

### **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**

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 Rodrîguez Presented by Willard C. Lacy

Presentation of 1998 Industry Stephen D. Bechtel, Jr. and

Partnership Award: 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



# RECEPTION HOSTED BY

AIME	ASARCO, Incorporated	
Bank One	Bechtel	
BHP Copper	BHP Minerals	
Boart Longyear/Lang	Bucyrus International	
Call & Nicholas	Cimeta Engineering	
Cutler-Hammer	Cyprus	
Drilling Services/Boyles Bros.	Empire	
Filtemp	Freeport	
Frontier Kemper	Geotemps	
Henkel Corporation	Homestake Mining Company	
Independent Mining Consultants, Inc.	Industrial Motor & Control	
Kennecott Utah Copper Corporation	Komatsu	
Kvaerner Metals	Lowell Exploration	
M3 Engineering & Technology Corp	Mintec	
Modular Mining	Phelps Dodge Exploration Intl.	
Picor Commercial Real Estate	Pincock, Allen & Holt	
Pioneer Equipment	Purcell Tire Company	
Southern Peru Copper Corporation	Southwest Energy	
Sundt Corporation	TIC - The Industrial Company	
The Winters Company	US Electrical Motors	
Wells Fargo Bank	Western States Engineering	
Williams Detroit Diesel	Woodward Clyde	



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.

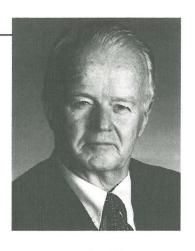
The Hall of Fame honorees, both living and deceased now number 69. The plaques which commemorate their induction are on display at the Arizona Historical Society's Museum at 949 East Second Street in Tucson.



#### **1998 RECIPIENT**

### **CHARLES GRAHAM PREBLE**

harles 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.

#### 1998 INDUCTEE FROM MINING'S PAST

### H. MYLES JACOB

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 succes-



sively 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.

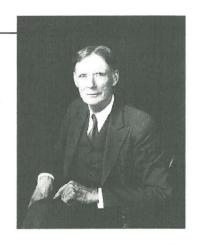


#### **1998 INDUCTEE FROM MINING'S PAST**

### JOHN CROMWELL LINCOLN 1866-1959

ohn 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.



#### 1998 MEDAL OF MERIT RECIPIENT

### DAVID N. SKILLINGS, JR.

avid 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.



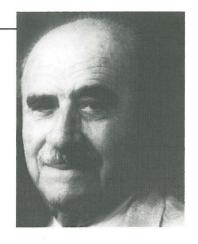
### AMERICAN MINING HALL OF <u>FAME</u>

#### **1998 MEDAL OF MERIT RECIPIENT**

### JOSÉ RUBÉN VELASCO RODRÍGUEZ

orn 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.

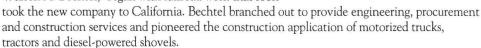


#### 1998 INDUSTRY PARTNERSHIP AWARD

### STEPHEN D. BECHTEL, JR. AND BECHTEL CORPORATION

998 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



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, Ir.

### 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

### Gold Members

Harry J. Winters, Jr.

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



1983 Recipient	1988 Recipient	1993 Recipient
George E. Atwood	Simon D. Strauss	Milton H. Ward
1984 Recipient Charles F. Barber	1989 Recipient G. Robert Durham	1994 Recipient J. Burgess Winter
1985 Recipient	1990 Recipient	1995 Recipient
George B. Munroe	Harry M. Conger	Douglas C. Yearley
1986 Recipient	1991 Recipient	<b>1996 Recipient</b>
John C. Duncan	Kennth J. Barr	Richard de J. Osborne
1987 Recipient Plato Malozemoff	1992 Recipient TS Ary	1997 Recipient James R. Moffett

### Medal of Merit Recipients

Ralph J. Roberts, 1989 Victor H. Verity, 1989 John S. Livermore, 1990 George D. Argall, Jr., 1991 Arthur A. Brant, 1992 William C. Epler, 1992 Walter E. Heinrichs, Jr., 1993 Willard C. Lacy, 1993 Donnell W. Agers, 1994 J. David Lowell, 1994 Ronald R. Swanson, 1994 Warren Kay Pincock, 1995 Richard W. Hutchinson, 1996 Charles L. Pillar, 1996 Hugo T. Dummett, 1997 Spencer Rowe Titley, 1997

### Industry Partnership Award

Caterpillar, Inc. - Glen A. Barton, 1995 Amigos (Arizona Mining & Industry Gets Our Support), 1996 Colorado School of Mines, 1997



### 1983-1997 Inductees

Maxie L. Anderson	Meyer Guggenheim	Charles Debrille Postor
1934-1983	1825-1905	1825-1902
Bert S. Butler	Hal W. Hardinge	Frederick Leslie Ransome
1877-1960	1855-1943	1868-1935
Nellie Cashman	George Hearst	Rossiter W. Raymond
1849-1925	1820-1891	1840-1918
Louis S. Cates	Joseph Austin Holmes	Robert H. Richards
1881-1959	1859-1915	1844-1945
William Andrews Clark	Herbert C. Hoover	Thomas A. Rickard
1839-1925	1874-1964	1864-1953
John Van Nostrand Dorr	Daniel C. Jackling	Louis D. Ricketts
1872-1962	1869-1956	1859-1940
James Douglas	Ira B. Joralemon	Reno H. Sales
1837-1918	1884-1975	1876-1969
James Stewart Douglas	Henry Krumb	Fred Searls, Jr.
1868-1949	1875-1958	1888-1968
Charles F. Fogerty	Waldemar Lindgren	Antonio Siraumea
1921-1981	1860-1939	1710-1760
Antoine M. Gaudin	Curtis H. Lindley	Arthur F. Taggart
1896-1974	1850-1920	1884-1959
Wesley P. Goss	John William Mackay	William Boyce



1831-1901

Donald H. McLaughlin

1891-1959

Seeley W. Mudd

1861-1926

1869-1930

Arthur Redman Wilfley

1860-1927

1899-1985

William C. Greene

1853-1913

John C. Greenway

1872-1926

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.





### Mining Foundation of the Southwest

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