully implemented the recommendations from the U.S. Army Manpower Analysis Agency report. The restructuring specifically included additional manpower and hiring for the cemetery administration function, the scheduling and interment services function, and new organization design under the deputy superintendent. As of March 2017, ANC had 190 of 216 authorized military and civilian personnel on hand.

Finding 2: Interoperability Between Record Management Systems

Closed Recommendation 7: The Executive Director, Army National Military Cemeteries should develop and implement a single data entry process and system for record management at the ANC that captures all burial requirements needed from initial record creation intake through burial scheduling to final interment. **Action:** ANC officials stated that they deployed the Burial Request module of the Enterprise Interment Services System during 2018. They further stated that the module implemented a single data entry system for record management which eliminated the need for data entry into multiple systems, removed redundancy, and reduced the potential for human error.

Finding 3: Responsiveness to Burial Requests

Closed Recommendation 8: The Executive Director, Army National Military Cemeteries should optimize the use of overtime and borrowed military manpower to support existing schedulers in reducing the backlog of scheduled burials.

Action: ANC leadership initiated a three-phased effort to reduce the backlog of scheduled burials. First, a special team of six established initial contact within a 14 day period. Second, overtime hours were authorized to reduce the number of "ready to schedule" in backlog from 1911 in July to 656 as of October 1, 2013. Third, additional personnel were hired to meet the scheduling challenge. The Executive Director also indicated that the ANC continues to refine its systems and processes for interment scheduling. The ANC submitted a mandated report to Congress on the cemetery's capacity for interments and inurnments. This report is intended for the Army to consider changes to eligibility in order to prolong the life of the cemetery as an active burial ground. These eligibility decisions will require Secretary of Defense and Executive Congressional input. The ANC expects demand to continue to far exceed the capacities of the Military Services to provide honors and escorts and scheduling wait times will remain significant. This resolve at that time.

Closed Recommendation 9: The Executive Director, Army National Military Cemeteries should assess the effectiveness of current process and manpower levels for schedulers and representatives and adjust as necessary.

Action: The Executive Director indicated that the ANC continues to refine its systems and processes for interment scheduling. The ANC submitted a mandated report to Congress on the cemetery's capacity for interments and inurnments. This report is intended for the Army to consider changes to eligibility in order to prolong the life of the cemetery as an active burial ground. These eligibility decisions will require Secretary of Defense and Congressional input. The ANC expects demand to continue to far exceed the capacities of the Military Services to provide honors and escorts and scheduling wait times will remain significant. This recommendation was closed because the issues were being beyond the ANC's capacity to resolve at that time.

Closed Recommendation 10: The Executive Director, Army National Military Cemeteries should identify shortfalls in military funeral support and coordinate with the Military Services to mitigate.

Action: The ANC continues to host monthly coordination meetings with the Military Services and key stakeholders to better synchronize funeral and special event coordination efforts. The intent of these meetings is to provide an open dialogue to resolve issues and to pass relevant and current information. Invited attendees include the Honor Guard, Band, and Chaplains from each of the respective Services (Army, Navy, Air Force, Marine Corps, and Coast Guard). ANC attendees include key leaders from the Events and Ceremonies Branch, Interment Services Branch, and the Chief Information Officer/G6. These meetings are informal and there are no published minutes.

Closed Recommendation 11: The Executive Director, Army National Military Cemeteries should assess alternative scheduling options that would allow expanding the number of burial services that can be accommodated, to include increasing: hours per day available for services, numbers of days per week available for full military honors funerals, and numbers of funeral services conducted per hour.

Action: ANC leaders continually assess opportunities to more efficiently and effectively conduct funeral services for veterans and loved ones. All possible opportunities to increase interment services in a dignified and respectful manner are being pursued, while ensuring that the quality of each and every service is maintained. The ANC is the only national cemetery which inters on Saturday, thereby creating additional opportunities to schedule services. Expansion projects will provide the physical disbursement of locations for simultaneous above ground inurnments and in-ground interments to keep pace with current requests for burial at the ANC.

Finding 4: Single Interagency Standard

Closed Recommendation 12: The Secretary of the Army, in coordination with the Office of the Under Secretary of Defense for Personnel and Readiness, should continue to express support for the final proposed Fiscal Year 2014 National Defense Authorization Act that includes the developed legislative request granting concession authority to the Arlington National Cemetery.

Action: Army officials stated that they would continue support for the proposed FY 2014 National Defense Authorization Act.

Closed Recommendation 13: The Secretary of the Army should coordinate with the National Park Service to develop mutually agreed upon standards for appearance of the Arlington National Cemetery complex.

Action: In FYs 2014 and 2015, formal meetings and discussions occurred between the ANC and the National Park Service concerning standards of appearance along Memorial Drive leading into the cemetery. These discussions led to an increase level of cutting the turf and trimming the hedges. Rather than pursue a formal memorandum of agreement with the National Park Service, ANC officials coordinated to directly share ANC turf maintenance contract specifications. The National Park Service, through an informal agreement, began to maintain its turf and horticulture to similar standards. This approach has been effective to date, and the ANC considers this matter resolved.

Closed Recommendation 14: The Secretary of the Army, in coordination with the Office of the Secretary of Defense, should coordinate with the Office of Management and Budget to implement interagency best practices for contracted services supporting Arlington National Cemetery to ensure efficient and effective operations.

Action: Specifically in respect to contracted services, the ANC conducted a collaborative site visit with contracting officials from American Battle Monuments Commission on January 14, 2015, and consistently researches and implements best practices in the development of Performance Work Statements from the Department of Veterans Affairs for similar service requirements. The Executive Director, Army National Military Cemeteries conducted training for Cemetery Responsible Officials and incorporated contracting into the training schedule. Finally, the House Appropriations Survey and Investigation Team conducted a sight visit of the Arlington, Veterans Affairs, and American Battle Monuments Commission cemeteries during the first quarter of FY 2015. The informal briefing with the ANC Superintendent recognized ANC for having set the metric for best practices in cemetery management, including contracted services.

Management Comments

Executive Director, Army National Military Cemeteries

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	oonse to Draft DOD IG Repor nen's Home National Cemet	t (D2018-D00SPO-0019.000) on Arlington eries
Management of A		19, Subject: Operations and irmen's Home National Military 9.000)
your current asse National Cemete from the 2013 Do	essment of the two Army Nati ry staff are pleased your repo DIG inspection have been co	ments on the draft report which highlights onal Military Cemeteries. The Arlington ort above notes that all recommendations ompleted. The staff strives to sustain the nultaneously meeting new challenges.
	s that follow specifically addr ency's formal reply per your i	ess the report recommendations and request.
implement a qua	that the Executive Director ality control process during	r, Army National Military Cemeteries, g the transition to the Enterprise e accuracy of the records within the
ANC Response:	Concur with comment.	
Module, will be fin Services System will be segmented	elded in the programed secon (EISS). Discrepancies in his	ess, identified as the Quality Assurance nd release of the Enterprise Interment toric records which are not fully resolved olution in the Quality Assurance Module, FY2020.
	PL 111-339; over the next se	ed to meet the 100% baseline veral years as records of burial were a certified status into the ANC burial

Executive Director, Army National Military Cemeteries (cont'd)

SAAC-ZA

SUBJECT: Response to Draft DOD IG Report (D2018-D00SPO-0019.000) on Arlington and Soldier's Airmen's Home National Cemeteries

reduce errors and contained a capability for the web-interface to allow public access to the interment data on the public facing application, ANC Explorer.

ANC RT and the ANMC RT are two distinct systems that were developed with differing overall goals and some differences in functionality. The ANC RT was developed for the sole purpose of accomplishing historical gravesite accountability IAW PL 111-339 and has been modified to also provide functionality for sustainment of headstone photo and final record review and for current/on-going interments. The ANC RT was never intended to be used as the System of Record or to replace ISS. The headstone review functionality will be sustained in the EISS as part of the robust Quality Assurance Module.

Recommendation B: We recommend that the Executive Director, Army National Military Cemeteries:

1. Ensure timely, proper commemoration (designation of burial site with a temporary or permanent marker) of all decedent burials in accordance with policy.

ANC Response: Concur with comment.

ANC, the agency responsible for operating the SAHNC, enforces a strict Chain of Custody procedure which directs the placement of temporary markers at the time of the interment grave closing. Additionally, written procedures require placement of a temporary marker whenever a grave marker is damaged or requires removal from the grave location to prevent loss of accountability. Operating procedures outline the quality assurance process used when the permanently inscribed marker arrives and is placed. At no time are known graves left unmarked.

The two identified locations where the graves were not marked as identified by the DoDIG team were from the earliest burials at the cemetery, 1863. These unmarked locations occurred during the time period when the records and data for SAHNC were still undergoing the 100% graveside accountability review. The SAHNC accountability process was completed, with 13,685 cases verified, in Aug 2018 with 875 corrective actions identified for resolution or action. Actions remaining for correction include uncommemorated decedents on private markers as well as markers where the identity of the deceased is obstructed by tree growth or unreadable.

Recommendation B:

We recommend that the Executive Director, Army National Military Cemeteries:

2. Direct a census review of SAHNC burial sites during transition from the Cemetery Research Tool to the Enterprise Interment Services System ensure that the information transferred is both accurate and complete.

Executive Director, Army National Military Cemeteries (cont'd)

SAAC-ZA

SUBJECT: Response to Draft DOD IG Report (D2018-D00SPO-0019.000) on Arlington and Soldier's Airmen's Home National Cemeteries

ANC Response: Concur with comment.

The accountability baseline for SAHNC was completed in Aug 2018 and migration to EISS will occur in the summer of 2019. As of 27 February 2019, 875 corrective actions had been identified which include un-commemorated decedents on private markers as well as markers obstructed by trees or unreadable.

ANC personnel promulgated the 100% accountability of cemetery records by enhancing the ANC Research Tool and launched the ANMC Research Tool in 2013 as the SAHNC and all Army cemetery records were scanned and subsequently loaded into a common database for validation. ANC personnel completed the validation of the SAHNC records in the ANMC RT in Aug 2018. In order to continue operations and ensure continuity of efforts, ANC personnel will utilize the improved Interment Services System with certification capabilities until the SAHNC historic burial data is migrated to the EISS system of record which is planned for Sep 2019.

A deliberate data anomalies adjudication process, the Quality Assurance Module, will be fielded in the programed second release of the Enterprise Interment Services System (EISS). Discrepancies in historic records which are not fully resolved will be segmented in a status intended for resolution in the Quality Assurance Module, pending final development and release during FY2020.

The ordering of replacement markers to address current illegible markers at SAHNC has commenced and been in progress since Nov 2018. However, ordering of the ~800 historic markers rendered potentially illegible over time must be balanced in order to not overwhelm the National Cemeteries Administration ordering system for these special markers and consider preserving the historical significance whenever legally possible.

Recommendation D:

We recommend the Executive Director finalize and publish the updated drafts of Army Regulation 290-5, "Army Cemeteries," and Army Pamphlet 290-5, "Administration, Operation, and Maintenance of Army Cemeteries," to formalize the implementation of United States Code, title 10, chapter 446.

ANC Response: Concur with comment.

The report should note the Secretary of the Army memorandum dated 17 April 2012, in which he established and appointed the Executive Director, ANMC as the "functional proponent for policies and procedures pertaining to the administration, operation and maintenance of all military cemeteries." In this same memorandum, he directed the ED to "develop and update... consolidate and promulgate all pertinent policies in a single, comprehensive regulation under the proponency of the Executive Director."

Executive Director, Army National Military Cemeteries (cont'd)

SAAC-ZA

SUBJECT: Response to Draft DOD IG Report (D2018-D00SPO-0019.000) on Arlington and Soldier's Airmen's Home National Cemeteries

The task to promulgate and consolidate cemetery policy under one regulation requires the merging of AR 290-5, AR 210-190 (Army Post Cemeteries), and Annex C to AR 210-26 (The United States Military Academy). The merging and update of all three policies into one regulation has been an iterative one. Eligibility criteria for the Army National Military Cemeteries have long been codified in both the Code of Federal Regulations and in AR 290-5. However, Army Post Cemetery eligibility criteria have only been codified in AR 210-190 and in AR 210-26. Between 2012 and 2016, the Army updated and promulgated the Code of Federal Regulations for the Army National Military Cemeteries. During this same period, the Army determined for consistency, that all Army cemetery eligibility criteria should be defined in the Code of Federal Regulations rather than in the consolidated Army Regulation. Consequently, in 2016, ANMC intiated a second effort to update 32 CFR 553 to also add Post Cemetery eligibility criteria. Simultaneously, the draft Army Regulation and Pamphlet were finalized and staffed for coordination through the publication process. Today, the draft regulation, pamphlet and CFR are both close to publication. The final draft of 32 CFR 553 has undergone review for public comment and all public comments have been addressed and incorporated. The CFR with current ANMC and Post cemetery eligibility criteria should be published in summer, 2019. Likewise, the draft AR 290-5 and draft DA PAM 290-5 are also in the final stages of publication.

4. We remain committed to providing the best possible support to veterans, their families, and the American public. My POC for this action is

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Karen Durham-Aguilera Executive Director, ANMC

Acronyms and Abbreviations

ANC	Arlington National Cemetery
ANMC	Army National Military Cemeteries
COR	Contracting Officer's Representative
ISS	Interment Services System

- SAHNC Soldiers' and Airmen's Home National Cemeteries
- U.S.C. United States Code



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