

CONCENTRATES

2013 American Mining Hall of Fame Inductee James D. Toole



Born into a coal mining family in the anthracite region of Pennsylvania, Jim Toole began his mining career working in open cut strip mines. After graduating from King's College in Wilkes-Barre Pennsylvania, and completing his service in the United States Marine Corps, Jim was hired by the explosive division of Hercules Inc. in 1965. His first assignment was to the Minnesota Iron Range where he arrived with his wife Molly. Three years later Jim and his family were transferred to the Panama Canal Zone where he worked on the canal widening project. After South America, a third transfer found Jim, Molly and their three children in Tucson, Arizona where copper mining was expanding. Also expanding was the Toole family with the addition of three more children in the following years.

In May of 1973, taking an innovative approach to the application of bulk blasting agents, Jim left Hercules and founded Southwest Energy. Four months later, Hercules' Arizona operations were purchased by Southwest Energy. Soon Southwest began to broaden its business

affiliations beyond Arizona. In early 1980 Southwest Energy took an equity position in Apache Powder Company, now known as Apache Nitrogen Products Inc. in Benson, Arizona.

After adding additional bulk loading capacity and blast hole drilling throughout the 1980's and 1990's, Southwest Energy formed a joint venture in 2000 with SASOL, a South African chemical and energy company. As a result of this joint venture, Southwest Energy gained access to explosive technologies, electronic detonators and a unique form of ammonium nitrate prill called EXPAN. After three years, the joint venture was dissolved when SASOL exited the global explosive market, leaving Southwest Energy in a stronger market position with expanded product capabilities.

In 2008 Southwest Energy created a new joint venture with Orica, the largest explosive company in the world, based in Melbourne, Australia. With the innovative explosive technologies and strong manufacturing base of Orica, Southwest Energy continues to provide even greater value to its mining customers. Today, Southwest Energy has multiple facilities, distribution sites, and blasting operations across the Western United States.

During the company's forty year history, Jim Toole believes that the greatest assets of Southwest Energy are the exceptional employees and the ability of the company to share its profitability with all of its people and the communities where they live and work. Southwest Energy's mission has always been and continues to be, the creation of opportunity for its employees by bringing ever increasing value to its customers.

CONGRATULATIONS TO ALL 2013 HALL OF FAME HONOREES

HALL OF FAME INDUCTEE— JAMES D. TOOLE

Past President & CEO, Southwest Energy, LLC, Tucson, AZ

MEDAL OF MERIT HONOREE— JOSEPH M. KEANE

Principal Metallurgical Engineer, SGC METCON Research/KD Engineering Co. Inc., Tucson, AZ

MEDAL OF MERIT UNDER 40 HONOREE— TO BE ANNOUNCED

MINING'S PAST INDUCTEES

BARTOLOMÉ DE MEDINA (1528—1581)

Metallurgist, Inventor of the Patio Process

BEN WILLIAMS (1852—1925)

First Mine Superintendent & General Manager, Copper Queen Mines, Bisbee

JACK S. FINDLAY (1874—1935) & EDWIN B. ROYLE (1904—1957)

Co-Inventors of the Mucking Machine

CHARLES E. MILLS (1867—1929)

Founder & President of Apache Powder Company & The Valley Bank

LOUIS CARYL GRATON (1880—1970)

Economic Geologist, USGS, Author, Professor Emeritus, Harvard University

INDUSTRY PARTNERSHIP AWARD— P&H INC. /JOY GLOBAL

World leader in product craftsmanship and breakthrough innovations

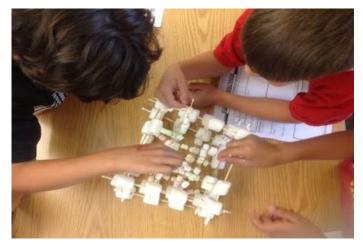
SPECIAL CITATION AWARD—ARIZONA GEOLOGICAL SURVEY

Leader in providing geological materials to support exploration for 125 years

OUTREACH CORNER by Pam Wilkinson

January-April 2013

The spring semester has been a very busy semester. I attended the February annual SME meeting in Denver where I am vice-chairman of the Minerals Education Coalition. In March I attended the PDAC meeting in Toronto and met with the leaders of Mining Matters, K-12 education group. In classrooms, over 2800 students and 30 teachers participated in presentations and hands-on activities. At Cochise Community College during the Math and Science Experience 575 students learned about mining by participating in birdseed mining activity. Plans and preparation are underway for the first mining engineering summer camp for high school students at the U of A. Over 1700 students and 70 teachers are participating in MineZone: Engineers Rock, where I am the host of the show that enters the classroom by live feed. This year the program has highlighted the variety of engineers needed at a copper mining operation. This program is in conjunction with Freeport McMoRan Copper and Gold, Inc. and Paradise Valley School district. During Imagine Engineering day in Tucson, AZ, over 50 Girl Scouts learned about mining engineering using chocolate chip cookies. When you put all the numbers together I have shared information about the mining industry by direct contact with over 5000 students and adults in 4.5 months.



Marshmallow Mine: MineZone



Imagine Engineering: Girl Scouts



Math and Science Experience: Cochise Community College



Mining Engineering: Chocolate Nuggets

			Adult	
Schools	Cities	Students	S	Dates
Copper Canyon Academy	Peoria	30	1	1/24/2013
San Luis HS	San Luis	100	2	1/29/2013
Gila Ridge HS	Yuma	29	1	1/30/2013
Liberty Traditional Elem.	Prescott	75	3	1/31/2013
Wigwam Creek MS	Litchfield	137	1	2/4/2013
Round Valley MS	Eagar	104	1	2/6/2013
Holbrook Jr High	Holbrook	100	1	2/6/2013
Verrado MS	Buckeye	179	1	2/11/2013
Continental Elem.	Green Valley	62	1	2/13/2013
Khalsa Montessori	Tucson	28	1	2/18/2013
Emily Gray MS	Tucson	160	1	2/19/2013
Liberty Traditional MS	Prescott	69	1	3/19/2013
Granite Mtn. MS	Prescott	270	2	3/21-22/2013
Walden Grove HS	Sahuarita	275	3	3/25-26/2013
Canyon Del Oro HS	Oro Valley	60	1	3/27-28/2013
Summit Academy	Mesa	170	1	4/10/2013
Centennial MS	Ahwatukee	62	1	4/12/2013
Sahuaro HS	Tucson	138	1	4/16-17/2013
Altadena MS	Ahwatukee	115	1	4/22/2013
Morenci HS	Morenci HS	130	1	4/29/2013
Morenci MS	Morenci Jr Hi	94	1	4/30/2013
Thatcher MS	Thatcher	139	1	5/1/2013
Altadena MS	Ahwatukee	123	1	5/7/2013
Marley Park Elem.	Surprise	175	1	5/8/2013

MEMBERS' CORNER

IN MEMORIUM

JOHN SEALY LIVERMORE 4/16/19-2/7/13 MFSW 1990 Medal of Merit Recipient

Livermore was an American geologist who jointly discovered four disseminated gold deposits in northern Nevada and the Carlin deposit was his first and most notable discovery. His open mind and non-reliance on preconceived geological theories and his ability to integrate facts into new geological concepts contributed to his success. His lifelong support of mineral exploration was evidenced by endowments at Stanford University and the University of Nevada.

NEW GOLD MEMBER

THOMAS D. TOOLE

President

Southwest Energy, LLC, Tucson AZ

Toole graduated from the University of Notre Dame in 1994 with an undergraduate degree in engineering, and went on to complete a Masters in Mineral Economics at the Colorado School of Mines. He worked in the construction industry in California before joining Southwest Energy, LLC in Tucson, AZ. Toole worked in multiple operations and marketing positions before his promotion to President in 2010. 520-696-9495 ttoole@swenergy.com

MEMBERSHIPS NOT RENEWED BY 6/15/2013 WILL BE REMOVED FROM THE DIRECTORY AND WILL NOT RECEIVE FUTURE COMMUNICATIONS FROM MFSW

RECOGNITIONS

MINTEC—Susan Wick, COO and Erik Johnson, Minesight Development Manager of Mintec, accepted the US Presidential "E" Award for Exports from US Acting Secretary Rebecca Blank at a ceremony in Washington DC on 5/20/2013. The Presidential "E" Award was revived by President John F. Kennedy to recognize America's exporters and is the highest recognition any US company may receive for making a significant contribution to the expansion of US exports.

Pamela A.K. Wilkinson, MFSW Outreach Coordinator is nominated for the National Mining Hall of Fame and Museum's Prazen Living Legend of Mining Award. The Prazen Award is given annually to an entity or individual for continuing commitment and successful efforts to educate the public on the importance of the minerals industry.

Charles G. Preble, 1998 American Hall of Fame Inductee, for his recent donation to the Mining Foundation of the Southwest.

HALL OF FAME BANQUET

MARK YOUR CALENDAR

The Thirty-First American Mining Hall of Fame
Awards Presentation Banquet & Fundraiser
Saturday, December 7, 2013
JW Marriott Starr Pass Resort & Spa
Tucson, AZ

CALENDAR

June 8, 2013

Arizona Geological Society
Guest Speaker: Steven Van Nort

Topic: Abstract-Gold Fever, BRE-X/Busang Story

Sheraton Tucson Hotel

5151 E Grant Road, Tucson, AZ

June 24, 2013

College of Science
University of Nevada
3rd Annual Tournament
Thunder Canyon Country Club
19 Lighting "W" Ranch
Washoe Valley, NV 89704
Contact: laddison@unr.edu, 775-682-8786

July 15 to 24, 2013

National Boy Scouts Jamboree, The Summit, Bechtel Family National Scout Reserve, VA

August 11-15, 2013

23rd World Mining Congress
"Mapping the Future: Advances in Mining Engineering"
Montreal, Quebec, Canada
www.wmc-expo2013.org

September 14, 2013

National Mining Hall of Fame Banquet Brown Palace Hotel, Denver, CO Interested members for two free tickets to attend the banquet should contact MFSW office.