Sixteenth Annual

American Mining Hall of Fame
Awards Presentation
and Banquet

December 5, 1998
The Westin La Paloma, Tucson, Arizona

Sponsored by
Mining Foundation of the Southwest
PROGRAM

Reception ............... 6:30 p.m.
Banquet Dinner......... 7:30 p.m.
Ceremony ............... 9:00 p.m.

Welcoming Remarks: Martin C. Kuhn

Introduction of Head Table
and Other Honored Guests: Martin C. Kuhn

Awards Presentation: David M. Spatz

Presentation of 1998 Inductees: H. Myles Jacob
Presented by Walter E. Heinrichs, Jr.
John Cromwell Lincoln
Presented by John C. Lacy

Presentation of 1998 Medals of Merit: David N. Skillings, Jr.
Presented by Herbert E. Welhener
J. Rubén Velasco Rodríguez
Presented by Willard C. Lacy

Presentation of 1998 Industry Partnership Award: Stephen D. Bechtel, Jr. and
Bechtel Corporation
Presented by David M. Spatz

Presentation of 1998 Recipient: Charles G. Preble
Presented by William H. Dresher

Featured Address: Charles G. Preble

Adjournment: Martin C. Kuhn
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The goal and purpose of the Mining Foundation of the Southwest is to promote public understanding of and education related to the mining industry. Toward this goal, the Foundation has funded a number of projects from donations and fund-raising activities.

Examples of projects funded by the Mining Foundation of the Southwest are:

- Computers for use by students in the Department of Mining and Geological Engineering at the University of Arizona
- Funding a new sound system for the mining exhibits at the Arizona Historical Society Museum's Mining Hall in Tucson
- Funds for the purchase of books and publications at the libraries at the Colorado School of Mines, Mackay School of Mines and New Mexico Tech
- Funding geology and mining related interpretive signs at San Pedro Vista and Aspen Vista on the Mt Lemmon Highway in Arizona
- Donation of Mineral and Rock Collection to Arizona-Sonora Desert Museum
- Donation of books, manuscripts and journals relating to the mining industry to Arizona Geological Survey
- Donation Mineral and Rock Collection and old mining equipment to ASARCO's Mineral Discovery Center
- Publication of 3 volumes of History of Mining in Arizona

The Hall of Fame Awards Banquet serves a dual purpose in educating people about prominent persons associated with the mining industry, both present and past, and raising funds to continue projects of the Foundation.

The Mining Foundation of the Southwest was incorporated in 1993 with the merger of the Mining Club of the Southwest and the Mining Club of the Southwest Foundation. The Mining Club was started in 1971 and the Club's Foundation began in 1983 with the first American Mining Hall of Fame Awards.

The Hall of Fame honorees, both living and deceased now number 69. The plaques which commemorate their induction are on display at the Arizona Historical Society's Museum at 949 East Second Street in Tucson.
Charles G. Preble, is the President and Chief Executive Officer of Southern Peru Copper Corporation (SPCC). He received a B.S. degree in Mining Engineering in 1956 and was awarded the honorary degree of Professional Engineer in 1981, both from the University of Arizona. He also has received honorary professor titles from the Universities of Tacna and Puno, both in Peru. In July of this year he received an honorary doctorate degree from San Marcos University in Lima, Peru - the oldest university in the Western Hemisphere.

Upon graduation from the University of Arizona, he was employed by ASARCO at Silver Bell as a mining engineer. In 1957 he entered the United States Air Force and served until 1961 when he returned to ASARCO. In 1967 he joined SPCC at their Toquepala operation as General Mine Foreman and Assistant Mine Superintendent. In 1984, Preble was appointed to his present position of President and CEO.

Preble has distinguished himself by his corporate and civic leadership as an executive of an American-owned company operating in a foreign country. His leadership was most noteworthy during the long unrest in Peru resulting from the activities of the Sendero Luminoso. In spite of personal and company hardships during this time he was able to maintain his company's performance as the premier and only privately owned copper operation in Peru. During this period and since he has exhibited his personal dedication to Peru and the Peruvian people in numerous ways.

He serves on the boards of numerous professional and civic organizations. He has received the AIME Charles F. Rand Gold Medal and was named 1997 Copper Man of the Year by the Copper Club in New York City.
Myles Jacob was born March 19, 1913 in Bloomfield, New Jersey. He received a B.C.S. degree in Business Administration from New York University in 1935 and became a Certified Public Accountant.

Six years later he joined Inspiration Consolidated Copper Company (at the time a part of Anaconda Copper Company) and served successively as Assistant Secretary and Treasurer (1944), Secretary and Treasurer (1947) and Vice President and Secretary (1955). He joined the Board of Directors of Inspiration in 1953 and was named as Executive Vice President in 1957, President in 1959 and elected as Chairman and CEO in 1973. Jacob retired in 1978 as Chairman and Chief Executive Officer of Inspiration Consolidated Copper Company (now Cyprus Miami Mining Corporation). He also served on the Board of Directors of Sperry (now UNISYS) until 1983 and Callahan Mining until 1990.

Under Jacob's leadership, Inspiration became the first mining company to have a fully integrated operation and the first to electrolytically refine copper in Arizona. A smelter was acquired in 1960 and, in 1969, when its continuous copper-rod plant began operation, was the first in the state to produce a semi-finished product.

In 1974 the American Institute of Mining, Metallurgical and Petroleum Engineers (AIME) presented him with the William Lawrence Saunders Gold Medal, "For a career of real dedication to the United States and his exceptional leadership and inspiration toward solving the production and environmental problems to mutual benefit of the community, the country and his industry."

Jacob assisted in founding the Copper Development Association, the International Copper Research Association and the National Mining Hall of Fame and Museum in Leadville, Colorado.
John Cromwell Lincoln was born in Painesville, Ohio in 1866. He graduated from Ohio State University in 1888 with a degree in Electrical Engineering.

He founded the Lincoln Electric Company in 1895 and went on to become a nationally known industrialist. In 1998, the company continues to hold a premier place in the industry.

He had a penchant for experimenting and research and was directly responsible for 55 patents. He helped send his brother James to school and then told him, “You run the company and I will do the inventing.” The bonus system he established at Lincoln Electric, and later at the Bagdad Mine in Arizona, made the employees among the highest paid in their respective industries.

Lincoln came to Arizona in the early thirties. His interests were many and varied. He joined in the construction of Camelback Inn and had an interest in the Universal Wire Spring Company. He was a great philanthropist as well as a civic leader and donated the money to begin construction of John C. Lincoln Hospital in Phoenix.

Lincoln took control of the Bagdad Copper Corporation in September, 1944. A laboratory was soon established to research the leaching of the oxide ores. This led to the construction of a small pilot plant to test the fluosolids roasting of the sulfide concentrates. To make fluosolids an economical project it was necessary to solve the high unit cost, as well as the capital costs of crushing and grinding.

He experimented for a number of years with high speed crushing rolls and was still working on these problems at the time of his death in 1959. By that time he had established a framework upon which his son David built to make Bagdad one of the best open pit copper mines in the country.
David N. Skillings, Jr. is president of DN Skillings Inc., which publishes Skillings Mining Review and the Skillings Minnesota Mining Directory, with offices in Duluth, Minnesota.

In addition to serving as publisher of Skillings Mining Review and the Skillings Minnesota Mining Directory, he is president of Skillings Conferences, which organizes the World Iron Ore Conference held in the fall of each year. Previously conferences have been held in Orlando, Florida and Port of Spain, Trinidad, and this year will be held in New Orleans, Louisiana.

Skillings Mining Review is a mining magazine published every week since June 1, 1912, covering the worldwide mining industry. The magazine was founded originally by Charles D. Skillings, who was active until 1943, and then succeeded by his son, David N. Skillings, father of David N. Skillings, Jr., who took over as publisher in 1975. The magazine has appeared each week without exception since its beginning in 1912.

In 1992, the Minnesota Mining Directory, which was started in 1920 and published by the University of Minnesota until 1989, was acquired and is known as the Skillings Minnesota Mining Directory. In 1996, the Skillings Conference was started as an additional service to the industry.

His grandfather and father began regular trips to copper and other mines in the southwestern U.S. and Mexico after World War I, and David Skillings, Jr. made his first trip to Arizona in 1939. Since that time he has visited all copper mining operations in Arizona and New Mexico, and presently he makes at least three trips a year to the Southwest to update mining information for publication in the Skillings Mining Review.

David Skillings, Jr. earned a BA in economics at Carleton College, Northfield, Minnesota, and has been associated full time with Skillings Mining Review since 1958.
Born September 12, 1910 in Hermosillo, Sonora, Mexico, Rubén Velasco spent his early years in Sonora, and later attended the University of Arizona where he earned a Bachelor of Science degree in Mining Engineering in 1932.

His long affiliation with the Cananea Consolidated Copper Company (then a subsidiary of the Anaconda Copper Company) began in 1935 as Assistant Geologist. He served as Exploration Geologist for the company in Mexico and Arizona from 1946 to 1948, when he was commissioned by Anaconda to complete geologic investigations in the copper-rich Cuajone-Toquepala-Quellaveco region in Peru; subsequently he was given responsibility for Anaconda’s exploration program in Chihuahua and Sonora. In 1950, Velasco was named Chief Geologist of the Cananea Consolidated Copper Company where he cultivated an exceptional group of well trained and skilled geologists to serve the needs of this world-class mining operation.

From 1963 until his retirement in 1979, Rubén held several high-level positions with the Cananea Consolidated Copper Company and after 1973, its nationalized successor, Compañía Minera de Cananea. He followed his “retirement” with another career as Professor in the Department of Mining Geology at the University of Sonora in Hermosillo, where he taught economic geology until his second retirement in 1991.

He is the author of important publications in both Spanish and English, member and former officer of several international professional organizations and recipient of several awards from the University of Arizona, the University of Sonora, and Instituto Minerva, recognizing his achievements and service. He is said to be proudest, however, of his Award of Acknowledgment from students of mining and geological engineering at the University of Sonora, recognizing his expertise as a true professional and inspirational educator.
1998 INDUSTRY PARTNERSHIP AWARD

STEPHEN D. BECHTEL, JR. AND BECHTEL CORPORATION

1998 marks 100 years Bechtel has provided quality and innovative services to the mining industry.

The company which was founded in Oklahoma by Warren A. Bechtel, began with railroad work that soon took the new company to California. Bechtel branched out to provide engineering, procurement and construction services and pioneered the construction application of motorized trucks, tractors and diesel-powered shovels.

During the 1930s Bechtel began tackling large joint ventures and public works projects. Hoover Dam, the largest masonry structure since the Great Pyramid, was one of the first built by a partnership of W. A. Bechtel Company and other companies.

Following his father's sudden death in 1933, Stephen D. Bechtel, Sr. became president. He expanded into new markets, including refineries and chemical plants and handled large assignments in support of the Allied effort during World War II. The new Bechtel Corporation pioneered the turnkey concept—taking full responsibility for a project until completion.

The election of Stephen D. Bechtel, Jr. as president in 1960 marked Bechtel's third generation of family leadership. Keeping pace with this new era, Bechtel served markets including pollution abatement, transportation, urban planning, medicine and education and in the 1970s branched into advanced telecommunications systems and became a leader in the liquefied natural gas industry. In 1972 Bechtel was responsible for engineering or construction of about 20 percent of the new power-generating capacity in the United States and by the end of the decade they had been involved in the design and construction of more than 70 large airport projects around the world.

Riley P. Bechtel became chief executive officer of Bechtel Group, Inc. when his father retired in 1990 and under his direction the company continues to evolve.

Bechtel, a global organization working for the mining, metal and minerals industry, has contributed to more than 300 mining projects and 900 mining studies covering all aspects of the ferrous, non-ferrous, precious metals, and energy minerals industries.
Board of Governors
Martin C. Kuhn - President
William H. Dresher - Vice President
Susan A. Wick - Secretary/Treasurer
Nick Balich
R. W. Ballmer
A. Frederick Banfield
Roshan Bhappu
Wayne H. Burt
John L. Cesar
Milton M. Evans
Larry D. Fellows
Walter E. Heinrichs, Jr.
Marvin A. Hustad
John C. Lacy
James D. Loghry
Robert A. Metz
William C. Peters
Charles R. Sewell
Everett Smith
David M. Spatz
Jack E. Thompson
Herbert E. Welhener
Gordon W. Wieduwilt
William H. Wilkinson
Harry J. Winters, Jr.

Hall of Fame Committee
David M. Spatz - Chairman
William H. Dresher
Milton M. Evans
Walter E. Heinrichs, Jr.
Martin C. Kuhn
John C. Lacy
Willard C. Lacy
Robert A. Metz
Jack E. Thompson
Herbert E. Welhener
William H. Wilkinson
Harry J. Winters, Jr.

Gold Members
A. Frederick Banfield
Milton M. Evans
The Dorr Foundation
Jack E. Thompson
Milton H. Ward
William H. Wilkinson

Silver Members
George J. Allen
Wayne H. Burt
John C. Lacy
Frank R. Milliken
Dave Parnell
Forest E. Rickard
Susan A. Wick
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<td><strong>Medal of Merit Recipients</strong></td>
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<td><strong>Industry Partnership Award</strong></td>
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Maxie L. Anderson  1934-1983  
Meyer Guggenheim  1825-1905  
Charles Debrille Poston  1825-1902  

Bert S. Butler  1877-1960  
Hal W. Hardinge  1855-1943  
Frederick Leslie Ransome  1868-1935  

Nellie Cashman  1849-1925  
George Hearst  1820-1891  
Rossiter W. Raymond  1840-1918  

Louis S. Cates  1881-1959  
Joseph Austin Holmes  1859-1915  
Robert H. Richards  1844-1945  

William Andrews Clark  1839-1925  
Herbert C. Hoover  1874-1964  
Thomas A. Rickard  1864-1953  

John Van Nostrand Dorr  1872-1962  
Daniel C. Jackling  1869-1956  
Louis D. Ricketts  1859-1940  

James Douglas  1837-1918  
Ira B. Joralemon  1884-1975  
Reno H. Sales  1876-1969  

James Stewart Douglas  1868-1949  
Henry Krumb  1875-1958  
Fred Searls, Jr.  1888-1968  

Charles F. Fogerty  1921-1981  
Waldemar Lindgren  1860-1939  
Antonio Siraumea  1710-1760  

Antoine M. Gaudin  1896-1974  
Curtis H. Lindley  1850-1920  
Arthur F. Taggart  1884-1959  

Wesley P. Goss  1899-1985  
John William Mackay  1831-1901  
William Boyce  1869-1930  

William C. Greene  1853-1913  
Donald H. McLaughlin  1891-1959  
Arthur Redman Wilflley  1860-1927  

John C. Greenway  1872-1926  
Seeley W. Mudd  1861-1926
The American Mining Hall of Fame Committee of the Mining Foundation of the Southwest would like to thank Modular Mining Systems for its continued support by typesetting and printing this evening’s programs. Modular has provided this contribution for many years.