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**alumni**  
association



## AUGUST 2002 NEWSLETTER

### FROM THE DESK OF GEORGE ABRAHAMSON



George Abrahamson  
*Photo by Dan Jones*

We have an opportunity to help SRI and ourselves at the same time. A power conservation program championed by Hew Crane and Tom Little in the 90s fell by the wayside. The program had a group of staff volunteers who encouraged staff to save power by turning off lights, computers, and other equipment when not in use. This was credited

with saving SRI \$5 million. The program died due to preoccupation of management with other issues. With the approval of the Steering Committee, I talked with Curt Carlson, Tom Furst (Chief Financial Officer), and Tom Little (Corporate Director, Support Services) about whether the Alumni Association could help in power conservation and in return receive some support for Association undertakings. All three welcomed our involvement.

A Steering Committee has been formed consisting of Joyce Berry, Earle Jones, Bob Schwaar, Pete Valenti,

Donn Parker, Fred Weil, John Herndon, and myself. The Committee has held several meetings to determine how we should approach the task. We are currently focused on establishing a method of measuring the effects of our efforts and defining the elements of the program so teams can be formed to begin work.

One immediate impact on Association activities is that the charge for the annual reunion this year will be \$10. This will be subsidized by expected income from power conservation results. We are confident that significant power savings can be achieved. We will continue our policy that dues will be used only for activities that benefit the entire membership and not to cover reunion costs.

As we move ahead on power conservation, members will be needed to staff the various tasks. Please indicate on your reunion reservation form (included with this mailing) or otherwise notify the Alumni Association if you can help. This is a wonderful opportunity for the Association and the Institute!

### SRI ALUMNI ASSOCIATION REUNION — 2002

Meet your former colleagues at the 2002 SRI Alumni Association Reunion to be held on Thursday, October 3, 2002 in the International Building Exhibit Hall and Dining Room. See the enclosed reunion announcement for all the details. Sign up now! Fill out the coupon at the bottom of the page, tear it off and mail it in now.

Photographers are encouraged to show some of their work at the Reunion. Both hobbyists and professionals are invited. Bring copies of your wedding photos and let us guess who the lucky brides and groom are. If you would like to display some of your photography or any photos of interest to Alumni, please contact Donn Parker at donnlorna@aol.com or phone 650-948-9039.

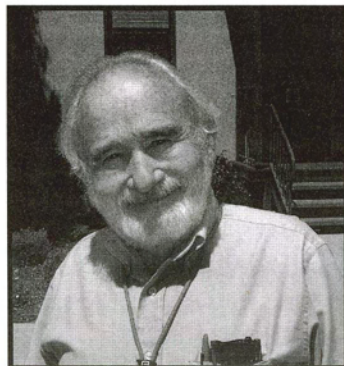
# SPRING PICNIC

The jolly alumni you see here are enjoying the companionship and refreshment at the annual spring Picnic, held May 9 on the patio between buildings 100 and 108.

About 30 attendees reported that the venue provided just the right balance of sun and shade, with no fauna hanging down from the oak trees.



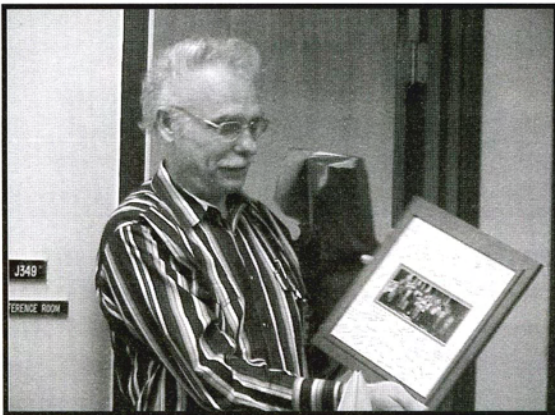
*If you're not in these photos,  
make plans to attend next  
year's Annual Picnic  
in May 2003!*



*Photographs by  
Alumni Member  
Don Cone*

## DR. FRANKEL GOES TO WASHINGTON

Mike Frankel, Vice President and Director of SRI's Information, Telecommunications, and Automation Division (ITAD) has accepted a two-year appointment in Washington, D.C. as Deputy Assistant Secretary of Defense for C4ISR and Space Systems. He took up his new post on May 6. On May 2, his SRI friends and colleagues surprised him with a farewell party in conference room J349. *(Photos by Naomi Campbell)*



Mike receives a group photo signed by colleagues.

Mike is expected to make a major contribution to the security of the United States during this difficult time. This is a great honor for Mike and for SRI. In Washington he will have oversight for programs associated with command, control, communications, computers, intelligence, surveillance and reconnaissance, thus reflecting his deep commitment to helping make America a better and more secure country.

Mike Frankel joined SRI's Radio Physics Laboratory in 1974, shortly after receiving his Ph.D. in Electrical engineering from Stanford. Among his early assignments was the development of the Packet Radio, a wireless version of the early ARPANET, a predecessor of the Internet. Mike's idea of a military test-bed to permit military users of the Packet Radio to gain hands-on experience led to the formation of a new Department at SRI in 1982. Headed by Mike, the Department became a Center in 1982, and a Division in 1988. This division, now known as ITAD, has grown to a staff of more than 130.

Mike and his staff established several military testbeds over the next 10 years or so. Among these were Army testbeds at Fort Bragg, NC, Fort Lewis, WA, and at the Signal Center in Augusta, GA; an Air Force testbed at the Strategic Air Command in Omaha, NE; and a United States Army European testbed in Germany. Most of these testbeds operated for 5 years or longer. Other testbeds were established and operated by ITAD engineers and technicians as required by clients. These testbeds generated several tens of millions of dollars of revenue for SRI.

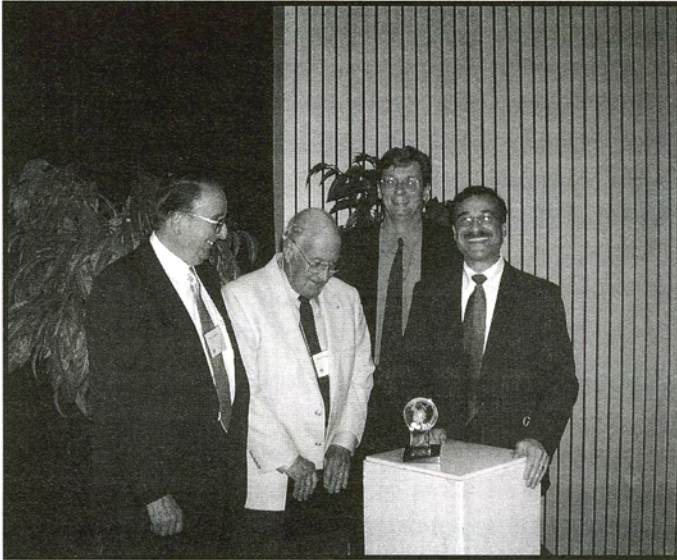
ITAD has a charter to conduct basic and applied research in all areas of information and automation sciences and technology. ITAD conducts research in distributed processing; distributed-telecommunication protocol analysis, design and implementation; applied artificial intelligence; robotics, mechanical systems, image processing, sensor technology and medical device development. Prototype/software hardware systems, and mathematical models of advanced information processing and communications technology, are integrated to demonstrate concepts and systems for all market sectors.

Mike is well qualified to respond to the nation's needs. He is a member of the Defense Science Board, and he previously served on the Army Science Board for six years. He was Chairman of the Army Science Board for two and a half years and received the U.S. Army Distinguished Civilian Service Award, the highest commendation for a civilian providing volunteer services. The Army described Mike's contributions as "profound, comprehensive and of singular importance and value. Dr. Mike Frankel is an extraordinary American who is nothing less than a national treasure."

David Nitzen (Sr. Principal Scientist in the Advanced Automation Technology Center) says goodbye to Mike.



## FINNIGAN RECEIVES GIBSON AWARD



(l-r) Paul Jorgensen, Dennis Finnigan, Curt Carlson, and Len Polizzotto.



Barbara and Dennis Finnigan



Dennis visiting with reception guest.

*Photos by Dan Jones*

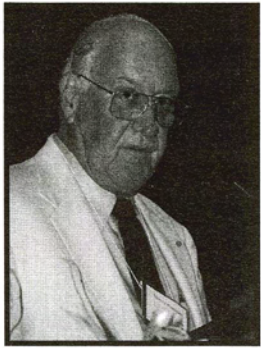
On June 11, Dennis Finnigan received the 2002 Gibson Award, as detailed in the April 2002 Newsletter. These photos were taken at the ceremony and the reception that followed.

When we caught up with Dennis a few days later, he agreed to write a story about one of his amusing travel adventures—see page 5.

A press clipping from an Oregon newspaper that gives some more details about Dennis' amazing career is posted on the web: [http://www.oregonlive.com/metrosouthwest/oregonian/index.ssf?/xml/story.ssf/html\\_standard.xsl?/base/metro\\_southwest\\_news/102656147134181.xml](http://www.oregonlive.com/metrosouthwest/oregonian/index.ssf?/xml/story.ssf/html_standard.xsl?/base/metro_southwest_news/102656147134181.xml)

## ANOTHER TRAVEL STORY . . .

by Dennis Finnigan



Dennis Finnigan  
Photo by Dan Jones

Donn Parker's travel story (April 2002 Newsletter) prompted me to reflect on some of my more than 400 international trips, which spanned nearly 40 years. There were near misses, cancellations, cockpit seat assignments, diversions, upgrades, downgrades and nearly every other situation one could imagine, but the flight

that really stands out in my memory was the one on which I was "King for a Day."

It happened like this: In early December 1967, I was to travel on a SAS flight from Bangkok to Stockholm with my client, the President of SAS Karl Nilsson and his wife Mai. It was to be a two-day journey via India, Turkey, Germany and Copenhagen. Coincidentally, on the same evening, SAS was inaugurating a one-stop service from Bangkok to Copenhagen via Tashkent in the Soviet Union. I was invited to the cocktail reception celebrating the new service prior to the departure of the maiden flight; among the dignitaries in attendance were all the Scandinavian ambassadors to Thailand, the Thai ambassadors to Scandinavia, all their spouses, and none other than the King of Thailand himself. The entire group, including the King, was to be on the inaugural flight to Tashkent and Copenhagen.

Just minutes before the flight was to depart, the King announced that he would not make the trip; he preferred to stay for the South East Asia Yacht races that were beginning the following day and in which he was a perennial contestant. His abrupt cancellation caused lots of confusion. It also created an empty seat on the flight. The Nilssons were offered the seat but they did not want to take separate flights back to Sweden. So Mr. Nilsson insisted that I take the flight as his representative. I collected my baggage and followed his orders! By this time the flight had been boarded and was ready for departure; I was rushed to the gate and entered the first class cabin of the DC-8.

What followed was both startling and amusing. Neither the Captain, the cabin attendants nor other dignitaries in the First Class cabin had been told of the King's change of plans. As I made my way to my seat--1C--that had been assigned to the King, everyone got to their feet and started applauding, bowing and stooping. Needless to say, I was very surprised and embarrassed and announced that I was Dennis Finnigan, not his Majesty. Quickly picking up on the situation, the Captain declared that I would be "King for the Day" and was to be treated accordingly. My seat partner became the King's "aide-de-camp", who went on to state that as the King's "sit-in" on the flight, I would also be his "stand-in" at the receptions that were to take place in Tashkent and Copenhagen. As the King and I were about the same age and stature and shared some features, many guests at the parties did not know that I was not really "His Majesty." Oh, what an experience it was — mixed with lots of vodka in Tashkent and aquavit in Copenhagen!



The experience had at least two interesting consequences: The SAS people in Bangkok had alerted the Anglais Hotel in Stockholm that due to the change in flights, I would arrive one day early. But they had not realized that my arrival on December 10 would be "Nobel Prize Day". Every hotel in Stockholm was fully booked. The hotel manager, Cris Folckers, could not let this be a problem: he turned his office into a bedroom and I spent the night as "General Manager for a Night."

The other consequence was not as humorous: Upon returning to Menlo Park some days later, I was summoned to a meeting with our security people and my boss to receive an "unofficial" reprimand for my unauthorized "visit" to the Soviet Union. It seems that as a holder of high and sensitive security clearances, I should have obtained prior approval before entering Russia. Given the circumstances, the hand slapping was not "official," but I was more careful in the future!

## TOKYO ALUMNI MEET

The third reunion meeting/party of the SRI Japan Club (SJC), the Alumni Association of SRI International Japan and its affiliated companies, was held at Tokai University Members Club in Tokyo on May 13. It was a season of new green, the week following Golden Week, Japan's May holiday week.

Kurao Tsuchiya read a celebratory message from George and Curt. In the message, they thanked the members for past work, which helped build SRI's reputation in Japan, and expressed appreciation for SJC's continuing association with SRI, which helps SRI build business with old and new clients.

Osamu Karatsu spoke about the cooperation among SRI, SRI Consulting (C&H), SRI-BIC and Red Siren Technologies in Tokyo Office through SJC community amalgamation, and his hopes to see the members again next year in a prosperous shape. Mr. T. Nakada, a guest and friend of Tom Teshima, made a brief presentation about recent and future business in biotechnology.

Peter Yokoyama chaired both the meeting and the party that followed. Jun Shimosato summarized the performance of SJC in 2001 and introduced Masa Tashiro as the successor to the current Club Chairman, Tom Teshima.

Ken Inoue led the toast at the beginning of the party. The party lasted for 2 hours, and was really wonderful. Approximately 30 people attended. A major topic of conversation was how to spend a valuable life rather than simply to enjoy life.



(left to right): Shoko Tachiki (present secretary of SRI Japan Club) and Toshiko Miura (former secretary), at the reunion reception desk. They are still active in SRI Tokyo.

*Photo by Ken Inouye*



(left to right): Mitsuko Nishiguchi, Seiichi Yoshizawa, Tom Teshima and Mr. Toshio Nakada (the guest speaker).

*Photo by Jun Shimosato*



(left to right): Hisao Yamaguchi, Makiko Tanaka, Jun Shimosato and Takashi Ikeda.

*Photo by Ken Inouye*

## HISTORY CORNER - 20 years with SRI in Tokyo

by Tad Sasano



I was with SRI International and SRI Consulting for 20 years (1979-1999), stationed in Tokyo. I still do contract work for SRI as a senior advisor in the chemical and health business. SRI has given me wonderful experiences in those 23 years, and in many ways my story parallels the story of the SRI Tokyo office.

Before joining SRI I was with Teijin Limited, a Japanese synthetic fiber company. I gathered some fiber industry information, but I was mainly involved in process development of plastics and in oil & gas exploration. This strange combination gave me a lot of opportunities after I left the company. When I was 45, there was a serious downturn in synthetic fiber business, so I left Teijin and applied for a job with SRI. Tak Takaoka, Andy Kridl and Judy Blackford hired me in July 1979.

My first assignment was in Indonesia, collecting chemical market information. At that time chemical industry in Asian countries outside Japan, Korea and Taiwan was in its infancy. It was my luck that I could be involved in the birth and growth of the petrochemical industry in Singapore, Thailand, Malaysia, Indonesia and China. In 1989-1992, I was involved in many China projects and developed a network of information collection in China. I helped establish the SRI Beijing office in the early 1990's.

I especially enjoyed several one-shot multi-client programs in 1987-1993. Bob Muller was my teacher. For example, in 1987, we wrote an olefin study predicting high profits in the petrochemical industry around 1989. This projection was not believed until 1988, but it came true. Now many people understand such profit cyclicity in the petrochemical industry. These one-shot programs brought us funds for further growth.

Secondly, I was involved in many single-client projects funded by European, United States, and Japanese chemical companies, related to China and the ASEAN markets. I spent many days traveling. Akzo Nobel, Rhone Poulenc and Dow Chemical were among our clients. I remember that Eric Linak, Jim Ma, Jeanie Ayers, Emilio Cvitkovic, Philippe Michelin and a few people in Zurich office (esp. Andy Leder and Mario Jackel) worked with me.

Thirdly, I was involved in World Petrochemicals program (WP) and Specialty Chemicals Update Program (SCUP) for many years. I used my knowledge to develop a special report for SCUP on Asian Industry Dynamics. Our strategy has always been to leverage SRI's experience in Asia to develop more business.

In the 1980's, many Japanese chemical companies came to SRI for laboratory projects at Menlo Park. I worked with people such as Subhash Narang (functional polymers), Bob Wilson (organic chemistry), and Masa Tanabe (new drug development). At that time there were many opportunities and I was busy connecting our clients with capable experts in Menlo Park laboratories.

For six years, I taught in Kyoto University. Each year I lectured for two days on Chemical Process Design Practice. Groups of students were assigned to design chemical plants. My friend Bob Schwaar taught similar subjects at Stanford University; we used the same textbook on plant cost estimation.

The Tokyo office of SRI moved around in the past 23 years—two places near Nihonbashi, a big office in the Imperial Tower, the Shin-Nikko Building, and now the Daito Building, close to the premier's residence and to Parliament. Once we had as many as 60 people, including consultants (in finance, manufacturing and process industries) and project marketers for SRI's laboratories. At present about 30 people including SRI International, SRI Consulting, SRI Business Intelligence and Red Siren work in the Tokyo office.

After retiring from the director's position in 1999, I became a senior advisor, consulting in my favorite areas of textile chemicals, membrane separation, butylenes, and oxo chemicals. Tak Takaoka, my boss for many years, gave me important wisdom to survive as a consultant. Later Jun Shimosato became my boss. He is the hardest worker in the office. Now, Yosuke Ishikawa is the director in charge of the Chemical and Health Business for Asia, covering Japan, Korea, Taiwan and ASEAN countries with his staff of eight reporting to Judy Blackford.

The Asia Petrochemical Industry Conference (APIC) is the biggest chemical conference in Asia with 600-700 people gathering every year in May. Since 1998, I have acted as APIC coordinator for Japan, Taiwan and Korea. It is a real pleasure for me to exchange information with those people while promoting SRI.

I will retire completely soon. I've been very happy at SRI so I will miss all the people I worked with. My wife and I have been traveling quite a lot since 1999—the East Coast of the US and Italy (1999), Spain, Netherlands and Belgium (2000), and New Zealand (2000). We plan to be in Australia in October, 2002. We don't like the rushed pace of a group tour; we prefer to stay longer in one place. Both of us came from the country (from same high school). We like to sit down and talk about family.

## SRI DIGEST

The SRI Digest, an e-zine, can be viewed on the world-wide web at <http://www.sri.com/news/digest/>. Each short article on current projects at SRI International contains references to more complete information. Headlines from the current issue include:

- SRI-Sarnoff venture, Rosettex, to develop and commercialize technologies for the National Technology Alliance
- SRI speech recognition software used in Afghanistan
- Transeda licenses SRI's formal verification software
- Envirotechnical program helps protect marine life
- SIMCALC: A better way to bring calculus to students
- Review of the market for digital home entertainment
- Satyam Cherukuri replaces Carnes as CEO AT Sarnoff

*Here are some other projects, with descriptions excerpted from press releases on the SRI Insider:*

### Wireless Microsensors Monitor Structures

Wireless microsensors integrate commercial radio frequency identification (RFID) tags with sensors to enable rapid wireless interrogation of the health of structures. These passive devices can be embedded in the structure to provide an indication of internal damage. The SensorTag concept is a powerful idea that has wide ranging dimensions and applications. One dimension is the integration of other sensors, such as pressure, flow, and strain. Another dimension is structural. SensorTag devices could be embedded in buildings, automobiles, aircraft, and as a part of industrial process control to provide the needed health monitoring for these structures.

### Shoe Boots Up Electronic Devices

*By Irene Brown, Discovery News*

Oct. 2, 2001 — Walking a mile in another man's shoes may soon generate more than empathy — it could recharge your cell phone. Backed by Defense Department research funding, SRI is working on lacing a boot with electroactive polymers to convert the mechanical energy of walking into electric power to charge up gadgets, batteries and other devices.

"No one had ever generated electricity with the polymers before," said SRI International program director Ronald Pelrine, who is overseeing the boot generator project.

The polymers are thin films of rubbery materials with electrodes positioned on opposite sides. As the film is compressed and released, the electrodes move closer and farther apart, increasing the distance between positive and negative electrical charges, which generates electricity. This energy can be tapped immediately or converted into power for later use.

As little as 10 grams of the material is needed to generate the charge. SRI has been testing a pair of shoes in a laboratory and so far has generated a steady half-watt of power in a squash-and-release demonstration of the boot. Ultimately, Pelrine believes two- to three watts of power can be generated, which would be enough to power up small electronics devices and recharge batteries.

The military is interested in the technology for four applications: to recharge batteries; to serve as an emergency backup power source; to power equipment in the boot, such as a navigation tool; and to possibly cushion or otherwise augment the walk of the soldier, who may have to transverse long distances with 70 pounds of equipment on his back.

"Soldiers today are quickly getting overwhelmed with batteries, particularly with what you'd like to equip them with," said Pelrine.

The Defense Advanced Research Projects Agency, or DARPA, has contributed about \$2.6 million of the approximately \$10 million spent so far. SRI's other partners in the project, which began about 10 years ago, have included the U.S. Office of Naval Research, a Japanese government research agency, and corporations. The firm currently is in negotiations with shoe manufacturers and other companies to spin off the technology for commercial applications.

The polymers also can work in reverse, serving as actuators rather than generators to convert electrical energy into mechanical muscle. The applications for motors, robotics devices, pumps, valves and other devices are virtually endless.

SRI, for example, is investigating using the polymers to design and build miniature air vehicles propelled by tiny bird-like wings, which, at that size, are more energy efficient than conventional propellers.

"Your car has about 50 actuators in it," said Pelrine. "This technology is fairly significant — It's not just about boot strikes."



## ALUMNI ARE ELIGIBLE TO JOIN SRI FEDERAL CREDIT UNION

If you are a former employee of SRI, or of an SRI spin-off, or a family member, you are eligible to join the SRI Federal Credit Union. The credit union has grown from 10 members in 1957 to over 3,300 members. As of June 30, 2002, the total assets of the credit union are over \$28 million and the credit union has over \$3 million in capital. During the past 12 months, the credit union has added a number of services, including

- Free Home Banking. You can access your account through the Internet.
- Free check imaging. You can obtain images of the front and back of your cleared checks on the Internet.
- Home Equity Loans-up to 90% loan to value.
- Access your account via Visa Debit card.
- Platinum Equity Visa Cards-allows limits of up to \$50,000 with a low variable rate.
- Mortgage loans through our agreement with MeriWest Mortgage. See the current rates on our web site at [www.srifcu.com](http://www.srifcu.com)
- Your first 150 checks are free: if you are over 62, your checks are always free!

And remember: There is still no annual fee for your VISA cards, and you can arrange to have monthly VISA payments made automatically by transfer from your checking or savings account. As always, there is no minimum balance and no monthly fee on your SRI Federal Credit Union checking account.

For more information, or to open an account, phone 800-986-3669 or email [srifcu@srifcu.org](mailto:srifcu@srifcu.org). Even if you don't want to join, feel free to write us. We love feedback!

## IN SYMPATHY

**Blanche Jacobson Rosen**, 80, wife of Charlie Rosen, died unexpectedly on June 10 in Kaiser Hospital. Married 60 years, she and Charlie were among the six co-founders of Ridge Winery, a pioneer among small wineries specializing in fine wines. A native New Yorker, Blanche met Charlie in the Catskills in 1936, and they were married five years later. They moved from Syracuse to Menlo Park in 1957 when Charlie joined SRI. She became a working partner in the winery: as the winery grew, she became famous for her cooking and entertaining and for her art, especially stained glass. She was an avid reader and a lover of literature and the fine arts. She is also survived by sons Hal and Steve and daughters Naomi and Sema.

Friends of **Phyllis Moore Hamilton** will be saddened to learn of the death of her brother, Tom Moore, in Modesto. Tom, 88, had been stricken with bone cancer a few months ago, and died in his sleep only hours before the start of the 61st Modesto Relays. As an athlete, starter, and meet director, Tom had been involved in the Relays every year since it began in 1940. As a Cal student in 1935, Tom set a world record of 14.2 sec in the 120-yard high hurdles. A tribute had been planned for Tom at the Relays; it turned into a memorial.

### REMEMBRANCES OF C. WARD SEITZ JR.

July 7, 1929-March 30, 2002

by Fred Weil

Ward came to SRI in August 1974 from the planning staff of North American Aviation, where he had been their client contact for SRI's Long Range Planning Service (LRPS—now the Business Intelligence Program). Dan Shearer, who knew him from his LRPS days, hired him for the Mechanical Industries Economics Program due to his engineering education, (Wayne State University), MBA degree (USC), practical planning experience, and knowledge of the aerospace and other industries.

Ward initially had a number of assignments relating to aircraft markets and technology. These involved extensive traveling throughout the world. I assisted him with several client presentations in Europe including Aeritalia in Italy and Saab Aerospace in Sweden. I remember being impressed with his thoroughness and deep insight of the aircraft industry.

About 1980 he began to shift his emphasis to evaluating battery technologies and market trends. Ward and the electrochemists in the Physical Sciences Division worked closely together, supporting each other's work and clients. He wrote a BIP report, developed a successful multi-client battery program, and led projects for clients in many countries. He developed an international reputation as an expert on battery markets.

After Ward retired from SRIC in 1998 he continued consulting and assisting BIC. Retirement did allow him more time to continue with his skiing (he was known as a hard man to keep up with, even in his later years), gardening, and writing. He had completed an autobiography shortly before his unexpected death. Ward was a devoted family man with a wife of 45 years, four children, and four grandchildren.

## IN MEMORIAM

### Robert Bollen

On May 4, Robert Bollen, 64, died after a long battle with cancer and congestive heart problems. He was born in 1937 in Lincoln, NE, grew up in San Francisco, and received his B.S. in Physics at Stanford in 1959, at which time he joined SRI. He worked in the Communication and Propagation Lab, then transferred to the Radio Physics Lab in 1962, from which he retired as a Senior Research Physicist in 1991. He lived in Portola Valley.

Bollen's projects included work on an anti-missile defense system, experiments on lightning, and studies of nuclear detonations in the ionosphere. One of the most intriguing ones was the use of sonar to detect hidden passages in the Pyramids, a technique that he extended to look for suspected tunnels linking North and South Korea. He traveled widely, spent a lot of time at the Pentagon, but found time to write more than 50 articles.

Survivors include his wife, Lynne, son John and daughter Kirsten.

### Rudolph Kermit Brunsvold

Rudy Brunsvold died on June 28 at the age of 84. He was born in Page, North Dakota, where he grew up with his nine siblings, four of whom survive him. After graduating with a degree in engineering from North Dakota State University, Rudy spent 22 years in the Army, advancing to the rank of Colonel.

He joined SRI in 1960 as an Operations Analyst in the Defense Evaluation Program, and in 1967 became Vice President, Coordination & Planning. Along the way he had worked in the Operational Technology Division and the Systems Sciences Division. He was also a Special Assistant for Military Affairs and an Executive Assistant to the SRI President. He served other groups as Vice President, advancing in 1976 to become Vice President for Personnel & Affirmative Action. Rudy was the Director of Staff Development & Training when he retired in February of 1980.

In addition to his wife, Dorothy Jane Brunsvold of Prunedale, survivors include three brothers and a sister, sons Rudy Jr. and Steven, daughters Dianne Weitzel and Kimberly Legard, 12 grandchildren and eight great-grandchildren.

### Patricia Howard

Pat Howard died on April 19. Her service at SRI spanned more than 20 years, beginning with her hiring in October 1966 as a Report Typist in Support Services. She advanced rapidly to Senior Report Typist, Proofreader, then Senior Proofreader. In 1969 she became an Administrative Assistant in Report Services.

In 1970, Pat was promoted to Secretary and served several groups, including the Bio-sonar group in Life Sciences, the Physical Sciences Division, the Systems Evaluation Department, and then the Polymers group of the Chemical Industries Division, where she became a Senior Secretary in 1980. She stayed with the group through several name changes in the 1980s.

She lived in Berkeley after her retirement in 1986. Survivors include her daughters Ellen McCarthy and Sharon Howard.

### Wilbur B. Ream

Wilbur B. ("Bud") Ream died on April 11 at the age of 74. He served more than 35 years in Report Production, Publications Services, and allied orgs as an Industrial Photographer.

Born in State College, PA, Bud attended Penn State University. He was drafted during the Korean War, and served in the 497th Photo Unit of the U.S. Army, stationed in Germany.

In 1952, he moved to California to hone his photographic skills at the Brooks Institute of Photography (Santa Barbara), where Walt Lawton found him and recruited him for SRI's Photography Division in 1955.

Bud became a Process Photographer in 1960 and a Senior Photographer in 1968. Among his more notable assignments were the photo-documentation of ERMA and Doug Engelbart's first mouse. He also had several assignments for the Poulter Labs, including work at the Mercury Nuclear Test Site (Nevada). Bud became a Senior Photolithographer in 1980 and retired from Publications Services in December of 1991.

He met Marilyn Norton in Report Production, and they were married in 1961. For many years, Bud pursued his hobby of cooking, especially French cooking. He also dabbled in model shipbuilding.

He is survived by his wife, Marilyn, and their son David of Mt. View, and by his nieces Anne Graham and Karen Graham.

### Gordon Scroggie Wiley

Gordon Wiley, 81, died on May 4. He was born in 1920 in San Diego, but attended Palo Alto High School and has lived in Palo Alto most of the rest of his life. He received degrees from Annapolis and from MIT.

Gordon was a communications officer on the USS Pennsylvania with the Pacific Fleet from 1942 to 1945, then became a naval aviator, following in his father's footsteps. After six years in fighter aircraft, he was assigned to the Pentagon in 1953-1954, then joined SRI as a Research Engineer in the Engineering Division. In 1956 Gordon became Head of the Operations Analysis Group in the Weapons Systems Lab. After several more managerial promotions, he became Executive Director of the Operations Analysis Division in 1968, and Assistant Director for Systems Planning in 1971.

Gordon had several jobs after leaving SRI in November 1972. He joined Arcadia Inc, moved to the Planning Research Corporation, and then to the Computer Sciences Corp. He was the Deputy Director and Director of the Scientific Support Lab at Fort Ord and Fort Hunter Liggett when he finally retired in 1992.

Gordon was active in numerous maritime and naval associations and clubs, including the Tailhook Association, and was a founding member of the Monterey Bay Aquarium.

Survivors include son William, daughters Lydia Jensen and Liza Harvey, sister Marie Ross, three grandchildren and two great-grandchildren.