

## **RICHARD F. STRICKLAND**

THE STRICKLAND GROUP, INC.

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Fort Worth, TX 76102  
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www.tsg.net

### **BIOGRAPHICAL DATA**

Birth date: August 31, 1948  
Citizenship: United States

Marital Status: Married, two children

### **EDUCATION**

#### College

B.S., Petroleum Engineering, Texas A&M University (1970)  
M.S., Petroleum Engineering, Texas A&M University (1974)  
Ph.D., Petroleum Engineering, Texas A&M University (1976)

#### Honor Societies

Tau Beta Pi (Engineering Honor Society)  
Pi Epsilon Tau (Petroleum Engineering Honor Society)

### **EXPERIENCE**

#### Industrial

The Strickland Group, Inc, President (June 2001 to Present)  
Cawley, Gillespie & Associates, Inc., President (January 1991 – May 2001)  
Cawley, Gillespie & Associates, Inc., Executive Vice President (January 1988 - December, 1990)  
Cawley, Gillespie & Associates, Inc., Petroleum Consultant (July 1982 - December 1987)  
Reservoir Simulation Technology, Inc., President (December 1980 - May 1982)  
Simulation Technology, Partner (September 1974 - November 1980)  
Numerical Simulation Section, Phillips Petroleum Company, Reservoir Engineer (May 1974 - Sep. 1974)  
Atlantic Richfield, Reservoir and Production Engineer (1970 and 1972)  
Pan American Petroleum, Engineering Assistant (May 1969 - September 1969)  
Tidewater Oil and Gas, Engineering Assistant (May 1968 - September 1968)  
Getty Oil, Engineering Assistant (May 1967 - September 1967)

#### Educational

Associate Professor, Texas A&M University (September 1980 - May 1982)  
Assistant Professor, Texas A&M University (September 1976 - August 1980)  
Instructor, Texas A&M University (September 1975 - May 1976)

#### Military

US Army, South Vietnam, Infantry (September 1970 - February 1972)

#### PROFESSIONAL AFFILIATIONS

Society of Petroleum Engineers (SPE)  
Texas Society of Professional Engineers (TSPE)  
National Society of Professional Engineers (NSPE)  
NSPE - Professional Engineers in Private Practice (NSPE-PEPP)  
American Consulting Engineers Council  
Registered Professional Engineer in the State of Texas  
Sigma Xi

#### PROFESSIONAL COMMITTEE MEMBERSHIPS

Frost Bank Advisory Board (2000 to Present)  
Petroleum Engineering Industry Board, Texas A&M University (1995 - 2000)  
Society of Petroleum Engineers Editorial Review Committee (1978 - 1980)  
Student Development Committee of American Association of Engineering Studies (1979 - 1980)  
Society of Petroleum Engineers Education and Accreditation Committee (1981 - 1994)  
Engineering Accreditation Commission of ABET (1984 - 1987)  
Board of Directors of the Accreditation Board for Engineering and Technology (1988 -1994)  
Chairman of the Fort Worth Section of the Society of Petroleum Engineers (1988)  
Board of Directors of the Fort Worth Section of the Society of Petroleum Engineers (1989 - 1992)

#### Texas A&M University Committee Memberships

Academic Council, Member  
College of Engineering Computing Committee, Member  
Petroleum Engineering Scholarship Committee, Chairman  
University Disciplinary Appeals Panel, Member  
L. F. Peterson Engineering Computing Center, Director  
College of Engineering Student Honors and Awards Committee, Chairman  
Brazos Valley Regional Science and Engineering Fair, Director

#### HONORS AND AWARDS

Outstanding Faculty Award, College of Engineering, Texas A&M University (April, 1980)  
Member, Graduate Faculty, Texas A&M University  
Dresser Professor of Petroleum Engineering  
Accreditation Board for Engineering and Technology - Fellow

#### PUBLICATIONS AND PRESENTATIONS

Strickland, R.F.: "An Analysis of Artificial Barriers for Controlling Water Coning," M.S. Thesis, Texas A&M University, May 1974.

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Strickland, R.F. and Morse, R.A.: "Artificial Barriers May Control Water Coning," Oil and Gas Journal, October 4 & 7, 1974.

Strickland, R.F.: "Gas Injection for Up-structure Oil Drainage," Ph.D. Dissertation, Texas A&M University, December 1976.

Strickland, R.F. and Jennings, J.W.: "Recent Developments in Texas A&M University's Lignite Gasification Project," 4th Annual Underground Coal Conversion Symposium. June 1978, Steamboat Springs, Colorado.

Strickland, R.F. and Jennings, J.W.: "Analysis of Geological Limitations to Underground Coal Gasification," In Situ, Vol. 3, Number 3, September 1979.

Strickland, R.F. and Morse, R.A.: "Gas Injection for Up-structure Oil Drainage," Journal of Petroleum Technology, October 1979, pp. 1323-1331.

Jennings, J.W., Strickland, R.F., and Von Gonten, W.D.: "Underground Lignite Gasification at Texas A&M," Presented at:

Symposium on Energy and Mineral Recovery Research, April 12-14, 1977, Golden, Colorado;

Third Annual Underground Coal Conversion Symposium, June 6-9, 1977, Fallen Leaf Lake, California;

Second Annual In-Situ Energy Recovery Technology, July 11-12, 1977, Albuquerque, New Mexico.

Strickland, R.F. "Short Courses for Industrial Representatives,"

Topics: Oil and Gas Technology  
Basic Reservoir Engineering  
Advanced Reservoir Engineering  
Numerical Simulation  
Thermodynamics and Phase Behavior  
Oil and Gas Property Evaluation  
Presented 1977 through 1990

Strickland, R.F. "Disputes about the Panhandle Field of Texas",  
Society of Petroleum Engineers, Dallas Section, November 1986, December 1989.  
Dallas Geological Society, February 1990.

Strickland, R.F. "Oil & Gas Property Evaluation - A Seminar for Fiduciaries',"  
May 1988, May 1990.

Ravnaas, R.D., Strickland, R.F., Lake, L.W., Yang, A.P., Malik, Prezbindowski, and Mairs. "Three Dimensional Conditional Simulation of Schneider (Buda) Field," paper SPE 23970 presented at the Permian Basin Oil and Gas Recovery Conference, Midland, TX, March 1992.

Strickland, R.F., "Attributes of the Petroleum Engineer of the Future", presented at the Society of Petroleum Engineers Fall Meeting, September 1993.

Strickland, R.F., "Outsourcing, The View of a Consultant", presented at the Society of Petroleum Engineers Annual Meeting, September, 1994. SPE Houston Section, November, 1994. SPE Dallas Section, December 1994. SPE Ft. Worth Section, March 1995.

Strickland, R.F., Shingler, T., "Comparison of US and UK Transactions: Expected Market Value, paper SPE 28191 presented at the SPE Oil & Gas Economics, Finance & Management Conference in London, UK, June 1994.

Strickland, R.F., Purvis, Dwayne C., Alexander, R.A., Quinn, M.A., "Coupling Probabilistic Methods and Finite Difference Simulation: Three Case Histories" paper SPE 38777 presented at the SPE Annual Technical Conference and Exhibition, San Antonio, TX, October 1997.

Strickland, R.F., Purvis, Dwayne C., "Problems Reconciling Probabilistic and Deterministic Reserve Classifications and Evaluations" paper SPE 68591 presented at the SPE Hydrocarbon Economics and Evaluation Symposium, Dallas, TX, April 2001.

Nickle, Brad, Purvis, Dwayne C., Strickland, R.F., "Resolving the Nightmare of Performance Reporting and Portfolio Management – A Web Based Approach" paper SPE 95164-PP to be presented at the SPE Hydrocarbon Economics and Evaluation Symposium, Dallas, TX, April 2005.

## UNIVERSITY AND INDUSTRY SCHOOLS TAUGHT

### University Courses

Engineering Analysis: Introduction to engineering analysis affording practice in analyzing and solving engineering problems including computational methods and devices.

Petroleum Development: Principles of oil field development including drilling equipment, drilling fluids, casing and cementing of wells and formation evaluation.

Reservoir Rock Properties: Systematic study of physical properties of petroleum reservoir rocks; lithology, porosity, fluid saturation, permeability, relative and effective permeability and capillary characteristics.

Petroleum Development Laboratory: Properties and the testing and treating of drilling fluids and cements; well surveying practices.

Fluid Properties Laboratory: Conventional and special core analysis. Analysis of drill cuttings. Determination of lithology, porosity, fluid saturation, capillary pressure characteristics, electrical properties, permeability and relative permeability.

Reservoir Fluids: Thermodynamic behavior of naturally occurring hydrocarbon mixtures. Evaluation and correlation of physical properties of petroleum reservoir fluids including laboratory and empirical methods.

Petroleum Property Management: Factors which influence industrial organizations, securities and value of oil and gas properties. Preparation of valuation reports; taxation; introduction to mineral law. Regulation of petroleum production.

Petroleum Measurement and Transportation: Fluid static and dynamics. Theory and methods of gas and liquid measurements and transportation including mixed streams.

Measurements Laboratory: Flow and metering of gas and liquid in pipelines. Oil and gas well testing, field automation and optimization of sucker rod pumping installations.

Petroleum Engineering Numerical Methods: Use of numerical methods for petroleum problems. Application of numerical differentiation, integration, interpolation, and curve fitting. Introduction to numerical simulation.

Reservoir Engineering: Frontal advance processes. Influence of rock and fluid properties on reservoir performance. Well performance as related to various completion and stimulation techniques.

Materials Balance Methods: Materials balance methods. Identification of type of reservoir mechanism. Estimation of fluids in place and future production under primary recovery, gas injection and water influx.

Unsteady State Processes: Transient phenomena in fluid flow systems. Applications to finite and infinite reservoirs. Pressure build up and draw down, skin factor, interference, reservoir limits, drill stem testing, pulse testing.

Petroleum Recovery Methods: Secondary and tertiary oil recovery. Gas drive, water flooding, steam, hot water, in-situ combustion and miscible displacement. Use of carbon dioxide, surfactants, emulsions and viscous water for increasing oil recovery.

Special Topics in numerical methods and reservoir simulation.

#### Industry Schools

Basic Reservoir Engineering  
Advanced Reservoir Engineering  
Numerical Simulation  
Oil and Gas Property Evaluation  
Oil and Gas Technology  
Thermodynamics and Phase Behavior

#### COMMUNITY

#### Church

Ordinations: Deacon, Elder, The Church in Cityview

#### Recreational

Racquetball, Squash, Golf