

JAMES E. LAWSON

CURRICULUM VITAE

Jim Lawson (James Edward Lawson, Jr.) was born in Missouri in 1938. He lived in Canada from age 16 to 24. His secondary schooling was completed at the Kirkland Lake Collegiate and Vocational Institute in 1960. High first-class honours placed him second in a class of 100, and resulted in his going as an Ontario Scholar to the University of Toronto to study Physics and Mathematics. He left Toronto without a degree (with 4.0 average in his last year at Toronto).

Jim continued his studies in the Henry Kendall College at the University of Tulsa, and later in the Graduate School, under the supervision of Prof. Eysteinn Tryggvason. For one year he was an N.S.F.-funded graduate assistant analyzing East Coast On-Shore Off-Shore seismic refraction data. During a later year Jim was an intern to the Dean of the Tulsa College of Engineering and Physical Sciences.

Jim has degrees of B.A (Secondary Education/Physics, 1965); B. S. (Physics, 1965); M.S. (Physics, 1968); and Ph.D. (Geophysics, 1972) from the University of Tulsa.

In 1970, Jim accepted the newly created position of Geophysicist at the University of Oklahoma Earth Sciences Observatory near Leonard, in rural Tulsa County. In 1978, the facility became the Oklahoma Geological Survey Observatory, and Jim was named Chief Geophysicist. He is stationed at Leonard, and for the last few years has resided on Observatory property.

In 1978, Jim received an adjunct appointment at the University of Oklahoma. He has taught (albeit infrequently) undergraduate and graduate geophysics at the University, and graduate Seismology at the University of Tulsa. He has supervised several M.S. and M.N.S. theses, and has been a member of several Ph.D. committees.

Jim was a member of three LLNL "expert panels"—two panels on seismic risk east of the Rocky Mountains and one on seismic risk at the Savannah River New Production Reactor Site.

From 1987 to the present, he played many unofficial and low-profile roles in assisting diverse federal agencies in connection with the Threshold Test Ban Treaty. One of the verification sites (Designated Seismic Site) was built on Oklahoma Geological Survey Observatory property. At the request of DARPA/NMRO he went to Colorado to brief Soviet Military scientists on the history, calibration, and seismic noise levels at the Oklahoma site. On another occasion the Geotechnical engineers hired by the United States left the site in disgust with the slowness of the core drillers, and delegated the task to Jim of getting some sort of hole cored. When the core driller's helper also left, Jim acted as roughneck on the rig for three days as that was the only way he could find to get the test driller to continue.

He is a life member of the Seismological Society of America, a life member of the American Geophysical Union, a life member of Sigma Xi, and a member of the Oklahoma Academy of Sciences.

The following bibliography is limited to the area of nuclear verification research:

Hemish, LeRoy A., and Lawson, James E., Jr., 1991, Soviet seismic compound at the OGS Observatory, Leonard, Oklahoma, and shallow subsurface stratigraphy of the area: Oklahoma Geology Notes, v. 51, p. 36, 47.

Harben, P. E., and Lawson, J. E., Jr., 1990, Oklahoma deep-borehole seismic-noise measurements: characteristics as a function of depth, 1990, LLNL UCID-21870, 17 p.

Harben, P. E., and Lawson, J. E. Jr., 1992, Seismic noise variations in a 770-m-deep borehole near Tulsa, Oklahoma, LLNL, UCRL-LR-112429, 10 p.

Lawson, Jim, Golden, Paul, Herrin, Eugene, and Rinehart, Bill, 1992, Tulsa CD/GSE Open Station, poster at the 14th annual DARPA Seismic Research Symposium.

Lawson, James Edward, Jr., 1993, An international data exchange system of Open Stations using two standard internet tools: gopher plus and NFS remote mount, Proceedings of the ARPA/Phillips Lab/AFOSR 15th Annual Seismic Research Symposium, p. 228–233.

Funded verification related research:

LLNL/DOE Study of seismic signal and noise in a 770 meter borehole. Contract 89P086 1988 NOV23-1992 JUN30. \$22,000. On 1993 MAR25 the equipment was still continuously recording with Oklahoma Geological Survey operating funds. Indefinite continuation is planned.

DARPA/NMRO Installation of digital seismic equipment under an MOU. The equipment was supplied through a DARPA contract with Teledyne-Geotech. The contract number was MDA972-90-C-0002. 1990-1992.

DARPA/NMRO Development of Tulsa GSE System/CD Open Station and Spectral Differences in Regional Signals Recorded at Different Depths. U.S. DOD, Air Force Contract F19628-92-K-0028. 1992 NOV17 through 1994 FEB17. \$184,940.

EPSCOR/ARPA Deep Broadband Seismic Nuclear Proliferation Research Addition to the DARPA/NMRO-Funded Tulsa Open Station. Contract No. DAAH04-93-G-0470 \$139,852. The University of Oklahoma is providing \$35,000 matching funds, 1993 SEP01 through 1994 AUG31.

