

Volume 94 Number 4
Fall 2004

MINES



"We are in the business of creating the very future in which we, our students, and all humankind will live and work." John U. Trefny

Strategic Plan 2004-2014
center insert

Sea Floor in High Definition page 8
A Bob Hope Christmas page 23

The Smart Choices When You're Away from Home.

By business travelers, for business travelers, we keep pace with everything you need for business or for pleasure, including:

- Free high-speed internet access
- On site restaurant for breakfast
- Meeting space for groups up to 40
- Indoor pool, whirlpool and exercise room
- 24-hour business center

You'll find room to live at the all-suite Residence Inn. With 50% more space than other hotel rooms, it's like having a home on the road wherever you go.

- Free high-speed internet access
- Free deluxe breakfast buffet
- Free evening social hours (Mon.-Thurs.)
- Small meeting room for groups up to 30
- Indoor pool, whirlpool and exercise room



14700 W. 6th Ave.
Frontage Road
303-271-0776



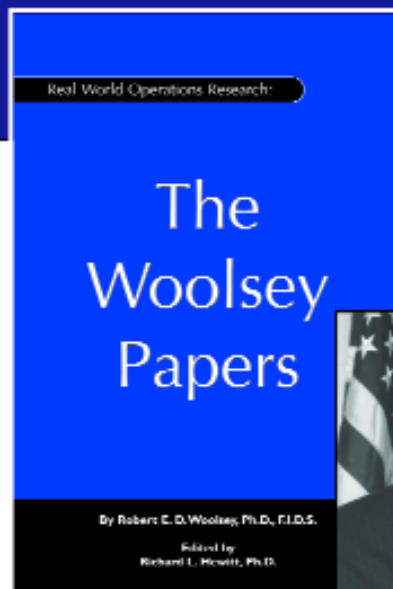
14600 W. 6th Ave.
Frontage Road
303-271-0909

ASK FOR THE COLORADO SCHOOL OF MINES (CSM) RATE!

We're just five minutes away from the Colorado School of Mines, surrounded by a variety of restaurants and near Colorado Mills Mall. Guests receive complimentary use of The Point Athletic Fitness Club.

Dilbert Meets Jack Welch

with a little Will Rogers and Mark Twain thrown in for flavor



Dr. Gene Woolsey has been a Colorado School of Mines faculty member for over 30 years. He has also been one of the most controversial, outspoken and beloved figures in the Operations Research community. **Real World Operations Research: The Woolsey Papers** collects 33 of his best articles and essays into what some would call a "How To Manual for Success." Sure, a lot of business books make similar claims but consider this:

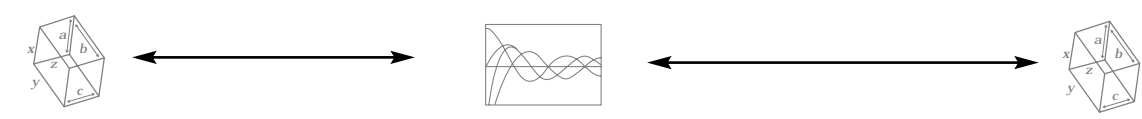
Woolsey's students (all of them CSM graduates) have generated a verified \$820 million in savings for businesses and government.

Learn what Woolsey's students know. **The Woolsey Papers** goes beyond lessons in real world problem solving giving Woolsey's unique take on teaching, marketing, consulting and working on government projects. A must read for success-oriented Miners!

Real World Operations Research: The Woolsey Papers
By Robert E. D. Woolsey, Ph.D., F.I.D.S. / Edited by Richard L. Hewitt, Ph.D.
\$19.95 (15&11) • 164 pages • 6 x 9 • paperback • ISBN: 1 931634 25 4

Order online at: www.lionheartpub.com/books

Published by **Lionheart Publishing, Inc.**
506 Roswell Street, Suite 220, Marietta, Georgia 30060
(888) 303-5639, ext. 214, fax: (770) 432-6969, e-mail: lp@lionheartpub.com



Letters	4
Notes and Quotes	5
Short Takes	6

8 Sea Floor in High Definition

Researchers examine hydrates in the deep sea

Staying Connected	10
A Letter from President Trefny	12



Strategic Plan 2004-2014
Charting the course for the next decade at Mines (see separate document)

1-24

Philanthropy at Mines	13
Calendar of Events	14
Athletics	15



People Watch
Building a future

16

On the Move	18
In Memoriam	22
A Bob Hope Christmas	23



About Our Cover:

In a special pull-out center insert, Mines presents an ambitious, visionary plan for the decade ahead.

MINES FALL 2004

Mines is published quarterly by the Colorado School of Mines and the CSM Alumni Association for alumni and friends of the School. The magazine is a merger of *Mines Magazine* (founded in 1910) and *Mines Today* (founded in 1986). The merger took place in 2000.

Comments and suggestions are welcome. Contact us by writing to MINES, P.O. Box 1410, Golden, CO 80402; or call 303-273-3294 or 800-466-9488, ext. 3294 between 8 a.m. and 5 p.m. M-F, MST; or email magazine@mines.edu

John U. Trefny, President Colorado School of Mines

Art Biddle '61, President CSM Alumni Association

Maureen Keller, Editor CSM Alumni Association

Marsha Konegni, CSM Communications Coordinator

Contributing Writers

- Les Bond**
- Jil Erganbright**
- Greg Murphy**
- Robert Pearson '59**
- Jo Marie Reeves**
- David Rein**
- Nicholas Sutcliffe**

Photography

- Jil Erganbright**
- Chip Parfet**
- Les Bond Geol E '59**
- Monterey Bay Aquarium Research Institute**

Graphic Design

Emelene Russell Advertising & Design

Printing

American Web
CPM Number # 40065056

www.mines.edu
csmaa.mines.edu/alumni

Letters to the Editor



I enjoyed reading the letter from Lou Amick about his slide rule that appeared in the Spring 2004 issues of *Mines*. My old slide rules are displayed in a glass case in my office as shown in the enclosed photo. The sign at the bottom of the case reads in red capital letters "BREAK GLASS IN CASE OF CALCULATOR FAILURE." Hopefully I will never have to follow that instruction.

Richard Waissar MSc Min '62

I receive *Mines* at my home because my son is too lazy to send his address changes to you. It's not my job!

I worked in research for almost 40 years and was delighted to read "Going to Extremes, Materials Science and Engineering" by Mark Eberhart. I saw Lawrence Berkeley National Lab credited for a photo. I worked there on accelerators for 36 years. I would really like to thank Eberhart for his excellent article.

Jim Hinkson, father of **Stephen J. Hinkson BSc Phy '91**



If you look closely, you can see that Guggenheim is at the end of the rainbow.

Correction: Grant D. Erdmann BSc Math '98 received his PhD in industrial and applied mathematics from University of Minnesota in 2003, not a master's degree as reported in the last issue.

Correction: *Rocky Mountains to the World: A History of the Colorado School of Mines*. CSM President Emeritus Theodore Bickart's name was misspelled in the history book on pages 11, 185, 202-204 and 207. His name appears as Bickert instead of Bickart.

Alumni notes & quotes

State and School Credit Unions Announce Merger

The Colorado State Employees Credit Union (CSECU) and the Colorado School of Mines Federal Credit Union (CSMFCU) announced plans to combine forces after CSM members voted their approval by a large margin in June. The merger will maintain the integrity and culture of each organization while offering greater benefits to its members.

New benefits to CSMFCU members will include online banking and bill pay, VISA debit and credit cards, and a variety of new account and loan options. CSECU members will have access to the CSMFCU's Golden location, giving all members a total of 13 branch locations.

"This merger will provide CSMFCU members with the same core values of the financial security and personal service that they've come to expect, but with access to greater resources," said Terry Leis, president and CEO of CSECU. "We look forward to other similar mutually beneficial opportunities in the future."

Jerger '95 Wins Creativity Award

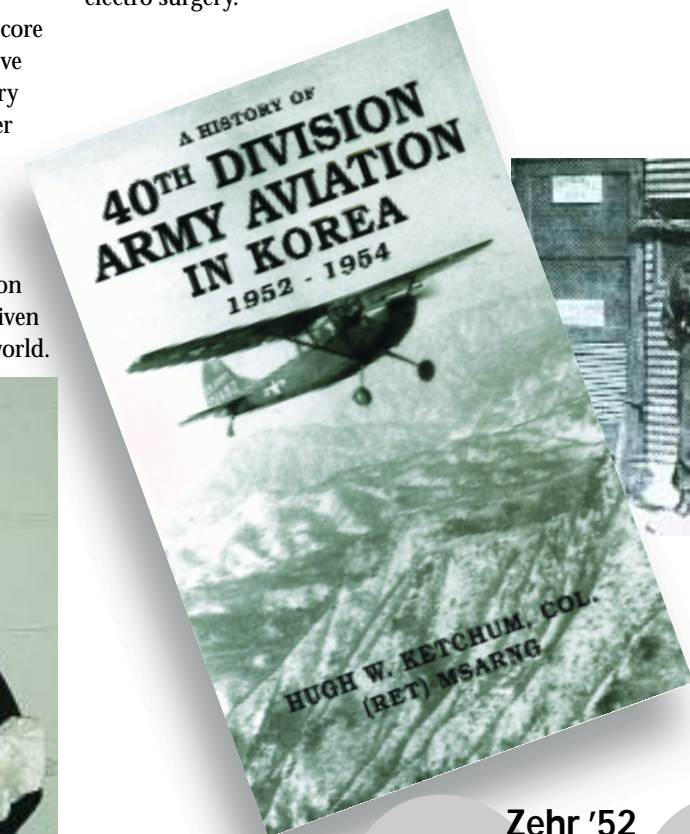
Kristen Morahan Jerger BSc Eng '95 won the 2004 Destination ImagiNation, Inc. Risogimento Award in May. The award is given in recognition of outstanding creativity that transforms the world.



Kristen and husband Matthew Jerger BSc Eng '94 and their new twins. Kristen is holding her award plaque.

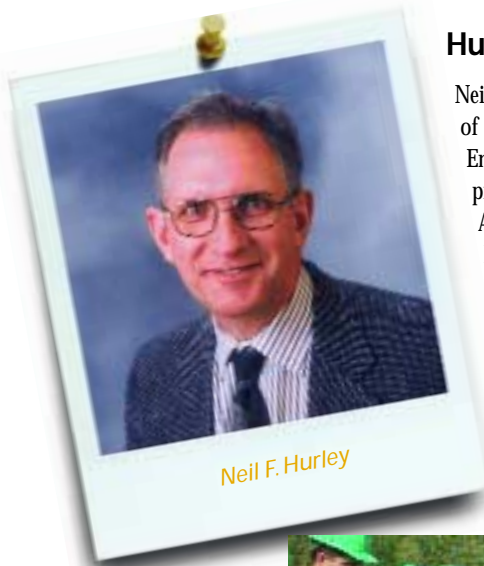
Destination ImagiNation is a nonprofit creative problem-solving program for children throughout the world. Former recipients of the award include Walt Disney, maze creator Adrian Fisher, and sculptor and engineer Arthur Ganson.

Jerger has actively participated in and developed conceptual problem-solving skills for nearly 20 years. Her dedication has led her from being a team member for Hamilton Middle School in Denver to being the holder of national and European patents. Jerger works for Valleylab, which develops electrosurgical and ultrasonic technologies. She has designed an ultrasonic surgical aspirator used to isolate, fragment and aspirate tissue bundles, used predominantly in neurosurgery to remove brain tumors. She also has patents for designs involving argon-enhanced electro surgery.



Zehr '52 Army Years Chronicled

Norm Zehr EM '52, MSc Min '56 was mentioned in a new book, *A History of 40th Division Army Aviation in Korea*. Zehr was a fighter pilot who served in Korea from 1953-1954.



Neil F. Hurley

Hurley Elected VP

Neil F. Hurley of the Department of Geology and Geological Engineering has been elected vice president by the 31,000-member American Association of Petroleum Geologists (AAPG). Hurley, who holds the Charles Boettcher Distinguished Chair in Petroleum Geology, is a past elected editor of AAPG.



RMAC Honors Murphy

Mines Sports Information Director Greg Murphy received the third annual J.W. Campbell Award in July at the annual Rocky Mountain Athletic Conference (RMAC) Hall of Fame banquet in Colorado Springs. The award, nominated and voted upon by the 14 sports information directors in the RMAC, recognizes excellence and professionalism in the field of sports information.



Greg Murphy

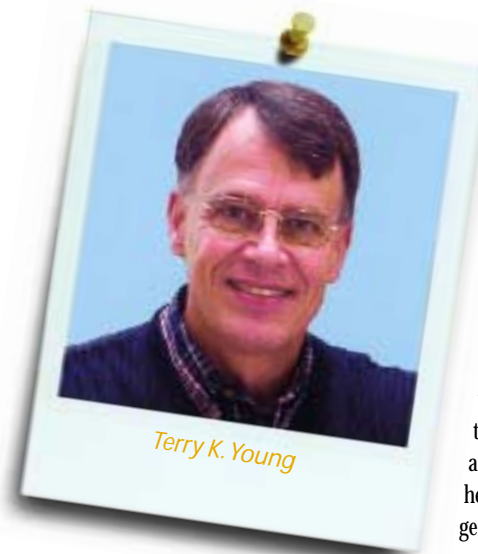
the largest-ever number of new students—approximately 800 freshmen and transfers—started the school year with the M-Climb tradition.

A Lot of Paint

More whitewash than ever covered the “M” on Mt. Zion in August as

“Silver Snoopy” to Abbud-Madrid

Angel Abbud-Madrid, associate research professor of Chemical Engineering and associate director of the Center for Commercial Applications of Combustion in Space, received the NASA Astronauts’ Personal Achievement Award (“Silver Snoopy” Award) on June 22 in Cleveland, Ohio. The award was presented by NASA astronaut Don Pettit; Dr. Julian Earls, director of NASA Glenn Research Center; and Ann Over, chief of the Combustion Flight Projects Branch at NASA’s GRC. The “Silver Snoopy” is awarded by NASA’s astronaut corps to individuals for outstanding efforts



Terry K. Young

that contribute to the success of human space flight missions.

Young for President

Geophysics Department Head **Terry K. Young MSc Geop ’77, PhD Geop ’80** is president-elect of the Society of Exploration Geophysicists, with a worldwide membership of approximately 20,000. His term begins in October at the end of the society’s annual international meeting held in Denver. Young is general chairman of the event.

Society News

Dr. Brajendra Mishra of the Metallurgical and Materials Engineering Department has been selected to serve as president of The Minerals, Metals and Materials Society of AIME in 2006. He will serve as the vice president in 2005. Currently the chair of the Extraction & Processing Division, Mishra has served on the board of directors since 2001. In addition, Mishra has been named a Fellow of the American Society of Materials International for 2004.



SHORT STAKES

How Hot Was It?

On a KUSA-TV, 9News, story that aired July 13, Mines Physics Department representatives helped anchorman Ward Lucas report the city’s 99-degree temperature. Not only did the group cook an egg under the sun, they also prepared s’mores by melting chocolate and marshmallows as the TV camera rolled. From left: Students Josh Dorr and Regina Caputo, Physics Department Program Assistant Barbara Pratt Johnson, Professor Tom Furtak, Ward Lucas and the Channel 9 photographer.



Weather News at Mines

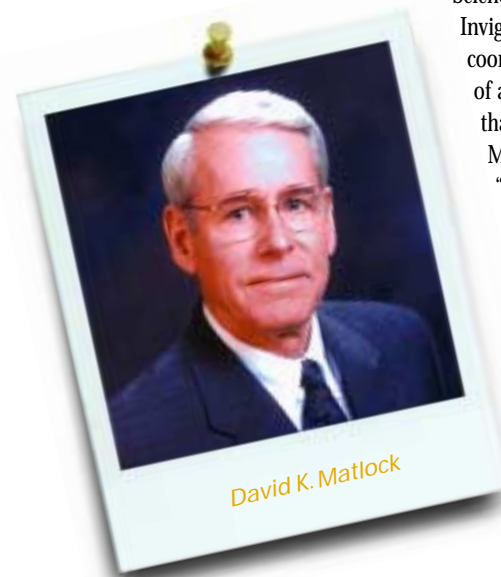
Water Research Granted \$2.69 Million

The U.S. Department of Energy has awarded \$2.69 million to fund research on “Produced Water Management and Beneficial Use,” a project that partners Mines with researchers in Montana and Wyoming, as well as colleagues at the Gas Technology Institute, Argonne National Laboratories and Stanford University.

The two-year project, initiated by the newly established Colorado Energy Research Institute at Mines, will address critical regional water issues.

U.S. Senators Hear Matlock

David K. Matlock spoke at the Materials Information Luncheon for the U.S. Senate



David K. Matlock

Caucus on Science and Technology July 7 in Washington D.C. Matlock’s presentation was part of the program “American Steel: Forging Strong Links between Materials Science and Technology to Invigorate the Industry,” coordinated by the federation of all U.S. professional societies that emphasize materials. Matlock spoke about “Partnerships to Enhance American Steel - The Role of the University.”

A member of the National Academy of Engineering, one of the highest professional distinctions accorded an engineer, Matlock

is the director of Mines’ Advanced Steel Processing and Products Research Center and is the Armco Foundation Fogarty Professor in the Department of Metallurgical and Materials Engineering.

No Dummies Here

Rob Farrington explains “Adam,” the fully instrumented mannequin in the automatic air-conditioning research center at NREL during the 2004 Energy and Minerals Field Institute for government officials, hosted in August by Mines’ Special Programs and Continuing Education.



Sea Floor in High Definition

Want to watch your favorite TV sports event in high definition? Why not your underwater research too? On one TV screen you observe characteristics of sea floor hydrates a half mile away, and on another you glance over and catch Lance Armstrong gracefully finishing his sixth straight Tour de France victory. For Mines graduate student Keith Hester BSc Chem Eng '02, this was a reality at sea.

In conjunction with the Monterey Bay Aquarium Research Institute (MBARI), Hester and Mines Professor Dendy Sloan recently embarked on a research project concerning natural hydrates in the deep sea. A hydrate is an ice-like compound composed of water, which can trap large volumes of gas, such as methane. The two-week study at the Hydrate Ridge site off the

coast of Oregon yielded results concerning the amount of methane available in natural hydrates. Natural hydrates are estimated to contain nearly twice the amount of methane found in traditional fossil fuels such as oil. "At a time when the world is starting to search for new sources of energy, it's important to remember the ocean makes up 70 percent of our Earth and we should be looking for possible sources there first," Sloan commented.

The research was done *in situ*, or in an undisturbed natural environment, using a remotely operated vehicle (ROV). Hester obtained results via a laser Raman spectrometer capable of measuring molecules remotely underwater. Hester, in a control room almost a half mile from the spectrometer, instructed

By Jil Erganbright

MBARI pilots on how to position the spectrometer as he observed on high definition television monitors. Sloan marveled at the impact of using such technology, noting, "In a way, this research method is Jules Verne's dream of scientific fiction coming true."

Hester is working on his Ph.D. in chemical engineering. His thesis focuses largely on deep sea Raman spectroscopy on natural hydrates. The research done by Hester and Sloan was funded by the National Undersea Research Program, a division of the National Oceanic and Atmospheric Administration (NOAA). Hester's work is published on the MBARI Web site under the gas hydrates section of the Raman spectrometer research. To take a closer look at Keith's work, visit www.mbari.org/raman/hydrates.htm.



ROV Tiburon is a custom-made \$6 million remotely-operated vehicle.

From left in back row, Dendy Sloan and Keith Hester of Mines, John Freeman, Chief Scientist Peter Brewer, Edward Peltzer. From left in front row: Kristen Schmidt, Alana Sherman, Sheri White, Rachael Dunk. All are associated with the Monterey Bay Aquarium Research Institute, funded by the David Packard Foundation.



The Raman spectrometer was deployed on the ROV Tiburon.

The R/V Western Flyer is a one-of-a-kind \$20 million research vessel.



Hester focused the Raman laser on a natural hydrate specimen from the control room a half mile away.



CSM Alumni Association

Officers

Arthur T. Biddle Met E '61
President
Alan J. Mencin BSc CPR '79
President-elect
Kathleen A. Altman BSc Met '80
Treasurer
Roger Newell MSc Geol '71
Secretary

Directors

Jeremy Bradford BSc Eng '03
Scott R. Clark BSc Pet '85
Vicki J. Cowart MSc Geop '77
Marshall C. Crouch III Geol E '67
Brenda J. Eckles BSc Geop '94
Hugh W. Evans EM '49
Scott Gustafson BSc Geop '77,
MSc Min Ec '79
Kimberly M. Lewis BSc CPR '92
Mike Nolan, Student Representative
Don Ott Geop E '63
Pat Phillips Met E '61
Laurence G. Preble PRE '54
Charles R. Russell Sr. PRE '54
Lori L. Stucky BSc Eng '97
Jeffrey S. Suiter BSc Geop '91

Staff

Janet Blair, Administrative Assistant
Kathy Breit, Interim Executive Director
Sarah Brinton, Student Assistant
Ginny Bruno, Clerical Assistant
Maureen Keller, Editor
Daniel Keyser, Student Assistant
Bob Pearson PE '59, Sections
Coordinator
Jo Marie Reeves, Records
Kaitlin Schmidt, Student Assistant

1600 Arapahoe Street
P.O. Box 1410
Golden, CO 80402
Office: (303) 273-3295
(800) 446-9488, ext. 3295
Fax: (303) 273-3583
E-mail: csmaa@mines.edu
www.alumnifriends.mines.edu

Send-Off Parties

One way alumni stay in touch is to host and/or attend send-off parties for incoming freshman.

In the Gulf Coast area, **Rob Jenkins '60** and his wife hosted a send-off party for incoming freshman Douglas Watson and his parents. From left, **Gordon Royce '60, Ron Doster '00, Eric Drennan '02, Dick Houston '65,** Jenkins and guest of honor, Watson.

In Wyoming, **Lisa '92** and **Bryan Mortimer '91** and **Lorraine '96** and **Michael Patton '94** hosted a dessert reception for incoming freshmen Chip Eklund and Jennifer Hanks. Back row from left, Byron Eklund, Chip Eklund, Michael Patton, Bryan Mortimer, Dennis Kosub, Jennifer Hanks, **Bill Fischer '56, Herb Price '65** and **Brian Quick '98.** Front row, Nancy Eklund, Lorraine Patton, Lisa Mortimer, **John Fraher '44, Jim '76** and **Maria Criswell '75.** Not pictured but in attendance were Fran and **Randy Pitts '78.**



Southwest

Phoenix

A group of alumni got together in Phoenix this summer to picnic and watch the Rockies beat the Diamondbacks.



Central

Chicago

In Chicago, a group of alumni gathered to watch the Colorado Rapids beat the Chicago Fire in soccer.



Metro Denver

For the second year in a row, the Alumni Association hosted a freshman move-in day picnic at the Coolbaugh House. This year, more than 300 attended including students, their families and alumni. The following Monday, alumni volunteered again to help freshman by handing out water during the "M" climb.



Join us for Homecoming and Reunions
1979, 1984, 1989, 1994 & 1999
Oct. 22-23, 2004

Friday

Golf Lectures:

The Role of the University in Energy Research
Engineering in Iraq: Civilian Infrastructure Rehabilitation
Mines Strategic Plan

Class Dinners/Receptions

Saturday

Pancake Breakfast
Homecoming Parade
Pre-game Tailgate Party
Mines vs. New Mexico Highlands
Post-game Alumni/Friends Party

Call for more information:
303-273-3295
or 800-446-9488, ext. 3295

Thank you to all who participated in the 20th annual CSMAA golf tournament.



2004 Winners from left, Dan Kleckner, John Kleckner '86, Dean Warne '84, Mike DeBerard '82.

Special thanks to:

Our corporate sponsors:

Coors Brewing
Dimension Z Golf
Stevinson Lexus

Our hole patrons:

George '80 and Kathy Breit
Coors Brewing
Golden Safeway
Mines Annual Fund
Kenneth W. Nickerson '48

Our sponsors:

A G Wassenaar Inc.
Applied Research Concepts
C & A Floor Covering
CTL/Thompson Inc.
Daniele Metal & Mineral Services
Hugh Evans '49
Graybol-Patton Company
Infinity Oil & Gas
John Lockridge '52
Miller Consulting Services
Robert E. Miller, Consultant
Nelson Pipeline Constructions
Prima Energy Corp.
Resource Solutions LLC
Royal Gold Inc.

Prizes:

Apple Vacations

Banks Insurance

CSM Alumni Association
CSM Bookstore
CSM Office of Special Programs & Continuing Education
Denver Art Museum
Denver Machine Shop
Denver Museum of Nature & Science
Dimension Z Golf
Hyatt Regency Beaver Creek
Holland America Cruise Lines
Liberty Mutual
Meyer Hardware
Steve Mooney '56
Norwegian Cruise Lines
Princess Cruises
Royal Caribbean Cruise Line
US Airways
United Air Lines
Woody's Pizza

2004 Committee:

Roy Banks
Jim Cowing '71
Greg Murphy
Dan Lewis
Doug Miller '64
Sandy Miller, Travel Society
(sandym@travelwithsandy.com)
Janet Blair
Kathy Breit
Maureen Keller

The event raises money for the CSMAA Financial Assistance Program
- more than \$106,700 so far!



Dear Colleagues and Friends:

With much gratitude for the efforts of many individuals, I am pleased to introduce the Strategic Plan for Colorado School of Mines. In the pages that follow, we share with you an exciting outline for the next 10 years. A description of the campus Facilities Master Plan, designed in conjunction with the Strategic Plan, will appear in the next issue of *Mines*.

These summary plans capture some, but by no means all, of the thinking that has brought us to this point. Implementation will require an enormous amount of further study and analysis, as well as numerous decisions regarding specific strategies and actions. Individuals and committees are already operating to this end, and more will be engaged in the coming months. In addition, the foundations for a strong marketing effort are in development.

One element of the Plan is to move Mines from a local orientation to one that expressly encompasses national and international needs. This is reflected in our goal to broaden the student base and also in the emphasis on key focus areas that build upon our existing and near-term potentials. Continued excellence in education is of paramount importance. Even as we enhance our academic programs, we will design added educational dimensions to better prepare our graduates for successful careers, leadership roles in their respective fields and responsible citizenship. All possible benefits of a residential campus—including academics, student-life activities and professional service—will contribute to an exceptional Mines educational experience.

Through our degree programs, research, and public service, Mines will become even more of a full-service provider for the segments of society we serve. Increased professional-outreach programs and enhanced technology transfer are among the planned extensions of our current portfolio. Policies, procedures, facilities and infrastructure to support research are all slated for essential improvements.

Enacting the Plan in the decade ahead, Mines will do business in new ways, as evidenced by an enhanced interdisciplinary or “whole institution” approach, as well as an increased emphasis on external partnerships. The recent Affiliation Agreement between Mines and its Alumni Association sets the stage for alumni to participate in many aspects of the Plan.

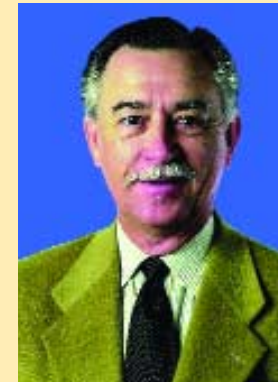
This is a critical time for Mines. Our environment and, particularly, our relationship with the State, are changing rapidly. In fact, these changes may even affect the priorities and sequencing of the Strategic Plan. Our existing resources are stretched, and there is tremendous pressure to develop new sources of support such as endowments, sponsorships and entrepreneurial initiatives. The reputation of Colorado School of Mines remains extraordinary, and the support of alumni, friends and corporate partners is more robust than ever. However, we fully realize that the School must work hard to continue to earn such support. Hence, the Strategic Plan is just one representation of an ongoing process of continuous learning and improvement.

As higher education responds to challenges, Mines will play a prominent role in developing positive solutions. Working together we will fulfill our vision for the future of this great institution.

John U. Trefny
President, Colorado School of Mines

President's Council Celebrates *TWENTY YEARS of GIVING*

20th
Anniversary
1986 - 2005



“I feel a strong responsibility to the future of the Colorado School of Mines as a repayment of a debt I owe. While at Mines, I received a great deal of support from alumni. I know that now, and I want to do my part to support the students who are on campus today. The President's Council is a great vehicle through which I can make this commitment, and every Mines grad should try to join.”

Harry J. Briscoe, Jr. '70 '72
President's Council, Charter Member

The Mines President's Council was founded 20 years ago on the principle that the School's vital mission is best served when a dedicated community of alumni and friends remains intellectually and financially invested in the institution. For the past two decades the generosity and commitment of Mines supporters have more than validated this belief.

Colorado School of Mines would be a very different school without the extraordinary contributions of President's Council members:

- Council members have created 156 of the 190 endowed private scholarships making awards to Mines students this fall.
- Eleven of the 20 endowed chairs and professorships at Mines are the product of President's Council members' gifts.
- Annual philanthropic support from individuals to Mines has grown significantly, with slightly over \$1 million in gifts recorded for the year prior to the founding of the President's Council, compared with well over \$11 million during the 2004 fiscal year.

All told, during the past 19 years 1,645 members of the President's Council have provided over \$115 million in support of the School. This sum represents more than 85 percent of all monetary gifts ever given to Mines by individuals.

To mark these *TWENTY YEARS of GIVING*, the School invites members, past and present, along with all Mines alumni and friends, to consider a special President's Council gift.

“I would like to take this opportunity to encourage all Mines supporters to commemorate this milestone anniversary by rededicating your commitment to the School,” states President's Council Chair, **Harvey Klingensmith '75**. “My vision for the President's Council during this upcoming year is one in which loyal members increase their support for the School, past members reconnect with Mines, and the ranks of first-time President's Council members swell to record numbers. I hope all Mines alumni and friends share this vision and will help to make it a reality.”

In 1986 at the close of its inaugural year, **Russell L. Wood '49**, the President's Council's first chair, noted that Council involvement had nourished a heightened sense of purpose and enthusiasm among the Mines community. He wrote that the Council had given Colorado School of Mines renewed confidence to meet the challenges that lay before it.

Twenty years later, the President's Council still imparts this confidence to the School, its students, faculty, alumni and supporters. Strong participation in the President's Council will ensure that Mines continues to flourish in the years ahead.

Colorado School of Mines recognizes alumni, parents, faculty, staff and friends who make annual contributions of \$1,000 or greater through membership in the President's Council. Gifts may be made in many forms, including cash, credit card or negotiable securities. Matching gift contributions are recognized and applied toward President's Council membership. While the President's Council places primary emphasis on unrestricted gifts, endowments and designated contributions qualify as well. For more information, contact the Office of Institutional Advancement, 303-273-3275.

October	October	November	December
07 Westside Mixer in Golden, Colo. 5-7:30 p.m., Woody's, 1305 Washington. First Thursdays. Pay own way.	Thursdays. Bookcliff Country Club, 2730 G Road, noon. For information call John Howe at 970-242-4903.	Hour. Time and place TBA.	03 Houston: Holiday luncheon at the Petroleum Club, 800 Bell St., #4300, 11:30 a.m.
13 Dallas, Texas, Happy Hour. Place and time TBA.	Denver Young Alumni Pub Tour: The Bank, 2239 E. Colfax, Denver. 5-7:30 p.m.	16 Denver Young Alumni Pub Tour: Mike O'Shays, 512 Main St., Longmont. 5-7:30 pm.	08 Spokane, Wash., Northwest Mining Conference Alumni Breakfast, 7 a.m., Location TBA
14 Golden, Colo., Lunch Bunch: second Thursdays at Buffalo Rose 1119 Washington, 11:30 a.m. Pay own way.	22-23 Homecoming and REUNIONS for classes '94, '99, '89, '84, '79	18 Grand Junction, Colo., section luncheon (see Oct. 21 for details).	Denver Young Alumni Pub Tour: Governor's Park, 672 Logan St., Denver. 5-7:30 p.m.
Downtown Denver Mixer: second Thursdays. Marlowe's, 211 16th Street, 5-7:30 p.m. Pay own way.	November	26-27 Basketball event at University of Nebraska-Omaha. CSM vs. South Dakota, 3 p.m., Friday. CSM vs. UN-O, 8 p.m., Saturday. Call for details (800-466-9488, ext. 3959).	09 Golden, Colo. Lunch Bunch (see Oct. 14 for details)
16 Durango, Colo., football event at Ft. Lewis College. Call Bob Pearson '59 for information, 800-446-9488, ext. 3959.	04 West Side Mixer in Golden, Colo. (see Oct. 7 for details)	December	Downtown Denver Mixer (see Oct. 14 for details)
21 Grand Junction, Colo., section luncheon: third	11 Golden, Colo. Lunch Bunch (see Oct. 14 for details)	02 Westside Mixer in Golden, Colo. (see Oct. 7 for details)	14 Dallas, Texas, Happy Hour. Details TBA.
	Downtown Denver Mixer (see Oct. 14 for details)		16 Grand Junction, Colo., section luncheon (see Oct. 14 for details).

Winter Carnival is scheduled for Jan. 22 at Eldora, Colo. Save the date!

For the most up-to-date information on what's happening in your area, check the website at www.alumnifriends.mines.edu and click on "News and Events" (top of page). Scroll down to the calendar.

FK Frontier-Kemper
Constructors, Inc.

Excellence in Heavy Civil & Mining Construction



PO Box 6690
Evansville, IN 47719
(812) 426-2741 Phone
(812) 428-0337 Fax
www.frontierkemper.com
information@frontierkemper.com

Gifts of APPRECIATED PROPERTY ARE APPRECIATED ...

... and can provide for you and the School, for example:

- You may receive a tax deduction for the full market value of your property.
- You may avoid any taxable capital gain.
- You may be able to provide lifetime income for yourself and your family.
- You may realize estate-tax savings.
- With gifts of \$1,000 or more in value, you are recognized as a member of the CSM President's Council.

Undeveloped, revenue generating or environmentally sensitive land may be accepted by the CSMF Property Management Corp. The unique expertise and talents of the CSMF Property Management Corp. could help relieve you of the liability of property with environmental issues.

Gifts of property, stock or other capital assets can be used in making a charitable gift to your alma mater. As with any gift to the School, you will have the satisfaction of knowing that you are providing for future generations of students.

**For more information,
contact the Managing Director, CSM Foundation Inc.
Linda M. Landrum at (303) 273-3142**

CSM Athletics fall 2004

Hannah Davey Becomes First National Champion in Mines History

By Greg Murphy, Sports Information Director

CSM has a rich history of athletics and junior Hannah Davey added to that history May 29 at the NCAA Division II Outdoor Track and Field Championships at Hilmer Lodge Stadium at Mount San Antonio College in California.

It was there that Davey became the first female athlete and the first track and field athlete in School history to win a national championship when she won the 3,000-meter steeplechase in a School-record time of 10:33.72.

CSM has sponsored women's athletics since the 1978-79 season and there are records for men's sports, such as football, dating back to 1888.

Davey's time was more than three seconds better than the runner-up and was 28 seconds better than her time in the preliminaries one day earlier in which she recorded the fourth-best time out of the 18 qualifiers. The top 12 times qualified for the finals and included athletes from Adams State and CU-Colorado Springs who had defeated Davey in the same event less than a month earlier.

"I was really nervous because I had never been at a meet that big before and that was only the fourth time I have run that race in competition," Davey said. "I was afraid I was going to trip over the barriers."

The steeplechase is one of the more unique and grueling events in track and field as it combines running with jumping over a barrier and water pit. "I thought it would be more interesting than running around loops all the time," Davey said. "I like to jump around and run hills and I thought I would be good at the steeplechase."

Davey did not have much time off to rest. She continued to train throughout the summer in preparation for the 2004 cross country season.

Davey and her teammates will be out to improve upon last year's most successful season in School history.

In 2003, the squad finished fifth at the North Central Regional Championships to earn a berth at the NCAA Division II National Championships for the first time in program history and placed 14th. Davey was the second Oredigger to cross the finish line and recorded a 55th place finish in the overall standings.



People *watch*

Appraisals

ELLIS INTERNATIONAL SERVICES, INC.
Geology • Economics • Appraisals
TREVOR R. ELLIS '78
Mineral Economist
Certified Minerals Appraiser 1994-7
Certified Professional Geologist 6740

1020 MAGUIRE ST.
DENVER, CO 80202 3117-1245
Ph: (303) 891-1383
Fax: (303) 355-3151
www.ellis-international.com

• Property Value Assessments
• Leasing Documents
• Mineral Claims
• Lease Agreements

Consultants

Decision Precision
Training and Assistance in Risk and Economic
Decision Analysis and Project Risk Management
JOHN SCHUYLER CAM, CMA, CMC
PF, CCF, CRM, RMP
CSM '72 '77 CU '77
(800) 214-3916
(303) 893-0067
fax: 893-2827

Aurora, Colorado
john@maxvalue.com
http://www.maxvalue.com

DAVID J. DUNN
Metallurgy/Materials Consulting
MET ENG. CSM 1959

30 Years Industrial Experience Current Passport
French, Spanish

930 Mountain View Dr.
Leadville, CO 80451 (719) 486-0838

EARTH SCIENCE SOFTWARE INFORMATION
Gibbs Associates
P.O. Box 706 Phone & Fax: 303-444-6032
Rouder, CO 80306 mining@miningsoftware.com
www.miningsoftware.com

TEAM
ENGINEERING & MANAGEMENT, INC. Bishop, CA

- Equipment Maintenance Cost Control
- Permitting and Environmental Regulatory Compliance
- Geomonitoring Studies
- Geological Services

781-417-1133
Walt Pachucki, President www.team-bishop.com

Contractors

Howell Construction
550 Tapan St. Denver, CO 80204
(303) 825-6257 • Fax: (303) 899-4786
www.howellconst.com

Bob Howell '39 • Jim Howell '66

Annual Professional Ad Rates

1 inch	2 inch	3 inch	4 inch
\$220	\$332	\$485	\$650

Add \$10 per inch for color.

One year of ads includes publication in four issues of *Mines* magazine plus the annual directory.

Building a Future

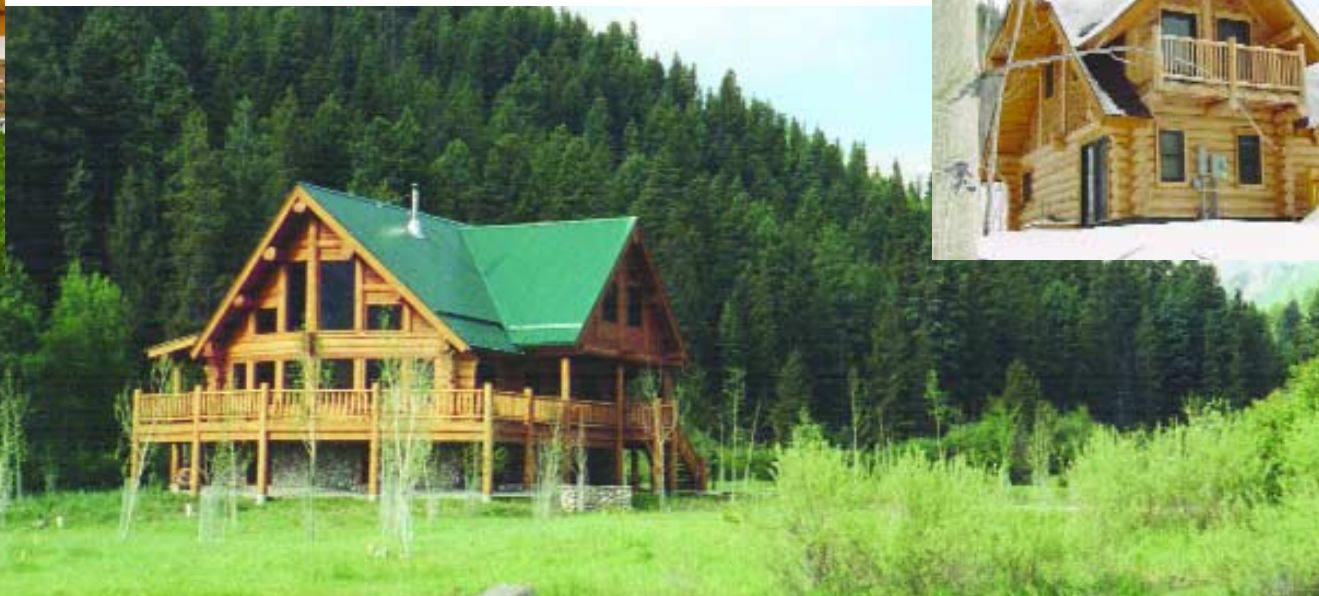
If it's a log cabin you want, **Eric Williams BSc Eng '95** might be the man to see. "Designing and building with logs is a unique niche," says the co-vice president of GreatLand Log Homes in Gunnison, Colo. "In design, it's wood, wood, wood."

Williams, as a partner in the family business, has built a 700-square-foot cabin in Taylor Park, Colo., a 6,000 square-foot-home in Salida, Colo., and most sizes in between. In addition to local Colorado projects, his company has projects in Arizona, Texas, Massachusetts, Pennsylvania and Rhode Island as well. Recently, the company has also developed log home kits.

GreatLand Log Homes was founded by Eric's father in 1991. Williams worked at the family business during summers, gaining experience in design, drafting and carpentry. "Upon graduating, I wanted to get some 'real world' experience, which I felt would be good for me and would develop more depth to my experience and qualifications," he says. He worked at an engineering consulting firm in Vail, Colo., and another in Texas. But, he continues, "In 1997, I was beginning to feel a severe deprivation of the mountains, so I jumped on the opportunity to move back to Gunnison and join the family business. As partner and vice president, I have a large variety of responsibilities ranging from management to technical drawings. I received my Professional Engineering license in 2003, which has been a valuable asset and adds another level of credibility to our designs and projects."



Eric Williams (at far right) with father, Bill; mother, Lana; brother, Zane; wife, Kathy; and sister-in-law, Heidi.



Working with family has its pluses. "We generally have extremely open communication, which leads to an honest and very productive atmosphere," Williams notes. Of course there's always the threat of seeing too much of your loved ones. "But overall it's very rewarding."

Williams says his education has served him well. "Mines stresses hard work and quality in their curriculum, professors and classes," he says. "This prepares you in a significant way for future work – productivity, working with people, learning things you're not yet proficient in. Mines really cultivates professionalism and excellence. At Mines you 'learn how to learn' and it stays with you for a lifetime, which is valuable because you never quit learning and improving."

Owning a small business requires a person to constantly expand one's knowledge. In addition to understanding wood, with its ability to lose or gain moisture with changing conditions, Williams has to understand and use concrete, stone masonry, steel, structural settling jacks, floating walls and more. "It's a challenging and rewarding career," he says.

Environmental Consultants

Compliance Partners, Inc.
Colorado • Wyoming

Environmental Regulatory Compliance Specialist

- Air Quality Permitting and Modeling
- Water Quality—Permitting, SPCC Plans, Stormwater
- Regulatory Compliance Management and Sampling
- EIS Support and Regulatory Negotiations

Cory McFadden, P.E., Principal BS CPR '81 MS '85
Susan McFadden, Treasurer MS CPR '86 PhD Min En '92
Dawn Cullley, Project Engineer, BS CPR & Clean '90

16955 Pecos Circle, Fort Collins, CO 80524 (970) 792-5832
1282 Yellowstone Road, Cheyenne, WY 82009 (307) 634-6587
www.compliancepartners.com

RIDOLFI Inc.

- Colin Ridolfi, P.E., 1980
- Bruce Ridolfi, P.E., 1978
- Colin Magowan, P.E., 1987

1411 Fourth Avenue
Suite 170
Scotts, WA 98101

706-687-7794 • info@ridolfi.com • www.ridolfi.com

Steffens and Associates, Inc. STEVEN D. STEFFENS, President
MS Min Eng '71; MS Env Sci & Eng '85
P.E. in Colorado, Idaho, Nevada

420 Aspen Place
Golden CO 80403 1936
303.216.1801
Fax: 303.273.8984
steffensinc@msn.com

Water Resources,
Environmental,
& Mine Reclamation
Engineering

Exploration

MARSHALL C. CROUCH III

PRESIDENT – GEOLOGICAL ENGINEER
WHITE EAGLE EXPLORATION, INC.

621 17th Street
Suite 2255
Denver, CO 80293

Office: 303-295-2080
Fax: 303-215-9174
Home: 303-215-9103
E-mail: mcrouch@whiteagleexploration.com

ROBERT A. METZ '55
MINING GEOLOGIST

EXPLORATION
EVALUATION
PROJECT MANAGEMENT

1729 South Desert Vista Drive
Tucson, AZ 85746-7549 Phone/Fax: (520) 885-2877
e-mail: ram@ultraev.com

**THANKS TO ALL OUR
ADVERTISERS!**

Exploration cont.

Kinnickinnick Exploration Inc.
Onshore S. La. Experience
3D & 2D Prospect Generation
Steven S. Anderson, Geop. Eng.'75
133 S. Audubon, Lafayette, LA 70503
337-261-0211 • Fax 337-261-0218

Financials

CORNERSTONE CAPITAL ADVISORS
Investment Portfolio Management
Peter Gallic, BIA Harper Gallic
85 BA '79, CU, MBA Fin (DU) 85 CU '90 (75), CU, MBA (UB)
www.comstonecapadvisors.com 2465 Wadsworth Boulevard
E-mail: pgalic@csad.net Lakewood, CO 80234
Tel: 303.432.8668 Tel. Fax: 303.277.8668

Geophysics

Hasbrouck Geophysics, Inc.
Mining, Groundwater, Environmental & Engineering
James C. Hasbrouck
Registered Geophysicist
2307 James Street
Montrose, CO 81401
USA
Phone/Fax: (970) 282-8189
Cell Phone: (970) 289-3045
E-Mail: jim@hageo.com

MICROGEOPHYSICS CORPORATION
* ENGINEERING GEOPHYSICS * ENVIRONMENTAL GEOPHYSICS
MARY ANN PORE DAVID BUTLER
PHONE: (360) 464-0169
FAX: (360) 424-0807
INNOVATIVE SOLUTIONS SINCE 1974

Metallurgical Engineering

FRED H. SCHWARTZBERG, P.E. '53
JOHN N. SCHWARTZBERG, P.E. '88
Metallurgical Engineers
Rocky Mountain Engineering and Materials Technology, Inc.
An Engineering/Consulting Firm
7177 South London Way, Suite H
Denver, Colorado 80231
(303) 296-8960 Fax: (303) 296-8990
www.rmteinc.com

Mining

Matheson Mining Consultants, Inc.
VIBRATION CONSULTING
Seismic Monitoring and Modeling
Liability Protection
Public Relations
Regulatory Compliance
Seismograph Lease and Sales
Inspections & Damage Claim Investigations
Blast Design, Seminars...
www.mathesonmining.com
2801 Youngfield St., Ste. 171 Golden, CO 80401-2255
(303) 458-5638 (303) 458-5639 Fax

GROSVENOR ENGINEERING COMPANY
David E. Krebs E.M. '66
709 W. Littleton Blvd.
Littleton, Colorado 80120 Mining &
Office: (303) 796-0181 Geological Consultants

1947
John P. Cogan EM, MSc Min '50 is retired in Colorado Springs, Colo.

1955
Horacio B. M. Aycardo PRE is retired in Rizal Province, Philippines.
Joseph L. Harbison PRE is retired in Edmond, Okla.

1958
Emmerson Kemp Met E is retired in Tucson, Ariz.

1959
Lary G. Cahill Met E is retired in Ocean View, N.J.

1963
C. Thomas Caves EM is a financial adviser for UBS Financial Services Inc. in Carmel, Calif.

1966
J. Stephen Wagner PE is manager of engineering for SND Energy Company, Inc. in Dallas.

1968
Thomas S. Elliott PE is chief operating officer with Rock Energy Partners in Houston.

1970
Harry J. Briscoe, Jr. BSc Geol, MSc Geol '72 is an independent consultant in Humble, Texas.
Gary R. Steele BSc Met, MSc Min Ec '75 is president and owner of Steele Capitol Advisors, Inc. in Centennial, Colo.

1971
Carlos E. Mateos BSc Pet is an independent consultant in Houston.
Paul E. Thompsen BSc Met is technical director for Aker-Kvaerner in Tucson, Ariz.
Edwin Dale Thompson BSc Pet is a reservoir engineering adviser for Noble Energy Inc. in Houston.

1972
Thomas F. Hamlyn BSc CPR is retired in Kherson, Ukraine.

1973
Don G. Beesley BSc Math is an independent consultant in Erie, Colo.
Kent M. Crites BSc CPR is technical sales manager for EnviroKinetics Inc. in Boulder, Colo.
Rodney D. Hunley MSc Math is manager of systems support for P2 Energy Solutions in Denver.

1974
William Chirnside EM is retired from the U.S. Geological Survey in Lakewood, Colo.

1975
Daniel T. Reineke BSc Pet owns Daniel T. Reineke, P.E., in Oklahoma City.

1977
Christopher C. Traeger Geop E, BSc Geop is a geophysicist with Plains Exploration and Production in Los Angeles.

1978
Salvador Gonzalez BSc Met owns Spanish Interpreting of Colorado in Westminster.
Joseph Kuchinski BSc CPR is an asset manager for Duke Energy Field Services in Greeley, Colo.

1980
LecClier Smith BSc CPR married Fred Kelly April 20 in Kauai, Hawaii.
Catherine V. Woldow BSc Geol, MSc Env Sc '90 is environmental health and safety program manager at the University of California at Santa Cruz.
Troy A. Hoefler BSc Pet is a senior staff reservoir engineer for Pioneer Natural Resources in Dallas.

1981
Gregory A. Arnster BSc CPR is president of Avalanche Oil & Gas Consulting Inc. in Colorado Springs, Colo.
Ann E. Hanson BSc Geop is new category development director for Igloo Products Corp. in Houston.

1982
Gregory L. Griffitt BSc Eng is lieutenant commander and maintenance officer for the U.S. Navy in Atsugi, Japan.
Brian Johnson MSc Min Ec is director of energy and utilities, Asia Pacific, for PricewaterhouseCoopers in Melbourne, Australia.

Technologies in Centennial, Colo.

1982
William Pincus MSc Geol, MSc Min Ec '86 is president, CEO and on the board of directors of Reliant Ventures in Vancouver, B.C., Canada.

1986
Peter H. Kendrick BSc Geop is co-president of Whipken Development LLC in Reno, Nev.
Patrick J. McGee BSc Geop is an electrical avionics engineer for The Boeing Company in Everett, Wash.

1987
Dan BSc Geop and Jill Kristan Donoho BSc CPR '88 announce the

birth of daughter, Jaclyn Danielle, Sept 26, 2003. Jackie joins big sister Victoria (Tori), 2. Dan is the managing partner of Donoho Oil & Gas Consultants LLC.



Troy A. Hoefler BSc Pet is a senior staff reservoir engineer for Pioneer Natural Resources in Dallas.
Craig H. Schurig BSc Pet is head football coach football for Washburn University in Topeka, Kan.

1988
Gregory L. Griffitt BSc Eng is lieutenant commander and maintenance officer for the U.S. Navy in Atsugi, Japan.

1989
Bradley R. Blair BSc Geol, M Eng Min '93, MSc Min Ec '04 is a research professor in the Center for Commercial Applications of Combustion in Space at CSM.
Timothy A. Hylton BSc Met, PhD Met '94 is general manager of quality assurance of industrial products for Maverick Tube Corporation in Chesterfield, Mo.

Timothy P. Lane BSc Geop is a senior geophysicist for the Forest Oil Corporation in Denver.

Jeffrey P. Quarantino BSc Eng is a structural engineer for Burns & McDonnell in Houston.

Monica Steikunas-Griffitt BSc CPR is an environmental project manager and a civilian employee with the U.S. Army Corps of Engineers in Japan.

1989
Bradley R. Blair BSc Geol, M Eng Min '93, MSc Min Ec '04 is a research professor in the Center for Commercial Applications of Combustion in Space at CSM.

Timothy A. Hylton BSc Met, PhD Met '94 is general manager of quality assurance of industrial products for Maverick Tube Corporation in Chesterfield, Mo.

1990
Anthony P. Gangemi BSc Eng, MSc Env Sc '93 is an associate attorney for Wiggin and Dana LLP in New Haven, Conn.

Mark K. Reeves BSc Pet is a reservoir engineer for Shell International Exploration and Production in Muscat, Oman.

1991
William L. Bahn BSc Phy, M Eng Engr Sys '04 is a senior engineer for Black Forest Engineering in Colorado Springs, Colo.
Jaime A. Guzman BSc Met, MSc Met '96 received his MBA in 2004 from The Wharton School of the University of Pennsylvania. He is a senior financial analyst for Honeywell, Inc. in Norristown, N.J.

Steven R. Klimowski BSc Geop is an energy analyst for project development for Trimont Energy Services, Inc. in Houston.

1992
Victor T. Massey BSc Eng is the product manager for Trinity Glass in Orting, Wash.
Penny J. Pettigrew BSc Chem was promoted to senior scientist by Morgan Research for her work in support of the Materials Science Research Rack International Space Station microgravity payload at

NASA's Marshall Space Flight Center in Huntsville, Ala.

1993
J. Russell Cirillo BSc Eng is an environmental engineer consultant for SECOR International, Inc. in Golden, Colo.

Mary C. Griggs MSc Env Sc, P.E., is a senior project manager/remediation engineer at Science Applications International Corporation in Lakewood, Colo.

Michael G. Lindsey BSc Met is general sales manager of bar products for the Chaparral Steel Co. in Midlothian, Texas.

Jennifer L. Schwarz BSc CPR is an extruder manager for the International Paper Company in Pine Bluff, Ark.

1994
Catherine C. Bedwell BSc CPR is a staff facilities engineer for Pioneer Natural Resources in Irving, Texas.

Holly E. Bellmund MSc Env Sc is manager of engineering for RMC Industries Corp. in Decatur, Ga.

Sombun Charoenvilaisiri MSc Met is assistant professor at King Mongkut's University of Technology Thonburi in Bangkok, Thailand.

W.J. "Johnny" DeCooman Jr. MSc Min Ec is vice president of Mining and Metals Advisory, a division of Standard Bank Group in New York City.

Jaime A. Guzman BSc Met, MSc Met '96 received his MBA in 2004 from The Wharton School of the University of Pennsylvania. He is a senior financial analyst for Honeywell, Inc. in Norristown, N.J.

Matt Jerger BSc Eng and Kristen Morahan Jerger BSc Eng



'95 welcomed twins Nils Pdraig and Elizabeth Rae March 5. Matt is senior product support engineer at SpectraLink. Kristen is product development process champion at Valleylab. They live in Brighton, Colo.

Michael A. McDougall BSc Pet is a senior petroleum engineer for Nautilus Resources LLC in Denver.

Blaise S. Mo MSc Env Sc is a criticality safety representative for Fluor Hanford in Richland, Wash.

Toshisuke Ozawa MSc Env Sc, PhD Env Sc '02 is a researcher at the National Institute of Advanced Industrial Science and Technology in Japan. He studies sustainable production and consumption issues with a focus on the development of decision-making tools.

Eric Douglas Wilson BSc CPR, MSc Eng & Tech Mgmt '04 is manager of technology solutions for Integrated Industrial Technologies in Denver.

1995
Maria Angela Capello MSc Geop is executive director of the Alumni and Friends Association at the Universidad Central de Venezuela.

Linda G. Gaines BSc CPR is a PhD candidate at University of North Carolina at Chapel Hill.

Pedro J. Ortega BSc CPR owns Pecarolas CA in Venezuela.

Lauren L. Torok BSc Math is project manager for The Schneider Corporation in Indianapolis, Ind.

Jessica A.L. Verizzo BSc CPR is a product quality engineer for Dell in Austin, Texas.

1996
Daniel J. Cutting BSc CPR is senior processing engineer for Nana-Colt LLC in Anchorage, Alaska.

Gregory J. George BSc Geop is a project engineer for Colorado Springs Utilities in Colorado Springs.

A Byte Above, owned by Jennifer Glennon BSc Met, MSc

Natural Resources

NEXGEN
"The Next Generation of Natural Resources"
Charles S. McNeil, P.E.
President
NextGen Resources Corporation
5300 S. Parker Road, 16th Floor
Aurora, CO 80004
Tel. 303-731-9250
Fax 303-731-9210
e-mail: csm@nexgen-groups.com

Petroleum

MILLER AND LENTS, LTD.
INTERNATIONAL OIL AND GAS CONSULTANTS
Stephen M. Hamburg
(P.E. '77)
1100 Louisiana St., 27th Floor Houston, TX 77002
Phone: 713-308-0349
Fax: 713-854-0914
shamburg@millerandlents.com

HALEY ENGINEERING INC.
PETROLEUM CONSULTANTS DOMESTIC & INTERNATIONAL
5601 SOUTH BROADWAY, SUITE 300
LITTLETON, COLORADO 80121
John D. Haley '48
President
Phone: 303-785-8578
FAX: 303-785-5068

MALKIEWICZ HUBNI ASSOCIATES
Workbooks/Watermark Consultants
A client oriented consulting firm providing practical solutions to resource management problems.
Joe Hines
Steve Skrus (30) Ken Schaeffer
14142 Denver West Hwy., Ste. 150
Lakewood, CO 80401
Phone: 303.277.0278
Fax: 303.277.0287
www.mhaflow.com

Employment Opportunity

Want to work and live in Golden?

Questa Engineering Corporation, a growing industry leader in International Petroleum Consulting, located in Golden, Colorado, has an employment opportunity for a Reservoir Engineer with 5+ years of experience. Qualifications include experience in reservoir analysis and reservoir simulation. CBM experience desired. Additional information about Questa Engineering can be found on www.questa.com

Want to know what alumni events are happening in your area? Check the website: alumni.friends.mines.edu "News and Events"

Petroleum cont.

SERVIPETROL LTD.
 International Petroleum Consultants
 Independent Oil and Gas Producers
ROBERTO AGUILERA
 M.Eng. '71, Ph.D. '77

Naturally Fractured Reservoirs
 Log Interpretation • Well Test Analysis
 Performance Forecasts
 Reservoir Modeling
 Economics
 Petroleum Short Courses

736 6 Avenue SW, Suite 1640
 Calgary, Alberta, Canada T2P 3T7
 Tel: (403) 266 3535 Fax: (403) 264 8397
 http://www.servipetrol.com
 email: aguilera@servipetrol.com

Remote Sensing

SANDRA L. PERRY
 MSc Geol. '85

Satellite Image Analysis & Processing
 Photogeology • Training • GIS

Perry Remote Sensing LLC sandraper@pm.inco.net
 22 Sedgwick Dr. Phone: (303) 761-7777
 Englewood, CO 80113 Fax: (303) 761-7778

Software

MINE SIGHT
 PAST PRESENT FUTURE

An integrated system offering the maximum flexibility and power for geologic modeling, mine planning, and mine evaluation which can be applied to all types of mines (underground, open pit, and strip mines).

MINTEC, Inc. employs a professional staff of mining engineers, geologists, and technicians available to provide maintenance, training, and technical support for MineSight as well as offering a full array of consulting services to the mining industry.

9544 East Fl. Lowell Rd.
 Lusk, WY 82501-1015
 Tel: 307.795.3891
 Fax: 307.325.2588
 E-mail: market@mintec.com
 URL: www.mintec.com

TECHBASE®

Engineering Software

- ~ Database Management
- ~ Maps, Cross Sections & Drill Logs
- ~ Modeling & Statistics
- ~ Open-Pit & Seam Mining
- ~ Interactive 3D Visualization
- ~ And more, all in one software package
- ~ Complete Training, Support & Consulting

Michael Norred '78

134 Union Blvd, Suite 640, Lakewood, CO 80228
 www.techbase.com - 303-980-5200

Looking for a job? Try the job listings at
www.alumnifriends.mines.edu

Met '98 and her husband, has been designated as one of only two CompTIA A+ Authorized Service Centers serving Southern Colorado and was named Best Computer Store by *The Gazette* in its 10th annual "Best of the [Colorado] Springs" section.

Scott A. Goodwin Jr. BSc Pet is a petroleum engineer for the Questar Corporation in Denver.

Eleonora A. Lein-Stevens MSc Min Ec is a planning engineer for Occidental of Elk Hills Inc. in Tupman, Calif.

Diana M. Light BSc Eng is a senior aerospace engineer for the Lockheed Martin Corporation in Sugar Land, Texas.

Brian D. Stevens BSc Eng is a systems administration consultant for STEVENS.COM Inc. in Houston.

Jennifer S. Swanson MSc Geop owns Jennifer Swanson Professional Organizing in Chanhassen, Minn.

1997

Nancy C. Ballout BSc CPR is a staff engineer for Philadelphia Gas Works in Philadelphia.

Robert G. Benson PhD Geol is a professor of geology, and geology and GIS program coordinator at Adams State College in Alamosa, Colo.

Andrea C. Blaine BSc CPR is a math and pre-engineering instructor at Bear Creek High School in Denver.

Dickie P. Smith BSc CPR, MSc Env Sc '04 is president of Dickie Smith Enterprises Inc. in Snyder, Colo.

Aaron R. Spencer BSc Phy is a sales representative for Mutual of Omaha in Aurora, Colo.

Jennifer A. Van Dinter BSc Geol is manager of investor relations for the Newmont Mining Corporation in Denver.

1998

Thitisak Boonpromote MSc Min Ec, PhD Min Ec '04 is a mining

and petroleum engineering lecturer at Chulalongkorn University in Bangkok, Thailand.

Hirofumi Yamamoto MSc Pet is a reservoir engineer for Oxy USA Inc. in Houston.

1999

John J. Brinks BSc Pet, MSc Pet '02 is a petroleum engineer for U.S. Bank Denver.

Tracy L. Copp BSc Chem, MSc Mat Sc '01 is a materials and process engineer for United Space Alliance in Indian Lake, Fla.

Bradley R. Crume BSc Phy, MSc Engr Sys '04 is a development engineer for ITN Energy Systems in Littleton, Colo.

Christopher A. Jarratt BSc Eng is a captain and weapons officer in the U.S. Air Force at McChord AFB, Wash.

Edward J. McDonald IV BSc Geol is a project engineer for Vector Colorado, LLC in Golden, Colo.

Tim Niznik PhD Min Ec was awarded the Airline Group of the International Federation of Operations Research Societies prize for best innovation for his paper "Efficient Algorithms for Overhaul Task Scheduling."

Roy E. Pfaltzgraff III BSc Math & Comp Sci is a math teacher for Lone Star Schools in Otis, Colo.

2000

Chris L. Baker BSc Eng, MSc Engr Sys '04 is a PhD student at CSM.

Jarrold R. Clark BSc CPR is a post-masters researcher for the Los Alamos National Laboratory in New Mexico.

Geno L. Fallico BSc CPR is a process engineer in DNC diffusion process engineering for Freescale Semiconductor in Cedar Park, Texas.

David A. Naibauer BSc Econ, MSc Eng & Tech Mgmt is a project engineer for Edward Kraemer & Sons in Denver.

Matthew J. Willeford BSc Min

is worldwide service manager for Ingersoll-Rand Company in Garland, Texas.

2001

William D. Edwards BSc Math & Comp Sci is a statistical analyst for the Colorado Department of Labor & Employment in Denver.

Mark W. Elliott BSc Pet is a completion engineer for ChevronTexaco in Lafayette, La.

Shelan M. Golightly BSc Pet is an engineer for Maverick Stimulation Company LLC in Fort Morgan, Colo.

B. Aaron Kelley BSc Math & Comp Sci is lead application developer in the Eagle Division for Tyler Technologies in Lakewood, Colo.

Jeremiah P. MacSleyne BSc Mat & Mat Eng and Amelia Carus BSc Met & Mat Eng were married



October 2003. They are pursuing PhDs at Carnegie Mellon University. Jeremiah studies materials science engineering and Amelia studies engineering and public policy.

Christopher M. Reidinger BSc Eng is a student at Denver Seminary.

Jennifer (Kramb) Rivers BSc Min is a captain in the U.S. Army serving with the 1st Infantry Division in Tikrit, Iraq.

Craig W. Sabol BSc Math & Comp Sci is an administrative assistant for Waldron & Company in Seattle.

Tracy Stotler BSc Eng and Curtis Perry BSc Eng '02 were married August 2003 in Buena Vista, Colo.

Roger N. Wagerle MSc Geol is a geoscientist for BP in Houston.

Gina Vaccari BSc Chem Eng and Jason Mabe BSc Eng '96 were

married July 2003.

2002

Zaresh Atakhanova PhD Min Ec teaches at the Kazakhstan Institute of Management.

Eric C. Berg BSc Eng is a systems engineer for Scientific Applications International Corp. in Longmont, Colo.

Gwendolyn E. Eberhart BSc Eng is a civil engineer for the city of Durango, Colo.

Brian A. Ellis BSc Phy, MSc Engr Sys '03 is a senior systems engineer in advanced information systems for General Dynamics in Bloomington, Minn.

Abigail Pagal BSc Eng is a second lieutenant and a developmental engineer in the U.S. Air Force at Edwards AFB, Calif.

Stephen Redak MSc Geol is a geologist for Newmont Mining Corporation in Midas, Nev.

Dustin S. Rice BSc Chem Eng is a staff engineer for Hargis & Associates in San Diego.

Jennifer E. Rupp BSc Eng is a civil engineer for the U.S. Bureau of Reclamation in Denver.

Magdalena A. Sekulski BSc Mat & Mat Eng is a quality coordinator and project metallurgist for Steel Dynamics Inc. in Avon, Ind.

Kyle C. Tingle BSc Eng is a maintenance engineer for CEMEX in Lyons, Colo.

Jesse M. Warman BSc Chem Eng is a staff process engineer for Nano Products in Longmont, Colo.

Nathan D. Wilson BSc Eng '04 married Christine Block in Littleton, Colo. Nathan is a structural engineer for Jacobs Engineering Group Inc. in Golden, Colo.

2003

Courtney Beard BSc Eng married **Matthew Bird BSc Eng** June 19 in



Houston. Courtney is a design engineer with Carter Burgess Inc. Matthew is a mechanical engineer with Bison Engineering.

Dustin E. Bennetts BSc Eng is a design engineer for Tensar Earth Technologies in Atlanta, Ga.

Forest J. Bommarito BSc Pet is a CSM graduate student in petroleum engineering.

Daniel J. DeSnyder MSc Min Ec, M Eng Pet '04 is an engineer for Shell Exploration & Production Company in New Orleans.

Alyssa A. Kohlman M Eng Geol is a field engineer with Hayward Baker in Houston.

Timothy J. Schulte BSc Eng is a sales engineer for Ingersoll-Rand Company in San Diego.

Taylor T. Shively BSc Econ, MSc Eng & Tech Mgmt '04 is a hardware engineer for the Lockheed Martin Corporation in Boulder, Colo.

Samantha Tokash MSc Geol is a hydrogeologist for Geomega in Boulder, Colo.

Joseph P. Zufall BSc Eng, BSc Eng is a project engineer for the M.A. Mortenson Company in Westminster, Colo.

2004

Bader S. Al Mana BSc Chem Eng, BSc Econ is an engineer for Saudi Aramco in Alkhobar, Saudi Arabia.

Ryan T. Allaire BSc Eng is a multi-discipline engineer for Raytheon in El Segundo, Calif.

Bryce R. Anton MSc Mat Sci is senior production engineer for Vapor Tech in Longmont, Colo.

Jonathan M. Ballard BSc Eng is a second lieutenant for the U.S. Air Force in Ft. Walton Beach, Fla.

Jeremy W. Beckman BSc Math & Comp Sci is a recreation clerk for the City of Broomfield, Colo.

Adam F. Behrle BSc Math & Comp Sci is a programmer for Quantum PM in Littleton, Colo.

Nathan A. Biddle BSc Pet works for British Petroleum from his home in Sedona, Ariz.

Jamon D. Bowen BSc Eng is a software engineer for Texas Memory Systems in Houston.

Ahmed Yasin Bukhamsin BSc Pet is an engineer for Saudi Aramco in Dhahran, Saudi Arabia.

Shane B. Carwin BSc Eng is an engineer for North Weld County Water District in Greeley, Colo.

Paul F. Christopher BSc Math & Comp Sci is a software developer for the LabJack Corporation in Denver.

Robert M. Connolly BSc Eng is a project engineer for Chevron Phillips in Pasadena, Texas.

Randi J. Crowder BSc Eng is a sales trainee for Ingersoll-Rand in Golden, Colo.

Sarah Lee D'Agostino MSc Geol is a coastal geologist for Woods Hole Group Inc. in East Falmouth, Mass.

Michael H. Deneff Jr. BSc Eng is a systems engineer associate for Lockheed Martin in Colorado Springs, Colo.

Emil D. D'Innocenzo BSc Eng is an engineer for the U.S. Navy in Eaton, Colo.

Craig E. Divine PhD Geochem is principal and owner of HydroGeo Analysis LLC in Littleton, Colo.

Fariz Fahmi BSc Geop works for ExxonMobil Exploration and Production Malaysia Inc. in Malaysia.

Payman Farrokhvar BSc Math & Comp Sci is a technical sales trainee for Ingersoll-Rand in Littleton, Colo.

Matthew P. Goman MSc Eng & Tech Mgmt is a software engineer for the Lockheed Martin Corporation in Denver.

Bonnie E. Harber BSc Eng is a junior field engineer for Schlumberger in Red Deer, Canada.

Mark F. Hart BSc Eng is an engineer for Baker Hughes Inteq in Lafayette, La.

Paul E. Hopkins BSc Eng is a field engineer and estimator for Flatiron Constructors Inc. in Longmont, Colo.

Rocky Mountains to the World:
 A History of the
 Colorado School of Mines




\$42.95 + \$6 (S&H) = \$48.95
 (Colorado residents add 7.3% sales tax for total of \$52.09)

www.csmma.mines.edu/Alumni/history_book/

303-273-3295
 800-446-9488, ext. 3295

The Holidays Are Coming!



How about a Mines throw or a Mines chair for your alumnus or yourself?

Throw is 4'x6', 100% cotton, machine washable, made in USA. \$45 + S&H

Chair back has black lacquer or cherry finish, cherry arm rests and laser engraved school seal. \$115 + S&H

To order:
 800-466-9488, ext. 3295;
 303-273-3295; or online at www.alumnifriends.mines.edu
 and scroll down to "Miner's Pick"

In memoriam

JAMES "JIM" D. BUHLER SR. MET E '42 of Placerville, Calif., died May 7 after a 14-year battle with prostate cancer. He was 84. After graduation, Buhler worked for Alcoa until the summer of 1944 when he joined the Navy as an ensign until December 1945. In April 1946, he joined Kaiser Aluminum in Spokane, Wash., where he spent more than 25 years in supervisory and management positions. In 1974, Buhler became vice president of international trading for Gulf Oil until he retired to California in 1978. The next 24 years he raised Arabian race horses, producing several winners. Buhler is survived by his widow, Maxine, four children, 12 grandchildren and nine great-grandchildren.



was 86. During World War II, Lindsay served with the Canadian 4th Armored Division as captain. He was born in Winnipeg, Manitoba, and became an American citizen in 1950. He was a Registered Professional Engineer in nine states. He joined Commercial Testing and Engineering in 1948 and advanced through its offices in Indiana, West Virginia and Ohio before becoming president in 1967 in Chicago. He had 35 years of devoted service to C.T.&E. and the coal industry. Lindsay was a member of the National Society of Professional Engineers, Illinois Society of Professional Engineers, Society of Mining Engineers of the American Institute of Mining and Metallurgical Engineers, Rocky Mountain Coal Mining Institute and was corporate vice president of Geo International. He also was a Kentucky colonel and a member of the Kappa Sigma fraternity. Lindsay is survived by his wife of 54 years, Barbara, three daughters, six grandchildren, a sister; four nieces and two nephews.



19 step-grandchildren and one step great-grandchild.

CHARLES J. MARQUARDT GEOP E '54 died June 27 in Sugar Land, Texas. He was 71. For 25 years, Marquardt worked for Oryx Exploration and its predecessor, Sun Oil. He and a partner also ran their own company for several years. He was a member of the American Association of Petroleum Geologists. Marquardt's life passion was cruising around the world. He took 29 cruises in 22 years and visited all seven continents. Marquardt was preceded in death by his wife of 47 years, Marjorie Love Marquardt. He is survived by a son, a daughter, five grandchildren, a brother and many nieces and nephews.



DELBERT F. TOLEN PRE '57 died June 25 in Grand Junction, Colo., at age 73. He grew up in Indiana, but in 1948, he moved to Montezuma, Colo., where he worked at Climax and other mines. From then on, he

considered Colorado home. Tolen joined the Army in 1951 and served in the Korean War in the 5th Regimental Combat Team. He received the Purple Heart and Silver Star. After he was discharged, he returned to Colorado, where he met and married Alice Mae Berg. Tolen worked at various refineries throughout his career in Colorado and other states. He was a member of Breckenridge Masons Lodge #47, CSM Alumni Association and the Elks Lodge. He recently attended reunions of two Korean War Veterans organizations: the 5th Regiment and the Outpost Harry Survivors Group, and was awarded the St. Maurice Medal for Valor for his actions at Outpost Harry in Korea. Tolen had a lifelong love of the outdoors and the Colorado mountains and an abiding interest in mining and geology. He also loved history and was particularly interested in the Civil War. He enjoyed reading, thought deeply on many things and loved vigorous discussion. Tolen is survived by his widow, five sons, 13 grandchildren and two great-grandchildren.



ERNEST LUCERO GEOL E '52 died Jan 12 at his home in New Mexico. He was 80. During World War II, Lucero served in the U.S. Marines and took part in one of the bloodiest campaigns, the battle for Tarawa Atoll in the Gilbert Islands. In 1966, he moved to New Mexico where he was assistant manager of the Jackpile Mine, Anaconda Mill and was manager of the Crownpoint Project for Conoco. He also was a government mining consultant. Lucero helped plan the Grants Mining Museum, served on the Grants grand jury and was a volunteer at the Mt. Taylor Winter Quadrathlon. Friend and classmate Jim Jerrell EM '52 said, "Ernie lent a lot of maturity to our little herd and I shall always remember his steady influence on me. I consider it a great honor to have known him." Lucero is survived by his widow, June, six stepchildren,



DOUGLAS J. JOHNSON BSC MATH '71 died April 20 after a two-year battle with multiple myeloma. He was 55.

Johnson first saw CSM on a trip out west with his family and decided to apply. His brother, Bob, visited him in 1971 and has lived in Denver ever since. Johnson roomed with Robert Knecht Met E '70 and John Lombardi EM '75 while in school. After graduation, he worked for the Colorado highway department. Johnson was born and raised in New York and returned east when his parents moved to New Jersey. He worked as office manager for L&S Pool Co. of Union, N.J., for 25 years and was a member of the N.J. Bridge League. He loved spending weekends at the home of his late grandparents on Eastern Long Island near where his many friends and family gathered for his funeral service. Johnson is survived by his mother, two brothers, a sister-in-law and three nephews.

KENNETH E. LINDSAY MET E '40 died June 2 at home in Indiana after a long illness. He

A Bob Hope Christmas Remembered

Les Bond GEOL E '59

At Christmas 1950, the country was at war in Korea and I was a 19-year-old U.S. Navy aviation radioman third class stationed in the Aleutian Islands, Alaska. Our aviation unit supported flying scout patrols in the Bering Sea and along the eastern coast of Russia. At the time, our forces were being pushed south in Korea and after seven months of fighting, we were losing ground. The war, the long hours and the uncertainty changed most of us from boys into men. Being scared about getting killed is a short-term condition; it's impossible to stay scared very long. The main concern was that you would not be a coward when the going got tough.

Earlier in December, I had injured my arm and was just out of the hospital so I was assigned a light duty job at the mess hall. I woke up the crew that served the food and made sure they were spic-and-span. The Navy takes a very dim view of mess cooks with dirty clothes, hands, or fingernails and inspections three or four times a day were normal. It was a temporary assignment with only short periods of work. Not many heroes come from the group that wakes up the mess cooks; neither do they get shot at very often.

We had little advanced notice that Bob Hope was coming to our base for a Christmas show. The program was held in our small gymnasium, which was a little larger than a basketball court but with no seating along the sides. We had to arrange it on very short notice and used many kinds of chairs spread out in rows. The stage was a small platform and a few plush chairs and sofas were arranged in front of it. A small balcony in the rear held a few more seats. The show was attended by about 400 people, who filled the small room to capacity with maybe 30 or 40 standing in the rear and along the sides.

Bob Hope and his cast of 12 to 15 were traveling in an unpressurized U.S. Navy R5D airplane with seating for about 40. The plane had a cruise speed of 175 miles per hour and normally flew at 10,000 feet or below. The constant winds in the North Pacific guaranteed a rough flight. Although the busy flight crew seldom got air-sick, the passengers were not as lucky. Bob Hope and his team no doubt arrived in the Aleutians in a tired and exhausted condition, to say the least.

Hope and his crew arrived at about 4 p.m. and the show was held at about 7 p.m. With no fanfare or introduction, Bob Hope appeared from behind a curtain. He looked down at the plush chairs and sofas that were occupied by officers and said bluntly, "We have to fix this before there is going to be a show." Then he turned and went back behind the curtain. After a long moment of silence, the officer group stood up and left the gym. No one cheered, but we were thinking about it. After a few minutes, the crowd filled in those comfortable seats down front and the program got under way.

The 45-minute show consisted of a few musicians, a couple of girls in fairly modest clothes who sang two or three songs, but mainly the show was Bob Hope. One joke I still remember was a complaint about his bad luck: "If I won half of Marilyn Monroe in a poker game, I'd no doubt get the half that ate!"

At the end of the show, a list of about 10 soldiers was called and they were asked to stick around. Hope had notes and photos from these soldiers' families back home and he sat down on the edge of the stage and visited with the men. The sight of Hope sitting with his feet dangling down talking to the soldiers was a special time. I don't know how he got the word from the families or how the men were picked, but it seemed very nice of him to do.

Flying to Korea in December 1950 by way of the Aleutian Islands in a slow, low-altitude airplane would have been a trying experience that most people would not repeat willingly. Bob Hope made the trip several times and he was a welcome sight for those lucky enough to have been there. He was a great American and those of us that he cared enough to visit during wartime will miss him at Christmas. He will never be forgotten by the troops he loved.



Colorado School of Mines
Alumni Association
P.O. Box 1410
Golden, CO 80402-1410



The putt was successful! So was September's Celebration of Mines, with 94 booths touting a variety of campus activities. More than 2,500 students, faculty and staff attended the annual back-to-school event.

NON-PROFIT ORGANIZATION
PAID Golden, Colo. Permit No. 98
U.S. POSTAGE