



DEPARTMENT OF THE ARMY  
ARMY NATIONAL MILITARY CEMETERIES  
ARLINGTON NATIONAL CEMETERY  
ARLINGTON, VIRGINIA 22211

SASA-ANC

SEP 11 2012

MEMORANDUM FOR RECORD

SUBJECT: Moratorium on Ground Penetrating Radar for Army Cemetery Purposes

1. **SUMMARY.** Extensive pilot tests completed at Arlington National Cemetery in 2010 demonstrated that ground penetrating radar (GPR) and other technology currently being used to determine irregularities below the ground with regards to interred individuals, caskets and urns are statistically unreliable and subject to a wide range of interpretation. Subject matter experts have provided analysis stating that the results of GPR introduce more uncertainty than conclusive evidence for individual gravesites. The significant costs associated with GPR also far outweigh any reasonable expectation of benefit for cemetery purposes. Therefore, GPR and other technology currently being used to determine irregularities below the ground will not be used for cemetery purposes on Army property until further notice.

2. **BACKGROUND.**

a. Arlington National Cemetery conducted an exhaustive geophysical investigation of three of its newest burial sections (59, 65 and 66) to determine if buried anomalies were present at locations with and without headstones, including special interest sites where anomalies were thought possible. The geophysical surveys were conducted from June-August 2010 using electromagnetic, magnetic and GPR techniques. This data was then analyzed in March 2011.

b. The geophysical investigation surveyed 27.04 acres across the three sections at Arlington, which included 20,678 lots (15,542 gravesites with headstones; 5,136 lots without headstones). Based on the findings of the subsequent analysis, only 70.0% of the existing plots yielded expected results, in which buried anomalies were present where expected or absent where expected. Of the remaining 30%, 11.7% of existing or potential plots yielded unexpected results (buried anomalies were not present when expected, present where not expected, or shifted from expected locations), and 18.3% of the existing or potential plots were represented by data that could not be conclusively reported. These GPR error rates were produced by analyzing three of the newest burial sections in Arlington National Cemetery. Results for analyzing older sections were expected to introduce even more uncertainty.

c. In addition to reaching inconclusive results even with the significant costs, these results were also subject to a wide range of interpretation from those private industry

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and Department of Defense subject matter experts participating in the geophysical investigation.

**3. MORATORIUM.**

a. Based on the results described above from tests completed at Arlington National Cemetery, effectively immediately, GPR and other technology currently being used to determine irregularities below the ground will not be used for cemetery purposes on Army property until further notice.

b. The moratorium includes GPR and other technology currently being used to determine irregularities below the ground conducted at U.S. Government or private expense.

c. I will personally approve any requested exception to this policy.

**4. POINT OF CONTACT FOR MORE INFORMATION.** Point of contact for this memorandum is Ms. Kate Kelley, ANMC Chief of Standards and Evaluation, (703) 614-1062 and [katharine.kelley.civ@mail.mil](mailto:katharine.kelley.civ@mail.mil).

A handwritten signature in black ink that reads "Kathryn A. Condon". The signature is written in a cursive style with a long, sweeping tail on the letter "n".

KATHRYN A. CONDON  
Executive Director