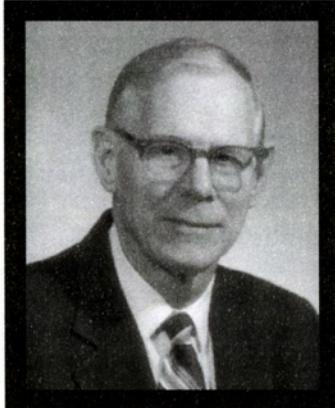




**alumni
association**

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**Dr. George Abrahamson
(1927-2003)**

Association, which he led and served for more than seven years.

George Raymond Abrahamson was born on August 31, 1927 in Painesville, Ohio, the son of Norwegian immigrants. When George was 3, his family moved to Southern California, where his father started up a fruit-selling business. George helped to sell fruit, even after dropping out of high school, but it didn't excite him. After a stint with the U.S. Army Air Corps, he became a machinist's apprentice at the San Pedro Naval Shipyard, simultaneously attending Compton Junior College. He married Mildred Bratton in 1948.

George earned a scholarship to Stanford in 1953, and also joined SRI as a machinist in what was then known as the "Extreme Pressures and Explosives Lab", later named the Poulter Lab in honor of Thomas Poulter, one of Dr. Abrahamson's mentors.

While working at SRI and living in Stanford Village, he earned a Ph.D. in Engineering Mechanics from Stanford in 1958. He became director of the Engineering Mechanics Department in 1959.

AUGUST 2003 NEWSLETTER

Through the 1960s, he contributed heavily to the investigation of the effect of nuclear weapons on missile structures. George and his team fielded sections of missile structures in underground nuclear tests. When he identified the key failure mechanisms of shell compression and buckling he was able to duplicate these phenomena in aboveground tests using explosives at the Calaveras test site. This work ultimately resulted in characterizing the critical loads that would cause failures in both U. S. systems and in foreign systems.

In 1968, George took the family to Norway for an assignment with the Norwegian Defense Research Establishment. They all took up cross-country skiing, and upon their return the Abrahamsens built a cabin in Bear Valley so they could continue the sport.

George was named director of the Poulter Lab in 1969, where he led development of many innovative uses of high explosives and propellants for a wide variety of applications. Special explosive charges were developed to simulate the effect of an accident in the core of a nuclear reactor. The Lab used these explosive sources to conduct tests on scale models of nuclear reactors to see potential damage that would be produced. Another application was simulating earthquake ground motion with explosives. George and his team developed contained explosive sources that would release energy over a longer time to simulate the effects of earthquakes. Many other techniques developed during George's tenure as Lab Director, such as containing blast and fragments from explosive charges and characterizing structural damage from explosives, are still being used today at SRI and elsewhere.

This tribute is concluded on page 10.

PRESIDENTIAL ACHIEVEMENT AWARD

On June 23, SRI President and CEO Curt Carlson presented the SRI Presidential Achievement Award to Paul Jorgensen, former Executive Vice-President and COO. Paul was honored at SRI's Mid-Year Update presentation for his "extraordinary accomplishments over the last 35 years and for [his] integrity, vision, excellence, perseverance, passion and teamwork. These are truly the qualities of an SRI Champion." The following outline of Paul's accomplishments is based on Curt's presentation remarks.

Paul joined SRI in 1968 as chairman of the Ceramics Department and then rose through the ranks — from Executive Director of Physical Sciences to VP of Physical and Life Sciences, and ultimately to Executive VP and Chief Operating Officer. As Paul says, he's held every job title at SRI except for CEO!

Prior to joining SRI and after a post-World War II stint in the U.S. Army, where he worked in Antarctica on ice crystal research for famed explorer Richard E. Byrd. Paul then joined General Electric, where he patented several improvements to GE's high-pressure sodium lamps — the kind you see along the highway — taking them from an average lifespan of 200 hours each to more than 10,000 hours. You could say this was a "shining" accomplishment early in his career!

Several of Paul's accomplishments at SRI should be familiar to you. It was through Paul's efforts that the SRI Fellows program was established; the "P"



CEO Curt Carlson and Paul Jorgensen

Photo by Shari Fisher

Building was built; and our early royalty-sharing program was begun. Throughout his SRI career, Paul expanded SRI's global reputation, establishing productive, long-term relationships with clients in Europe and Asia. He opened the first SRI office in Japan. He got the first SRI project funded by the Japanese government, and this relationship continues today. When President Reagan and the Premier of Japan agreed to more technical cooperation, Paul guided the effort that won SRI two of the six US projects that NTT funded. He led a multiyear project for Osaka Gas that involved

more than 100 projects spread over many SRI units.

Among other successful projects in Asia, Paul ran the China Economic Technology Alliance — a techno-economic collaboration founded by SRI to foster relationships between the Chinese government and major corporations around the world.

Paul retired from full time employment in December 2000, but he's never really left — to this day, he is sought out by SRI staff for his experience and insight on building business through good client relations. He has continued to provide leadership for SRI Japan and SRI Korea. Paul was inducted into the SRI Alumni Association Hall of Fame in September 2002.

Paul's wife Ardelle and the members of their family were also present at the award ceremony. In his acceptance remarks, Paul reminded the assembled staff of "the extraordinary freedom you enjoy here at SRI," and credited it for much of his success.

SAVE THE DATE!

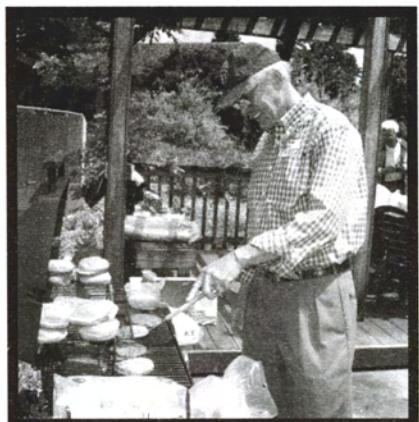
Wednesday, October 29, 2003
for The Annual SRI
Alumni Reunion

UPCOMING EVENT AT SRI

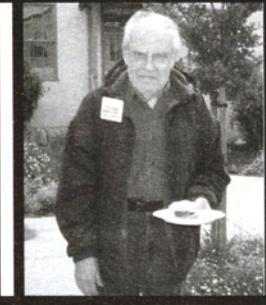
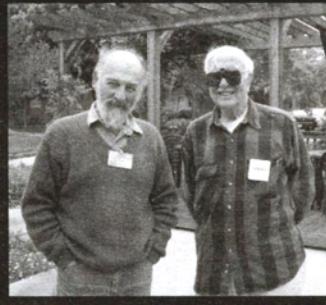
Wednesday, October 1, 2003
Mimi Fellows Awards
I Bldg. — 4:00-5:00 p.m.

ANNUAL SPRING PICNIC

Fine weather greeted alumni on May 8 for the Spring Picnic. As a special treat, hamburgers and hot dogs were grilled to order by Master Chef Boyd Fair. Plenty of good chatter and a mini-rafle, thanks to Sandy Hinzmann in Staff Activities. Special thanks to Boyd and to Pete Valenti for making it all happen.



Photos by John Leung and Boyd Fair



2003 GIBSON AWARD

The Weldon B. Gibson Achievement Award was presented on June 11th to Phil Green in recognition of his contributions in the fields of ultrasonic imaging and robotic surgery. One of SRI's highest honors, the Gibson Award recognizes SRI employees whose work has improved the peace and prosperity of society and has brought special luster to SRI's reputation.

Over his 25-year SRI career, Green made several important contributions to the medical community, including several patented technologies in ultrasonic imaging that are in use around the world.

In addition, his important contributions to the still emerging concept of a new form of minimally invasive "robotic" surgery has already had a significant impact on the practice of medicine.

Ultrasonic Imaging

Today, ultrasound is a mainstay in diagnostic imaging because of its ability to image soft tissue safely. Used as a primary sensor in obstetrical and gynecological exams, ultrasound is also important in a wide variety of other situations where safe, rapid screenings are important. The use of ultrasound in medicine dates to the post-WWII years but it struggled for many years with low resolution and inadequate sensitivity.

In 1967, SRI's Earle Jones asked Phil to come to SRI to set up a program in the medical uses of ultrasound. One of his first important ultrasound systems at SRI was a very slow but high-resolution, two-dimensional imaging device. It used a small transducer that scanned the object and produced an image quality showing the amazing potential of ultrasound. Papers reflective of this potential spurred the research community.

Then, Phil moved to what he called an "ultrasonic camera". This unit placed larger transducers and detectors in a water bath with the patient. The system was not only a real-time imager but had sub-millimeter resolution, higher sensitivity, moveable



CEO Curt Carlson, Phil Green, and Don Nielson

Photo by Shari Fisher

manufacturers in the technology.

Phil's most important contributions would come in the further refinement of ultrasound. He raised the frequency to the order of 10 MHz, revealing smaller and smaller features in the human body. He designed special filters that would minimize distracting "noise" from unwanted reflections inside the body — a patent on one of these filters would be a fruitful source of royalties for Phil and SRI for many years. He applied ultrasound to tiny instruments like endoscopic probes, gaining more sensitivity, resolution, and better feature enhancement. Concerning the latter, he and his colleagues invented "reflex transmission imaging", wherein with a single transducer he could see both reflective and transmissive returns involving the same region of examination. That was in 1984.

Phil led this work at SRI for more than 25 years. It produced more than 30 inventions and ultimately brought SRI almost \$60 million in royalties and settlements. Phil's innovations are now part of most ultrasound imaging systems.

2003 GIBSON AWARD (Concluded)

“Robotic” Surgery

The second area of Phil's contributions is perhaps even more exciting. With interest, he had noticed the difficulty surgeons had in performing a new, minimally invasive operations involving gall bladder removal. Gaining the needed dexterity using instruments inserted through tubes into the abdomen was very difficult and counterintuitive for surgeons to learn. In the mid-1980s, Phil had an insight that holds the promise of one day revolutionizing many types of surgery. Simply put, the idea was to cut operating instruments in half, placing the handles in the surgeon's grasp, and applying the operative end remotely – inside the patient. The two ends would then be “virtually” reconnected through complex, sensor-supported and eventually, computer-mediated linkages that enable the surgeon to operate as though the patient was directly in front of him.

Inside the patient, tactile sensors relay the movements of the surgeon's hand. Cameras supply a stereoscopic view and sound to the surgeon with no reversals or distortion, exactly as though the operation was completely open! The patient is in one part of the room and the surgeon, at a console, is in another.

SRI funded the first exploration of this technique in the mid- to late-1980s and the first working prototype was completed in 1991. Giving it the precision and sensory sophistication it required took the combined efforts of very proficient SRI staff, including Dr. John Hill, Joel Jensen, Yonael Gorfu, and others. With a demonstrable concept in hand and persistent effort, Phil managed to get NIH to fund a complete prototype later that year. Though peer review of his proposal was not sufficiently supportive, a videotape of what he had created made the difference. The new prototype was capable of startling precision. For example, on one of many trips

with the system to the University of California Medical Center in San Francisco, a surgeon, with almost no training on the system, severed and re-attached a tiny bovine artery...yet the surgeon and his work were separated by more than 10 feet!

Following his entrepreneurial instincts, Phil hit the road in 1994-5 to try to interest medical instrumentation companies and venture capitalists in licensing the concept. He was initially unsuccessful. But following his effort, and because of the attention it received, SRI was able to sign a license agreement with a concern that eventually became Intuitive Surgical Inc., now located in Sunnyvale, CA. They transformed the prototype into a system with all the capability and reliability needed in a clinical setting. They named their first system the da Vinci™ System.

In 1998, while awaiting FDA approval, several copies of the da Vinci System were taken to Europe and it was used over a period of several years in many types of abdominal surgery. In July 2000, the U.S. Food and Drug Administration approved its use in abdominal surgery, and in 2001, it was approved for chest (excluding the heart) and prostate surgery. Since then, other surgical uses have been approved and more than 12,000 surgeries have been completed worldwide. The technology provides a truly revolutionary approach to minimally invasive surgery, and one day, microsurgery.

Phil's inventive genius has definitely made SRI and the world a better place. The institute is genuinely proud of his outstanding contributions; they are noteworthy indeed.

Read more about the award at <http://www.sri.com/about/awards/gibson.html>.

RECENT RETIREES

- | | |
|---------------------|--|
| January 2003 | — Ellen L. Wong , Mathematician, after 35.2 years of service. |
| April 2003 | — Jan M. Henderson , TIA Technical Secretary, after 29.6 years of service. |
| | — Elizabeth C. Adams , Specialist Publications Coordinator, Organizational Development and Training, after 22.7 years of service. |
| June 2003 | — Anthony F. Ferrera , Supervisor of Tech Services, after 40.6 years of service. |
| | — Charles R. Kirkley , Research Engineer, after 38.4 years of service. |

HISTORY CORNER: SRI's CHINESE SUMMER

by Earle Jones

In 1979, an SRI delegation was one of the first to make an official visit from the U.S. to China. President Nixon's trail was still warm as our group attempted to explain SRI to a whole new audience.

But first, some background: For about 30 years following the communist revolution in 1947-'48 no Americans had been allowed to visit China. Then, in the mid 1970s, President Nixon began to open the doors using Henry Kissinger as his emissary. At that time, our official Chinese embassy was in Taipei where it had been moved after the communist revolution.

When the discussions regarding the recognition of Mainland China began, there was substantial resistance from the strong Taiwanese influence in the US congress. It required several years to convince the majority of congressmen that we should make the transition. Official US recognition of China finally came on January 1, 1979. By this time, almost every other country in the world had already done so.

Working his many international contacts, Hoot Gibson approached several Chinese government enterprises to discuss a possible meeting. In the spring, he received an official invitation to visit China some time that summer. Our official host was to be the "Chinese People's Committee for Friendship with Foreign Countries", known informally as the CPFA.

Hoot wanted a broad representation across SRI, especially in those areas that were of growing importance to China: Economic planning, technology, chemicals and mining, and agriculture. With our strong Stanford University connection, Hoot was concerned that we might be viewed as a purely educational organization and be steered around to universities and schools. He decided to broaden the base of the visiting group to include representatives of some of the companies in the SRI Associates Program.

The traveling group comprised Hoot and Helen Gibson, Don and Gladys Fiske, Andy Kridl, Ed Robison, and Earle Jones; along with representatives

from our associate companies Koppers Company, Ford Motor Company, Eaton Corporation, and Burroughs Corporation.

ARRIVING IN BEIJING

The dates were set for midsummer in 1979 (bear in mind that this was only six months after the official US recognition of China). Some of us had to hurriedly obtain new passports, because our regular passports had Taiwan visa stamps, "tainting" them in the eyes of the Chinese officials.

Our team gathered in Tokyo at a hotel near the newly opened Narita airport. We flew together from Tokyo to Beijing on July 9, 1979.

The available travel literature covering China was meager in those days. After all, no American had visited there in 30 years. Ominous sounding advice from Fodor's Guide—such as: "You will be searched at the border" and "Don't bring anything of value"—had some of us on edge.

We arrived late in the day and were met by representatives of the CPFA. They carried our bags and quickly steered around the usual customs lines to a private area where we received our official welcome to China. Senior officials from the CPFA warmly welcomed us, assuring us that our stay would be both comfortable and enjoyable to us, and hopefully of great value to future cooperation between our countries. Then we were escorted in a small bus to the Beijing Hotel, where we stayed two per room in the old wing.

A WORKING TOUR

Each day we would meet our CPFA hosts at breakfast to discuss the plans for the day. The first few days consisted of local visits—a local hospital that specialized in acupuncture treatment, several small factories, and a farm that specialized in the growing of Chinese green tea. Of course, we made the mandatory all-day visit to the Great Wall, which was very impressive. It was very much like a subsidized travel adventure in one of the most fascinating parts of the world.

HISTORY CORNER (Continued)

A few days later, we were invited to meet some high-ranking members of the government. On this visit, we dressed up in our finest suits and ties to meet high-ranking ministers, including Mr. Lee Xian-Nian—later President of the Peoples Republic of China. [A group photo shows us wearing our suits and ties; Mr. Lee is comfortably dressed in his short-sleeved shirt!]

We noticed that most of the Chinese people in Beijing — both men and women — wore simple dark blue cotton trousers, short-sleeved white shirts, and sandals. We decided that our clothes were too formal and several of us bought short sleeved white shirts that seemed to be so typical of the local dress.

After a few days of these formalities, they really put us to work.

We were divided up into groups to meet with organizations interested in our specific areas of work. We were taken to meet groups from various areas of industry, education, and R&D, to discuss new trends in our areas of competence.

Here is one example: One morning, I was asked if I could meet with some computer industry people to talk about new advances in hardware and software. Of course, I agreed, figuring I could respectfully represent the state-of-the-art to professionals who had only recently developed a working computer and a rudimentary computer network.

In my mind, I envisioned a small conference table with perhaps a dozen computer guys — just a friendly and informal discussion of new developments. I was led to a building and brought in through the rear door. My host guided me into a room — an auditorium really — where about 400 Chinese professionals were seated, pens in hand, to hear my comments about computer technology.

He introduced me to the very polite and receptive audience and then reminded me that I should give them a break at noon.

It was 9:30 AM.

I was very fortunate to have had the support of people in Menlo Park such as Dick Knock, who had worked with me on some similar presentations in Europe a few months earlier.

For the next two and a half hours we presented our ideas about future developments — focussing on the necessity for software expertise and the future shortage of software specialists. The audience was very receptive and showed an amazing facility with the English language, asking very thoughtful questions.

At 12:00 on the dot, my host reappeared, and about 20 of us continued the discussion over an informal lunch. After lunch, I was taken to a laboratory to see a computer that the local Chinese had developed, based on an old Data General machine. They had obtained schematics from a Data General salesman and copied the design. Lacking any access to semiconductor memory chips, they bought ferrite cores and using their readily available source of cheap labor, produced ferrite core memory arrays to support the machines.

They had built several models of the computer, some of which had been used for process control in factory operations. The reliability was very poor in the working environment of steel mills, etc. They had placed two of the computers in separate buildings and wired them together so as to be able to transfer messages from one to another. I saw a demonstration of file transfer over this rudimentary network. This was the first computer network in the country.

SPREADING OUT

After ten days in Beijing we traveled north to Shenyang and Dalian, on the North Korean border. Watching Russian MIG-15 aircraft zooming overhead was a new experience for an ex-USAF guy like me!

We visited steel mills, schools, hospitals, and shipyards. We met with those in charge and enjoyed discussions over tea. At all times we were made to feel very welcome and comfortable. We especially enjoyed the food—noting the big variation from one city to another. Banquets in the evenings allowed us to try

HISTORY CORNER (Concluded)

their alcoholic beverages. We would usually start out with a local beer, then move on to stronger stuff. After the banquets there was always a formal toast, after which we had to finish our drink, then another toast and another round.

We were completely unsupervised when we were on our own time. We were free to wander about town, just playing tourist, shopping and sightseeing.

In Shanghai, Ed Robison and I hired a taxi for the day for US\$20. Ed had been in China before the revolution and was eager to see how the places he had known had changed in 30 years. There were thousands of bicycles, but little auto traffic, much of it consisting of 1946 - '48 model US cars.

We spent about ten days in Shanghai, which was clearly the most modern part of the country. Occasionally we would see people wearing blue shirts—instead of the usual white shirts—with their dark blue pants.

We also saw young couples holding hands on the street, little public displays of affection that we did not see in Beijing and the industrial cities.

A footnote: This was the first time that I came to really know Hoot Gibson. I had known him at SRI for over twenty years, but since we were close together for almost a month in China, I had a chance to watch him work. He was always the first one up in the morning. I would sneak downstairs in the hotel to find a cup of coffee and Hoot would be there, busily writing. He was in the process of composing his early SRI history books. He was also the last guy to fold for the night. His interactions with the Chinese people were a great example for me. He was perfectly comfortable with the most senior Chinese executives and politicians. He was also able to have fun with the kids on the street, showing them little magic tricks with cards, coins, etc.

Altogether it was a fantastic trip. We did a lot of work and had a lot of fun.

LONDON ALUMNI EVENT

On Sunday 18th May, about 20 alumni met in Hampstead (North London) for a guided tour of the Village, with accounts of the renowned actors, writers, artists and others who have lived there, and an introduction to Hampstead Heath, followed by lunch at "The Flask" pub.

The guide explained the history of the local church, and told us about some of the many famous people buried in its graveyard, including Hugh Gaitskell, Kay Kendall (wife of Rex Harrison), and George du Maurier - the first of three famous people from that family.



*For more news and pictures, visit
<http://members.aol.com/SRIAlumniUK>*

Among the tour highlights was "Admiral's House" - built by a late 18th century admiral (an incompetent who had bought his commission) after being court-martialled for losing his ship in a battle with the

French, off the south coast of England, and having to be ransomed! The top of the house was built to resemble the poop deck of his ship, complete with flagpole and cannons, which were regularly fired. This house (and its history) was the inspiration for the opening scene in the film "Mary Poppins." It is currently owned by Russell Crowe.

NEWS FROM THE WORKPLACE

HOMELAND SECURITY NEWS

AIRPORT SECURITY EVALUATED FOR SAFE SKIES ALLIANCE: Scientists in SRI's Poulter Laboratory are working with the National Safe Skies Alliance to evaluate airport security performance of equipment designed to detect threats such as guns, knives and explosives. SRI replicated all aspects of a real airport security checkpoint at its remote test facility. Former airport security screeners operated the equipment and performed physical searches on luggage and people. Multiple explosives were used in the demonstration and were physically segregated to prevent possible cross-contamination that could have led to false readings by the detection equipment. By mid-April, SRI had conducted nearly a thousand tests. Read more about the Poulter Lab and how it is working with clients to understand the dynamic response of materials and structures to impacts, explosions, fatigue, corrosion, and fire at <http://www.sri.com/psd/poulter/>.

NATIONAL GUARD SOLDIERS SHARPEN WARFIGHTING SKILLS: The California National Guard successfully completed the first live demonstration of its Joint Training Experimentation Program (JTEP) on May 3. The federally funded statewide combat readiness training system, of which SRI is prime contractor and systems integrator, creates a realistic battlefield environment through the integration of live battle exercises with computer-based simulators. The demonstration included SRI's Deployable Force-on-Force Instrumented Range System (DFIRST) for armored ground combat maneuver and gunnery training. Learn more about the successful JTEP demonstration at <http://www.sri.com/news/releases/05-09-03.html>.

SRI is part of the OneTESS (One Tactical Engagement Simulation System) team, led by AT&T Government Solutions. The team was recently awarded a 13-month, \$2 million contract by the U.S. Army to help define emerging technologies and communications systems to be used for future combat simulation and live training. SRI expects to

apply its expertise in mobile ad hoc networking; live, constructive and simulated training integration; geometric pairing; advanced GPS; command and control systems; and communications technology and architectures. Read more at <http://www.att.com/news/item/0,1847,11487,00.html>.

BIOSCIENCES

NATIONAL CANCER INSTITUTE SELECTS SRI CANCER TREATMENT FOR FURTHER DEVELOPMENT: NCI has approved an SRI-developed cancer prevention drug for its "Rapid Access to Preventive Intervention Development" (RAPID) program. This is the first time an SRI drug candidate will be developed in the RAPID program, which is designed for the expeditious movement of novel drugs from lab to clinic. SRI expects that the drug will have potential clinical applications in both prevention and therapy. SRI Medicinal Chemistry researcher Ling Jong, Ph.D., co-discovered the novel cancer chemopreventive treatment. For her work in this drug class, Dr. Jong was awarded a California Breast Cancer Research Program award in Fall 2002. Read more about the drug project at <http://www.sri.com/news/releases/03-17-03.html>; Learn more about Dr. Jong at <http://www.sri.com/about/people/jong.html>.

ECONOMIC DEVELOPMENT NEWS

LEBANON'S ECONOMIC RECOVERY STRATEGY DEFINED BY SRI RESEARCHERS: SRI's Center for Science, Technology and Economic Development is working with Lebanon to help rebuild the basic infrastructure that was lost during the country's 15-year civil war. SRI experts have developed strategies to build on strengths in information technology, agribusiness, and tourism. Under funding from the U.S. Agency for International Development, SRI recently won a \$7.3 million cooperative agreement to continue this work for three more years. Read more at <http://www.sri.com/policy/cstd/>.

REMEMBERING GEORGE ABRAHAMSON, OUR FOUNDER (Concluded)

[Thanks to Jim Colton, current director of Poulter Laboratory, for the preceding summary.]

In 1980, George was named vice president of the Physical Sciences Division, and then took on the vice presidency of the Life Sciences Division in 1988, with the new title of Vice President of Sciences.

George took leave of SRI in 1991 when he was named as the Air Force's chief scientist, a distinguished honor. He held that position in Washington, D.C. until 1994, when he returned to SRI as Senior Technical Advisor. In 1999 he agreed to serve as acting vice president of the Physical Sciences Division during a difficult transition. Even after he retired, George remained active at SRI, advising, analyzing, encouraging, and ever present at Institute events.

At the time of SRI's 50th anniversary in 1996, he founded the SRI Alumni Association and served as the Association's president for seven years, stepping aside only when he was diagnosed with pancreatic cancer early this year. He led the SRI Alumni Association Hall of Fame Committee as well as the Gibson Achievement Award committee. He was inducted into the SRI Alumni Association Hall of Fame in September 2001.

Earlier this year, George was presented with the first SRI Presidential Achievement Award and Medal to

honor his extraordinary contributions have made a positive and lasting impact on the world, SRI's clients, and SRI. (*April issue, page 3.*)

Retired SRI Vice President Don Nielson reflected on his memories of Dr. Abrahamson: "As I think of what George stood for, three qualities leap to mind: a kind of integrity-based straightforwardness, an almost irresistible initiative to tackle the problems he saw around him, and, quite simply, stature. He liked to lead and make things happen and he was very good at it. Whether at SRI or in his role as Chief Scientist in the Air Force, he was known for his candid assessments and his willingness to see a task to completion. He set high standards for himself, for those around him, and for what they were to accomplish jointly. He also genuinely cared for people, including the obligations those relationships carried. Finally, he loved SRI and gave unselfishly of himself to see it succeed. He well deserved the wide respect he carried."

In addition to Millie, his wife of more than 50 years, surviving relatives include his daughter Chris Abrahamson McClelland of Morgantown, WV; sons Carl of Winterville, NC, Thomas Eric of Palo Alto, and Norman of Piedmont, CA; brothers Donald and Tom, sister Irene Starr; three grandsons and four granddaughters.

IN MEMORIAM

Fred Kamphoefner

Fred Kamphoefner, 82, died on March 29.

The son of two school teachers, Fred was born in San Francisco in 1921. He graduated from Polytechnic High School there, then earned a B.S. in Electrical Engineering at Berkeley in 1943.

Deferred from the draft during WW II, Fred joined Fred Terman's Radio Research Lab at Harvard, working on radar countermeasures. He then followed Terman to Stanford after the war, where he earned M.S. and Ph.D. degrees in Electrical Engineering.

He joined the General Electronics Lab at SRI in July of 1949, and became Manager of the Industrial Electronics Lab in 1953. Except for a year in

Heidelberg on a joint project with the Operations Research Office of John Hopkins University, Fred spent his entire career at SRI in Menlo Park. (It was at Heidelberg that he became enamored of the recorder, which he taught himself to play. "Being self-taught was a big mistake, Fred said.)

At SRI, Fred met Jean Henderson, a secretary in a nearby org. They were married in 1960 and moved to a home on Ravenswood Avenue, just across the street from SRI's new building A.

His group developed the high-speed check-handling systems, including Magnetic Ink Character Recognition, for the famed ERMA project for the Bank of America.

IN MEMORIAM (Continued)

Fred Kamphoefner (Concluded)

Other achievements in his various labs and programs include ink-jet printing, copier development for Savin, and electron-beam lithography.

His labs of some 50 professionals later became active in optical character recognition (OCR) for numerous industrial clients. Several of the professionals he trained later spun off to form the successful Systems Control, Inc.

When Fred turned 65, he asked to continue half-time. Even so, he continued to direct two orgs and serve as deputy director of the Advanced Technology Division.

Jean Kamphoefner died in 1989; Fred retired in December 1991 after more than 42 years of service.

In 1998, Fred was inducted as a charter member of the SRI Alumni Association Hall of Fame.

In retirement, Fred had more time to devote to his garden and his wild birds, and he took up beekeeping. Mostly he spent more time playing renaissance music.

Fred was a member of the American Recorder Society. He played recorders enthusiastically with the Mid-Peninsula Recorder Orchestra, which he helped found in 1962, and whose affiliation with the San Francisco Early Music Society he helped arrange.

Inspired by Jean's example, he took up the harpsichord, and studied with Anne Peterson and Margaret Fabrizio. His other interests encompassed reading and languages and foreign travel. He was also a strong supporter of the Peninsula Open Space Trust. Fred was truly a renaissance man.

Fred's older brother and sister predeceased him. Surviving relatives include his sister-in-law Eleanor Cannon of Bend, Oregon; niece Babs Burnett of Sleepy Hollow in Marin County; nephews Martin Kamphoefner of Kentfield and Kenneth Kamphoefner of Larkspur; and an assortment of grandnieces, grandnephews, great-grandnieces, and great-grandnephews.

John L. Crain

John Lewis Crain, 76, died on April 14 in Portland, OR.

A native of Louisville, KY, he served in the South Pacific during WWII.

John worked in Southern California, New York, and Washington, D.C. He came to SRI at the beginning of 1963 in the Economics and Management Research group as an Operations Analyst. He was a Senior Transport Analyst when he left SRI in April 1971 to found his own company, Crain & Associates in Menlo Park consulted in Transportation Planning, specializing in innovative projects to improve public transit, particularly for the elderly and disabled.

His company also created a statewide motorcycle safety-training program for the CHP that contributed significantly to reducing motorcycle accidents and fatalities.

John is survived by his wife, Martha Irvine of Portland; daughters Maggie Crain of Vashon, WA and Barbara Kneisley of Monterey; four grandchildren; and two great-grandchildren.

Joel Johnson

Joel Johnson, 70, former employee of SRI's Engineering and IMEG-Information Systems Management consulting group, died of cancer late in 2002. In his 19 years at SRI, Joel worked in various IS assignments that included banking automation, network architecture, data base management, and uniform procurement systems.

This article was prepared with contributions from his colleague at Croydon, David Gibby.

Although I had first met Joel when he interviewed me in London, in 1985, it was when I joined one of his IT project teams in Tokyo in January 1987 that I really got to know him. Joel's first visit to Japan had been as a 19-year-old GI, in 1951, and he had many stories of conditions there at that time. He never imagined that nearly 40 years later he would be leading multi-national teams advising top Japanese banks, such as Fujibank, on the use of Information Technology. Although such assignments brought him into regular contact with Presidents of large corporations around the world, his fund of anecdotes about his experiences often showed his self-deprecating sense of humour.

Joel's Korean War army experiences instilled in him a determination to make the best of his talents. After a career leading to senior IT Management positions in the US, he joined SRI in Sept. 1981. He soon transferred to Croydon to lead the IT consulting group in the final phases of one of SRI's most challenging consulting projects at the time, for Midland Bank. He then led several projects in Denmark and Sweden – the country from which his family originated. Joel worked closely with Croydon office director Fred Plugge (now deceased); together they expanded the IS consulting business to many areas of Europe and the group expanded and prospered.

After Joel returned to Menlo Park in 1986, he was much in demand to lead consulting projects around the world. These assignments frequently involved long periods away from home—in New York (where he worked for nearly a year and where, Tee Williams recalls, "he became the resident sage and the grandfather to one of the client's major development teams"), or further afield – in Europe, Australia, Japan, Kuwait, Zambia, or China (he often talked about how the banking system there involved moving clearing-transactions by bicycle messenger).

Joel moved to Engineering when SRI spun off the consulting group in January 1996. He worked on important projects for the U.S. government until he retired from SRI in March 2000. We will miss Joel, but the memories of our times together will endure. As Roy Price said to me, he was "a good guy, a gentleman, and a friend".

IN MEMORIAM (Concluded)

John Culich

John Culich, a native of Yugoslavia, died in Los Altos on June 6 at the age of 88.

An experienced tool-and-die-maker, John joined SRI in 1955 as a Model Maker in the Engineering Division. He was the Lead Technical Model Maker in Project & Facility Support Services when he retired in 1979.

John's wife Laure predeceased him. He is survived by his son Claude of San José; a sister, Mary Sankovich of El Cerrito, a brother Frank of Stockton; and two grandchildren.

Robert Kling

Rob Kling died unexpectedly in May 2003. He was 58. He had worked as a Research Engineer in the Applied Physics Lab from June 1966 until January 1972.

Kling was born in August 1944 and grew up in northern New Jersey. He completed his undergraduate studies at Columbia University in 1965 and his graduate studies at Stanford, specializing in artificial intelligence (M.S. 1967 and Ph.D. 1971).

During the two decades after he left SRI, Kling focused his research interests on social informatics — the role of information technology in social and organizational change. Kling studied how intensive computerization transforms work practices and how computerization entails many social choices.

Kling conducted much of his work at the University of Wisconsin in Madison and at the University of California in Irvine. His research has been published in over 85 journal articles and book chapters. He also served on the editorial and advisory boards of several scholarly and professional journals, including the *European Journal of CSCW*, *Information Technology and People*, *Social Science Computer Review*, and *Accounting, Management and Information Technology*.

He served as the editor-in-chief of *The Information Society*, a scholarly and mainstream publication for the information technology profession. In 1987, he was awarded an honorary doctorate in social sciences by the Free University of Brussels.

In 1996, he moved to the University of Indiana (Bloomington, IN) as professor of information systems and information science. At the School of Library and Information Science at Indiana University, Kling directed the interdisciplinary Center for Social Informatics. He

was also an adjunct professor of computer science at the University.

In 2001, he was elected a Fellow of the American Association for the Advancement of Science.

Kling is survived by his wife, Mitzi Lewison of Bloomington, IN and his sister Ellasara Kling of New York City.

Charlotte A. Matthews

On May 10, 2003 Charlotte A. Matthews passed away. She was 83 years old, and had served at SRI for more than 36 years.

Charlotte was born on July 3, 1919 in Chicago, Illinois. After graduation from Hyde Park High School, she completed a secretarial course at Moser Business College. Then in 1943 she took War Training courses at Illinois Institute of Technology that included Drafting for Women, Die Design, and Fundamentals of Machine Design. It was at IIT that she met Tom Poulter.

Charlotte moved to California in 1949, crossing the country in a 1947 Crosley station wagon with all her worldly possessions. She joined SRI in Long Beach as a Draftswoman and worked on Doc Poulter's Long Beach island settling project for several years before moving to Menlo Park to join the staff of his research lab. She did many jobs for Poulter Lab, from drafting to coordinating, before becoming a Senior Publications Coordinator for SRI's Central Staff, directing all the coordinators assigned throughout the divisions. She retired from SRI in July 1985.

Charlotte enjoyed many activities—bird-watching, shell and rock collecting, camping, California history, and Native American culture, to name a few. She was a founding member of the Peninsula Gem and Mineral Club, to which she bequeathed her rock collection. Her fantastic collection of California coast shells included many that are no longer found in the area; it was donated to a science teacher.

She lived with her dogs and cats in her Menlo Park home for 48 years. After a stroke in June 2002, she moved to a care home in Redwood City. A bad bout with a bug earlier this year left her very weak. She contracted pneumonia in April, but her memory was fantastic right up to the end.

Charlotte is survived by her brother John R. Matthews of Munster, IN; nephew Mark Matthews of Downingtown, PA; niece Cynthia Matthews DeGroshe of Newark, OH [who supplied much of this information about her Aunt Char]; and several cousins.