

DAVID G. KOGER

Vietnam Era Marine Corps veteran. B.S. Social Sciences, Kansas State University, 1975. Began remote sensing image analysis career in 1979 with a company that designed and built analog and computer-based image analysis systems. Developed applications, installed systems and performed training in various disciplines worldwide.

Research associate, Texas Christian University departments of Geology and Environmental Sciences, 1983-1987: mostly applied, but also some basic research in the application of satellite data and aerial photography to hydrocarbon exploration, land use, and environmental applications. Taught Masters-level students in habitat delineation, soil loss prediction, and environmental sciences. Started consulting business in oil and gas.

Koger has been called on for forensics film analysis, expert witness, the JFK assassination, processing underwater video for the mission that found the *Titanic*, and the Shroud of Turin. He has processed satellite data in the search for Noah's Ark and for broadcast journalism.

Koger has performed work and/or trained personnel for:

- U.S. Defense Mapping Agency
- U.S. Department of Energy
- U.S.D.A. Soil Conservation Service Technical Center
- U.S. Fish & Wildlife Service
- National Cancer Institute
- UCLA Extension Courses
- Earth Observation Satellite Corporation
- Redstone Arsenal
- Duke University
- United Nations Food and Agriculture Organization
- Panamanian Technology Transfer
- Wildfire Containment Force of Australia
- Ecuadorian Natural Resources Organization
- Chilean Department of the Air Force
- Chinese Research Institute of Surveying and Mapping
- Chinese Institute of Geography and Remote Sensing Applications
- Mount Ararat Research Foundation
- Nigerian Department of Forestry
- International Institute for Tropical Agriculture

American Farm Bureau
Nebraska Oil and Gas Conservation Commission
Petroleum Technology Transfer Council
American Geosciences Institute
Haynes and Boone, LLP, Susman Godfrey, LLP, Gardere Wynne Sewell, LLP, Wick Phillips, LLP, McDowell Owens Engineering, Colvin, Chaney, Saenz & Rodriguez, LLP, Vinson & Elkins, LLP, Bryan Cave, LLP, and
several hundred oil and gas explorationists.

Koger is past Chair of the Geosat Committee, Inc., a non-profit organization which performed pre-competitive, applied research and development to foment applications for new satellite sensors. He served on the Program Committee for the international conferences on Remote Sensing for Exploration Geology and for Precision Agriculture. He contributed to the report for the National Oceanic and Atmospheric Administration/Department of Commerce about what the next generation of Landsat satellites should be, contain, and do.

He configured and operates a state-of-the-art remote sensing image analysis and geographic information system as he consults on various remote sensing applications, lectures on exploration and global change issues, writes for trade journals, conducts training seminars and webinars. He conducted a study to map regional geomorphic features for all of Nebraska in 2007; since that time, ten earthquakes of 3.0 and above on the Richter scale have coincided with features mapped. Has studied huge areas around the globe.

He makes his home in Fort Worth, Texas.

PUBLICATIONS

Numerous proprietary reports to explain the conclusions and recommendations of completed work.

Koger, David G., 2000, ***Over space, spectra, time, satellite data can improve exploration, other planning.*** Oil & Gas Journal, Mar. 6, p 54.

Koger, David G., Dodge, R.L., 1999, ***NASA, Geosat to conduct sensor research probe.*** Oil & Gas Journal, Apr. 5, p 82.

Koger, David G., Dodge, R.L., 1998, ***Geosat starts up R&D on exploration sensor.*** Oil & Gas Journal, Oct.5, p 113.

Wiley, M.A., David G. Koger, 1994, ***Correlation of Landsat MSS and TM Imagery with Subsurface Structure, Ames Crater, Oklahoma.*** Proceedings of the Tenth Thematic Conference on Remote Sensing, San Antonio, TX.

Koger, David G., 1993, ***A Multi-Data Approach to Exploration.*** Earth Observation Magazine, (March) pp 52-54.

- Koger, David G., 1993, ***Comparison of Digitized Air Photos, MSS and TM in Mature Oil and Gas Areas.*** Proceedings of the Ninth Thematic Conference on Remote Sensing, Pasadena, CA.
- Koger, David G., 1993, ***Landsat 6 Images to Provide More Remote Sensing Muscle.*** Oil & Gas Journal, (cover story, Feb. 1) pp 51-55.
- Koger, David G., 1992, ***Photogeology Facilitates Oil Exploration.*** Earth Observation Magazine, (September) pp 38-41.
- Koger, David G., Henderson, F.B. III, 1991, ***Industry/Government Partnerships in Cooperative Research on Global Change, Environmental Management and Earth Observation Applications.*** Proc., Third Annual "Earth Observations and Global Change Decision Making: A National Partnership", Environmental Research Institute of Michigan, Washington, D.C.
- Koger, David G., 1991, ***Remote Sensing Photogeology: Image Analysis of the Austin Chalk, South Texas Fractured Reservoirs.*** Proceedings of the Eighth Thematic Conference on Remote Sensing, Denver, CO.
- Koger, David G., 1991, ***Remote Sensing Photogeology as a Lead Tool and its Integration with Seismic in a Mature North Texas Province: A New Field Discovery.*** Proceedings of the Eighth Thematic Conference on Remote Sensing, Denver, CO.
- Koger, David G., Henderson, F.B. III, 1990, ***Government/Industry Roles in the Analysis of Earth Observation Data and Global Change Policy Formulation.*** Proc., Second Annual "Earth Observations and Global Change Decision Making: A National Partnership", Environmental Research Institute of Michigan, Washington, D.C.
- Koger, David G., 1990, ***Remote Sensing Method Works in North Texas Producing Area.*** Oil & Gas Journal, (cover story, Aug. 27) pp 51-53.
- Koger, David G., Henderson, F.B. III, 1989, ***Observation, Evaluation, and Development of Predictive Models for Global Change: The Need for Establishing U.S. Government-Industry Links.*** Proc., First Annual "Earth Observations and Global Change Decision Making: A National Partnership", Environmental Research Institute of Michigan, Washington, D.C.
- Koger, David G., 1988, ***Use of Remotely Sensed Data by Independent Oil Producers and the Value-Added Industry that Serves Them: User Needs for an Advanced Satellite Remote Sensing System for Exploration, Production, and Development.*** Special Report to the Cooperative Institute for Applied Remote Sensing, Norman, OK, for the National Oceanic and Atmospheric Administration/Department of Commerce.
- Koger, David G., Carter, J. S., 1988, ***Use of Remotely Sensed Data in Mature Basins: Considerations on Creating Useful Imagery.*** Proceedings of the Sixth Thematic Conference on Remote Sensing, Houston, TX.

- Carter, J. S., David G. Koger, 1988, ***Successful Applications of Remotely Sensed Data for Oil and Gas Exploration***. Proceedings of the Sixth Thematic Conference on Remote Sensing, Houston, TX.
- Morgan, K. M., S. J. Wilhelm, David G. Koger, D. Dirlam, 1987, ***A Structural Analysis of the Slick Hills Using Landsat TM and Side Looking Radar Data***. GSA, Waco, TX., (abstract).
- Morgan, K. M., David G. Koger, and D. A. Dees, 1987, ***Landsat Image Enhancement for Tonal Anomalies***. Bulletin Assoc. of Petrol. Geochemists, 2(1): 14-19.
- Phillips, K. M., David G. Koger, K. M. Morgan, and L. Newland, 1986, ***Thematic Mapper Data: A New Land Planning Tool***. J. Soil & Water Conservation, 41 (5): 301-303.
- Koger, David G., 1984, ***Image Creation for Geologic Analysis and Photo-interpretation***. Proc. Southwest ASP-ACSM, San Antonio, pp 526-530.

PROFESSIONAL SERVICES

- Organizer, World Conference on Remote Sensing for Acid Rain, 1984,
Bayreauth, West Germany
- Director and Chair, Geosat Committee, Inc.
- Member, Ft. Worth Geological Society
- Founding Member and Secretary, Society of Independent Professional Earth Scientists, Fort Worth Chapter
- Member, Geological Remote Sensing Group
- Participant, Cooperative Institute for Applied Remote Sensing, University of Oklahoma/Geosat Committee Workshop: "Geologic Remote-Sensing Methods, An Assessment of Status, Needs, and Research Direction."
- Participant, Texas Department of Commerce/Texas Space Grant Consortium Workshop: "The Future of the Space Industry: Opportunities for Texas."
- Lecturer, UCLA Extension Course "The Global Change Research Program" on cooperative research initiatives between government and industry; barriers to increased industry involvement in the assessment of global change.
- Participant, Agriculture Research Institute/Geosat Committee, Inc.: "Forum on Remote Sensing in Agricultural Decision-Making".
- Awards Judge, Ninth and Tenth Thematic Conferences on Remote Sensing for Exploration and Environmental Geology.
- Participant, Cooperative Institute for Applied Remote Sensing, University of Oklahoma/Geosat Committee "Survey to Assess the Status of the Use of Satellite Remote Sensing in the Geologic Industry," 1993.
- Program Committee, Tenth and Eleventh Thematic Conferences on Remote Sensing for Exploration Geology; Co-venor, Oil and Gas Plenary Sessions.

Listee, *Who's Who in Science and Engineering*, 24th edition; *Who's Who in the World*, 13th edition.

Webinars for Petroleum Technology Transfer Council and the American Geosciences Institute.

MASTERS' THESES UNDER TUTELAGE

Land Use Classification from Landsat Thematic Mapper Data for Integration with Other Data; Using the Universal Soil Loss Equation to Define Areas of Critical Erosion in an Urban Watershed

Land Use Classification of Urban and Rural Areas Using Landsat Thematic Mapper Data and Aerial Photographs

Landsat Thematic Mapper and MultiSpectral Scanner Data for Detection of Tonal Anomalies Associated with Hydrocarbon Accumulations in West Texas

Use and Integration of Landsat MSS, TM, Aerial Photographs, and Side Looking Radar for Structural Analysis of the Wichita Mountains Complex, Oklahoma

Geologic Prospecting in the Val Verde Basin by the Integration of Landsat, Magnetics, Gravity, and Subsurface Geology

Structural Analysis of Lineaments in the Wichita Mountains of Oklahoma Using Landsat MSS Data

Utilization of Landsat Thematic Mapper for a Lithologic and Structural Analysis of the Slick Hills Area, Southwestern Oklahoma

Detection of "Serpentine Plugs" in South and Central Texas Using Landsat (MSS) and Magnetic Data