

## **ANDREW JACKSON'S THE HERMITAGE--SAGEEP2018 EXHIBITOR SURVEYS**

*William E. Doll, East Tennessee Geophysical Services, Oak Ridge, TN, USA*

*Janet E. Simms, USACE Engineer Research & Development Center, Vicksburg, MS, USA*

*Jason Greenwood, Advanced Geosciences, Inc., Austin, TX, USA*

*Dennis Mills and Jeff Leberfinger, Exploration Instruments, Austin, TX, USA*

*Mario Di Bello, Foerster Instruments, Inc., Pittsburg, PA, USA*

*Mike Catalano, Geonics Limited, Mississauga, ON, Canada*

*Vit Gregor, Stanislav Drdla and Petr Michovsky, GF Instruments, s.r.o., Brno, Czech Republic*

*Fabian Stickel, Institute Dr. Foerster, Reutlingen, Germany*

*Steve Cosway, Nectaria Diamanti and Greg Johnston, Sensors & Software Inc., Mississauga, ON, Canada*

SAGEEP2018 (Nashville, Tennessee) provided a unique venue for the Outdoor Equipment Demonstrations (OED): The Hermitage—home of President Andrew Jackson. Several equipment vendors took advantage of being at a historical site and volunteered their services to collect data at several locations on the grounds. Geophysical survey methods included magnetics, electromagnetic induction, electrical resistivity, and ground penetrating radar. The Hermitage's Chief Curator provided four sites of interest where geophysical surveys could be conducted: a possible slave cemetery, Alfred's Cabin, SAGEEP OED area, and the stables. The possible slave cemetery location is adjacent to the family cemetery and the interest in surveying was based on a single historical document suggesting that slaves were buried in this area. Historical photographs show structures proximal to Alfred's Cabin, but their specific location is unknown. The OED was held in an area not known to have any significant features during Jackson's day, therefore any information the surveys could provide would be beneficial. The stables were an active area over the years The Hermitage was occupied and it is likely that artifacts are present, however, the area is currently being used as a maintenance yard and present-day cultural features may compromise data acquisition and quality. Because this was a volunteer effort and the exhibitors had limited time, all geophysical methods were not conducted at each area of interest. The area around Alfred's Cabin had the majority of surveys performed. Initial data results identify possible utilities, building foundations and other anomalies of interest. The methodologies performed at each site will be correlated and presented.