

VII. Personnel

John Parker Burg received a B.S. in Physics and a B.A. in Mathematics from the University of Texas in 1953 and an M.S. in Physics from M.I.T. in 1960. Burg was employed by Texas Instruments Inc. from June 1956 to January 1973. He began in the Apparatus Division working on infrared systems and in 1960 was transferred to the Science Services Division to work on an AFTAC contract for the detection of underground nuclear explosions. His development of processing and analysis techniques for seismometer array data has been the basis of many present day digital oil exploration techniques. His Geophysics paper on three-dimensional frequency-wavenumber filtering has been highly referenced and in 1967 he was given the SEG best technical presentation award for the paper "Maximum Entropy Spectral Analysis". As a senior Research Geophysicist in charge of the Basic Research Section of the Science Services Research Laboratory, Burg was also responsible for supporting the anti-submarine warfare research of the division. In 1969, Burg left to attend Stanford University where he is presently working on his Ph.D. thesis in geophysics. Burg holds the patent on the well-known ARD deconvolution process and is the inventor of the Burg technique of spectral analysis. He is a member of the SEG and a senior member of the IEEE.



John Parker Burg
06



Jon F. Claerbout
R11, R23

Jon F. Claerbout received a B.S. degree in Physics from M.I.T. in 1960, where, for a thesis, he constructed a rubidium vapor magnetometer. In 1963 he received an M.S. degree in Geophysics from M.I.T. with a thesis on seismic data processing. He worked for Teledyne, Inc. and spent a year at Uppsala University in Sweden working on multiple time series analysis. In 1967 he received a Ph.D. degree in Geophysics from M.I.T. for a thesis entitled "Electromagnetic Effects of Atmospheric Gravity Waves". A member of SEG, he is an associate professor of geophysics at Stanford University.

Don C. Riley received a B.S. degree in Geophysics from the University of Tulsa in 1970. He is presently attending Stanford where he is working on a Ph.D. in Geophysics. During the summers of 1969-70 he was employed by Texaco Inc. (Tulsa division) interpreting sparker profiles. During the summer of 1972 he was employed by the U.S. Geological Survey developing systems for processing sparker data and assisting on the recent cruise gathering data in the Chukchi-Beaufort Sea. Riley is a member of Sigman Pi Sigma, AGU, and the SEG.



Don C. Riley
06, R23



DOHERTY

Stephen M. Doherty was born in New York city in 1948. He received his B.A. degree in physics from the University of Colorado in 1970 and is presently a graduate student and research assistant at the Department of Geophysics, Stanford University. His current research interest is the development of a modeling technique for the interpretation of refraction seismograms based on finite-difference solutions of the wave equation.

Theodore R. Madden is professor of geophysics at M.I.T. He did important early work in the use of induced polarization as a method of copper exploration.

Robert H. Brune attended the University of Missouri at Rolla from 1966 to 1969, receiving a B.S. in Geophysics. During the summer of 1968 he was employed by Pan American Petroleum Corp. working in reflection seismic processing. He was employed by Geophysical Services Inc. for 3 years in land and marine seismic exploration and in processing and interpreting marine gravity and magnetic data. Presently he is a graduate student in geophysics at Stanford University. He is a member of SEG, EAEG, and AGU.

BIOGRAPHICAL SKETCH OF T. R. MADDEN

Education

M.I.T., 1942-43, 46-49; graduated with B.S. in Physics
M.I.T., 1949-54, 1961; graduated with Ph.D. in Geophysics

Professional Experience

Lamont Geological Observatory, Columbia University; geophysicist
on submarine geophysical expeditions summer of 1948, 49, 50 and 52

Phelps Dodge Corporation; geophysicist in mineral exploration
work summer 1951

Bear Creek Mining Company (Kennecott); geophysical exploration
summer of 1954, 55, and 56, 57

M.I.T., Instructor, 1951-54, Lecturer 1954-57, Assistant Professor,
1957-62, Associate Professor, 1962, Professor, 1967, M.I.T., Depart-
ment of Earth and Planetary Sciences.

Visiting Associate Professor UCSD 1963-64

Consultant

Geoscience Inc.