H. Roice Nelson, Jr.

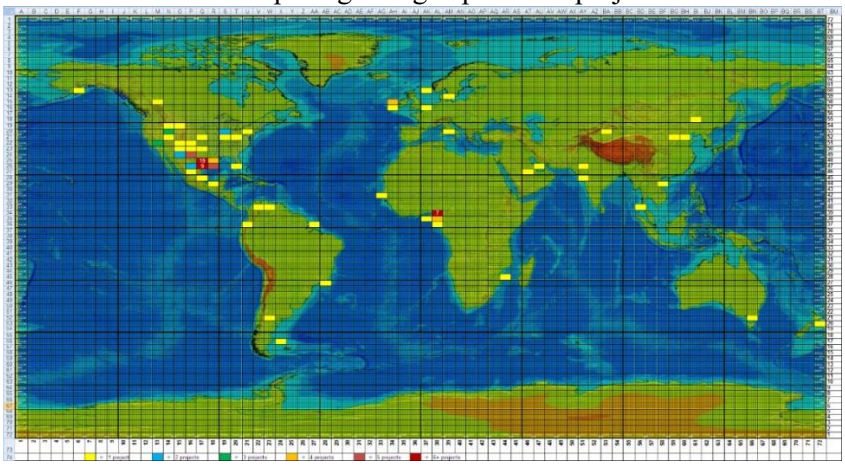
Short Bio

Howard Roice Nelson, Jr. (Roice), a serial entrepreneur, is focused on creating a new branch in the geophysical services industry, using lightning strike databases to map geology (Dynamic Measurement LLC. - US Patent 8,344,721 B2 Jan. 1, 2013 & US Patent 9,523,785 B2 Dec. 20, 2016). Roice has a B.S. in Geophysics, University of Utah, 1974, and an M.B.A., Southern Methodist University, 1981. He worked for Pan American, 1970, Amoco, 1973, Mobil Oil, 1974-1980, and the University of Houston's Seismic Acoustics Lab, 1980-1982, forming the on-going Allied Geophysical Laboratories, before co-founding Landmark Graphics Corp. in the fall of 1982. Landmark was sold to Halliburton in 1995, and the Landmark Division does over $1 billion annually. Roice co-founded companies for information (HyperMedia Corporation), visualization (Continuum Resources), datamining (InterLeeV LLC, Patent No.: US 11,494952 B1 Nov. 8, 2022), historical 501 (c) 3 (Southwestern Heritage Center Historical Society), and a planned Cedar Valley cowboy resort (Thunderbird Mountain LLC).

Roice specializes in integrating regional geological interpretations, merging seismic (only interpreter in early days of Landmark and worked worldwide on customer's toughest geologic problems), aeromagnetic (worked for Parker Gay at Applied Geophysics), outcrop (with Ward Abbot, Shell & Occidental, and Dr. Peter Vail, Exxon & Rice University), sequence stratigraphy (with Dr. Brad Macurda), log (with Dr. Robert Sneider), geochemical (worked with Dr. Dietrick Welte), production (worked with Dr. Fred Hilterman), and other geological and geophysical data (with Dr. Roger N. Anderson and Dr. Bob Ehrlich) into an integrated data cube. He lives in Cedar City, Utah, among the best seismic-scale outcrop-geology on planet earth, and truly enjoys studying, leading field trips, teaching, and unraveling complex tectonics.

Lighting analysis became the center of Roice's professional world, because the skin-depth of lightning electrical energy is tied to the build-up of storms, and charges telluric currents at exploration depths. Apparent Resistivity and Apparent Permittivity rock properties can be calculated from lightning strike databases. Displaying distribution of rock properties and lightning attributes as maps and volumes, allows regional interpretation of geotechnical frameworks - faulting, resistivity anomalies, and Sweetspots – interpolated to match existing or planned geophysical surveys, and filling-the-gaps between geological and geophysical control. Having completed 67 U.S. and Canada lightning analysis projects, each of which tied available geological and geophysical control, the next hurdle is to demonstrate the use of international lightning databases to do similar lighting analysis projects anyplace.

The map below shows the location of pre-lightning exploration projects Roice worked on since 1970:



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