

Woolpert Contracted by USGS to Conduct Geophysical Surveys in Arkansas



The U.S. Geological Survey has contracted with Woolpert to conduct a high-precision geophysical survey and subsurface geologic mapping in Arkansas. The firm will collect, process and deliver high-resolution airborne radiometric and magnetic data that will be used in geologic framework studies related to critical

minerals, energy resource research and geologic hazard assessments.

Under this task order, Woolpert will image the surface and subsurface geology of 10,400 square km in west-central Arkansas, which is the focus of a National Geologic Cooperative Mapping Program project. This survey will be flown to ensure seamless alignment with data collected in 2019-2020.

This project follows Woolpert's recent delivery of geophysical survey data collected over 15,600 square km in Virginia and North Carolina. That information is enabling the assessment of potential regolith critical mineral deposits, analyses of subsurface geology, and investigations into the varying nature and structural features of the central Virginia seismic zone. The data will inform ongoing studies by the USGS; the Virginia Department of Mines, Minerals and Energy; and the North Carolina Geological Survey.

Modelling and Interpreting Mineral Structures

Woolpert's geospatial market director Shelly Carroll said this type of exploration is key to mineral and energy resource research, as well as geologic hazard assessments. "Woolpert recognizes that subtle details in the geophysical data acquired are critical to modelling and interpreting mineral structures of a landscape. Providing the highest-quality data is key to scientists performing this work," Carroll said. "Recent energy and supply chain issues caused by the pandemic have made the world acutely aware of our reliance on geologic resources. We're honored to support the USGS in this much-needed effort to strengthen and extend geologic mapping programmes nationwide."

Woolpert subcontracted with [EON Geosciences](#), which specializes in high-resolution airborne geophysical surveys, to support its task orders in Virginia and North Carolina. EON also performed the initial geophysical survey in Arkansas, to which this new survey will align.

Geophysical survey data acquisition under this task order is scheduled to begin in the second quarter of 2022.

□ Piper Cheyenne airplane with tail stinger magnetometer. (Piper Cheyenne airplane with tail stinger magnetometer. (Courtesy: EON Geosciences)