#### 333 Ravenswood Ave. M/S AC-108 • Menlo Park CA 94025



Voice Mail: 650-859-5100 Email: steering-committee-alumni@sri.com Web Page: http://alumni.sri.com/

#### alumni association

# **APRIL 2010 NEWSLETTER**



# MESSAGE FROM PRESIDENT BOYD FAIR



No fooling...

Your first Alumni Newsletter of 2010 has arrived! We hope that everyone will find something of interest between the covers.

Boyd Fair

Some significant changes have occurred at SRI during the past few months. Starting at the top, SRI

has elected a new Chairman of the Board, Admiral Vern Clark. Read about Admiral Clark and what he brings to SRI. Another change is with the SRI-Sarnoff relationship that has existed since RCA Laboratories was given to SRI about 20 years ago. Sarnoff is now being integrated into the parent organization and will operate much like the other new offices that have been described in prior issues of the newsletter. You will find an article about this change in this issue.

New and interesting research continues at SRI. We have included a fascinating article about new tests that have been developed for the detection and control of parasitic diseases. Those alumni who worked in the sciences side of the house should find this article particularly interesting. The article on cold fusion will probably stimulate some interesting conversations, too.

For the "old timers" in the association, there are a couple of articles by fellow alumni that recall some of the interesting research done in the past. Walter Jaye describes research and field activities done during the Cold War when several nations were still testing nuclear weapons in the atmosphere. Paul Tuan writes about his pioneering work in computerautomated crew scheduling for the New York City Transit Authority.

Our Events Chairman has recovered from the 2009 Annual Reunion and has been busy putting together plans for our 2010 Spring Fling. This year he has arranged a field trip to the new California Academy of Sciences in Golden Gate Park. See the flyer included with this issue. Space is limited, so sign up immediately because we expect a full house.

We are starting a Help Wanted section in this issue. The Alumni Association functions only because of the efforts of a few dedicated alumni volunteers who wish to keep active in the SRI family. We are looking for "a few good folks" to augment our efforts and bring new ideas to the organization. Specifically, we are now seeking a volunteer to serve as backup to our Membership Chair; details on this role are given inside. (We are low key and flexible, so don't take the specifics of the write-up too literally.)

Last, we present our annual SRI Alumni Association financial summary, which shows that we remain solvent and have a good financial basis on which to continue this year's activities.

Read on and enjoy. — Boyd

The Spring Fling is May 17, 2010, at the California Academy of Sciences. See announcement on page 7. The flyer for this event is enclosed with this mailing.

# **NEWS FROM SRI**

# Jorge Heller Postdoctoral Fellowship Established by CRS Foundation

The CRS Foundation has established the Jorge Heller Postdoctoral Fellowship to cultivate "future leaders in the area of controlled delivery technologies." The author of more than 200 publications and holder of 50 patents, Jorge spent much of his career at SRI conducting research on the synthesis of polyortho esters. He was president of CRS (Controlled Release Society) in 1989-1990 and was founding editor-in-chief of the *Journal of Controlled Release*. The annual JCR Award, given at the CRS Annual Meeting for the best published paper on the science of controlled release, also is named for him.

The recipient of the \$30,000, one-year Jorge Heller Postdoctoral Fellowship will be announced at the 37th Annual Meeting and Exposition of CRS in Portland, Oregon, in July.

Jorge died in June 2009. His obituary was published in the August 2009 issue of the Alumni Newsletter.

#### Sarnoff Corporation to Be Integrated into SRI



After more than 20 years of being a wholly owned SRI subsidiary and nearly 70 years after its founding as RCA Laboratories, Sarnoff Corporation will be integrated into SRI.

Sarnoff is an innovator in vision, video, and semiconductor technology for the defense, security, and surveillance markets. In announcing the integration, Curt Carlson cited the similar businesses of SRI and Sarnoff, namely, "scientific research, client-sponsored R&D, technology licensing, prototype businesses, products, services, and spin-off ventures" and noted that "As an integrated enterprise, we will have broader and deeper capabilities and larger scale" and an enhanced ability "to move scientific research and related technology from laboratory R&D projects to market-ready products." The integration process has begun and will be completed on January 1, 2011.

# Admiral Vern Clark Elected Chairman of SRI's Board of Directors

Admiral Vern Clark has been elected chairman of the SRI Board of Directors. Samuel Armacost, who has been chairman since 1998, will remain on the board, continuing his three decades of service to SRI.



Admiral Clark joined the SRI Board in 2007. He retired

from the U.S. Navy in 2005 after completing the Navy's second-longest tenure as Chief of Naval Operations. He is a member of the Defense Policy Board and currently serves on the boards of Raytheon Company, Horizon Lines, Rolls Royce North America, and the World Board of Governors of the USO.

Said Admiral Clark regarding his chairmanship, "SRI is an extraordinary research institute addressing some of society's most important challenges in fields such as national security, communications, energy, health, education, and economic development. As chairman, I will focus on guiding the organization's continuing growth as it delivers solutions to the public and private sectors and will work with dedicated staff throughout SRI to assist them in achieving their goals."

### Sarnoff Winner of "Best New Product"

Sarnoff won the "Best New Product" award at the 2010 New Product Showcase (NPS) hosted by the Security Industry



Association. The winner is Sarnoff's Iris on the Move device, which can capture an image of the iris of a person's eye at a distance of as much as 10 feet while the person is in motion. The device has a throughput of as many as 30 people per minute. In all, 85 products and services were entered in this year's NPS.

## **NEWS FROM SRI (Concluded)**

#### Simple Test for Parasitic Diseases Created

A new fluorescence test being developed by SRI researchers can detect inexpensively and within minutes the presence of a family of parasites that cause several deadly diseases. The *Trypanosomatidae* family of parasites causes Chagas disease in Central and South America, sleeping sickness in Africa, and leishmaniasis in millions of people worldwide. The parasite also causes a disease called nagana in cattle and horses. Current tests require expensive or time-consuming blood analyses or antibody assays. SRI medicinal chemists have engineered a family of arsenic-based dyes and identified three that bind to sulfur-based groups in a peptide unique to trypanosomatid parasites. The peptide-dye complex then glows under ultraviolet light.



### "Cold Fusion" Is Getting Hotter

Nuclear fusion—the fusion of atoms or atomic nuclei to form heavier nuclei—could provide a virtually unlimited source of usable energy if the reaction can be controlled. Unfortunately, fusion is generally considered to require extreme conditions of temperature and pressure, such as those found in the cores of stars. After more than 20 years of controversy, however, near-room-temperature "cold fusion" appears to be gaining acceptance in the scientific community as a valid topic for research.

Once derided as "junk science" when some early claims that nuclear fusion had been achieved at room temperature could not be verified by other researchers, cold fusion was the subject of nearly 50 presentations at the March 2010 annual meeting of the American Chemical Society (ACS) in San Francisco. Among the presenters was Mike McKubre, Senior Staff Scientist and Director of the Energy Research Center in the Physical Sciences Division's Materials Research Laboratory, who provided an overview of research in the field, now commonly called "low-energy nuclear reactions" (LENR). He reviewed progress in LENR research, focusing on experimental work by SRI and its collaborators on new physical effects in metal deuterides, particularly the generation of nuclear-level heat and nuclear products. Among other reports at the conference were descriptions of a new type of battery based on a new cold fusion process, evidence of a cold fusion process in bacteria, and new theoretical models of excess heat production in cold fusion.

According to McKubre, the potential for commercialization of the technology depends on a better understanding of the science behind the reactions, which he and other researchers continue to pursue.

<b>RECENT DEPARTURES OF LONGTIME STAFF</b>				
			Years of Service	
December 2009	-	Pamela Pallakoff Susan Russell	24 34	
January 2010	- -	Katherine Irwin Robert Parks	29 27	
February 2010	-	Katherine Baisden	11	
March 2010	-	Vincent Itatani Kathleen Vickland	25 23	

# **HISTORY CORNER**

### The Design and Development of a Crew Scheduling System: The New York City Transit Authority and Beyond

#### By Paul Tuan

One of the exciting and rewarding projects that I pursued at SRI while serving as the director of the Transportation Systems Center was the development of a computer-based interactive crew scheduling system for the New York City Transit Authority (NYCTA). In 1976, because of the success of the interactive vehicle scheduling systems that the center had developed for various other transportation organizations, we were given the opportunity to submit a proposal to the NYCTA and were awarded the contract. Not only was this project rewarding, but it also led to other challenges and interesting experiences.

# The Need for a Real-Time Interactive Crew Scheduling System

Although we had created many scheduling systems, this was the first time we were to do crew scheduling instead of vehicle scheduling. The contract required us to develop an experimental system using the F-line as the prototype. The F-line ran from Jay Street in Brooklyn to Coney Island and was considered a typical subway route. Like all the other subway systems, the NYCTA used a manual method to schedule train crews (mostly conductors and motormen). Crew scheduling was done once a week, but with trip delays and cancellations, terminal problems, and crew shortages, the schedule had to be revised dynamically on a daily or even hourly basis. Besides meeting the train timetables, the crew schedule also had to take into account the labor union rules, crew resource limitations, operational constraints, and safety regulations. Because the manual method was very tedious and time-consuming, the nonproductive part of the crew costs-the costs caused by deadheading trips (trips with no passengers), idle times, overtime payments, and the like-was very high. The goal of our system design was to maximize cab times (revenue times) while minimizing nonproductive times. We believed a real-time interactive computer system was essential to the NYCTA.

#### The New System

Under the new system for generating a crew schedule, we first had to load data into the computer, including train timetables, network descriptions, crew resources, and other essential parameters such as union rules, safety constraints, and profit-and-loss factors. Once these data were entered, the computer would generate a first-cut crew schedule using a program that was composed mainly of mathematical algorithms for deriving an optimum solution. After the first-cut schedule was generated, the schedule makers had the option of providing additional input by using their unique knowledge and experience, which were not captured in the automated system. The schedule makers could work with the computer interactively and view the results of their input instantly on the computer terminals. This important feedback brought early credibility and validity to the new system.

By 1979, the computer-assisted crew scheduling system for the F-line had been tested, enhanced, and successfully implemented. After a period of using it, we further enhanced the system so it could be applied to all 22 lines of the New York subway system. This was accomplished by 1980.

#### **Enjoying Manhattan**

We worked hard on this project, but we also had fun visiting New York. Even though our client was located in Brooklyn, we always preferred to stay in a hotel in downtown Manhattan. Each morning, we rose very early and took the subway to Brooklyn and stayed there for the day. During the evenings, after dinner, we usually walked on Broadway. Walking on Broadway during the evening was especially nice around Times Square, where the lights and motion were very entertaining. My favorite eating place was Stage Deli on 7th Avenue, which served the best New York-style bagels with cream cheese.

#### Next, the Bus Lines

Because of our success on the crew scheduling system we developed for the subway, NYCTA Surface Transit invited us to submit a proposal to develop a similar system for the bus lines. Our first project was to create an interactive system for the B-44 bus line, and once that system was tested and implemented, we won a follow-up contract for all 212 bus routes.

#### Similar Projects Followed in San Francisco and Seoul

In 1979, we also were invited to develop the computer-aided crew scheduling system for BART, the San Francisco Bay Area Rapid Transit District, which we successfully accomplished. But perhaps the most challenging and interesting project was the development and implementation of a crew scheduling system for the Seoul Metropolitan Subway in Korea, the first subway in that country. On the official opening day of the subway system, our project team was invited to join many high-ranking government officials for the inaugural ride. That evening, we attended an impressive, very convivial Korean banquet with plenty of wine and beer to celebrate the occasion. We were very glad that our client had arranged to take us back to the hotel after the banquet in a special limousine.

# **HISTORY CORNER (Continued)**

#### Adventures at Sea in the South Pacific

#### By Walter Jaye

For three consecutive years in the early 1970s, a number of SRI staff members from the Geosciences Center in the Engineering Division spent their summers at sea in the South Pacific. It sounds idyllic, but with some exceptions it was all work and no vacation. These missions were undertaken because the U.S. government decided that it was in the best interest of the country to monitor the nuclear tests the French were conducting at the South Pacific island of Mururoa. About the only way to do this was to send an appropriately equipped and manned ship to the area. The Defense Nuclear Agency (DNA), in charge of this operation, determined that SRI was the best and most experienced contractor for the job. After all, SRI had done this kind of work a decade earlier, taking measurements during the U.S. high-altitude nuclear tests in the North Pacific at Johnston Island.

#### **Getting Started**

In early 1972, SRI's Geosciences Center became the prime contractor to oversee the data collection. This entailed installing the needed equipment and providing the technical support aboard a suitable naval vessel. The USNS *Wheeling*, formerly used as a missile range instrumentation ship, was available at Port Hueneme, California. Once a Victory class cargo vessel, it was 455 feet long by 62 feet wide, displaced 11,000 tons, and was capable of 15 knots. For its range instrumentation mission, the Navy had added several radars and also modified its afterdeck to become a helicopter landing and equipment storage area. This area became a perfect platform for the sophisticated equipment SRI needed onboard. The hangar became an ideal location for the SRI instrumentation vans.

With the equipment procured and stowed, the ship sailed on a test and shakedown cruise to Pearl Harbor in late May 1972, and then it was off to its South Pacific destination at the beginning of June.

#### Life and Work Aboard

The SRI personnel adapted well to the conditions aboard ship and made friends with the crew and other contractors. The accommodations were Spartan but adequate. Each cabin had two bunk beds, a place to hang clothes, a chair, and a small table. The johns (or, in Navy terms, heads) and showers were down a passageway. We had three meals a day, not gourmet but quite good, including fresh vegetables while they lasted. Entertainment while en route and when no operations were scheduled was limited, mostly reading, acey-deucey games, bridge for those who could get together a foursome, and a movie at night.

To ensure that the radar equipment was well calibrated, we deployed a reflector suspended from a weather balloon as a calibration target. Launching this balloon from the afterdeck of the *Wheeling* provided another form of entertainment for all aboard because the downdraft caused by the ship's forward motion, even at modest speed, made this a hit-ormiss operation.

The SRI staff held a project review meeting every afternoon at 4:00 in the hangar. On these occasions, orange juice was served. It was pure coincidence that a large amount of 100 proof alcohol, used as head cleaner for the tape recorders, was also available. Our staff's morale also was kept up by SRI's ham radio operators, who organized radio contacts that enabled each staff member to take his turn to talk to family back home.

#### Independence Day on Pago Pago

During this first expedition, which lasted nearly 90 days, we had a couple of lulls when the ship sailed to Pago Pago, American Samoa (see photo). Those visits were a welcome interlude. A particularly memorable one was on the Fourth of July, when the local chief provided a feast of many local foods, including a piglet roasted in the ashes of a fire.



The USNS *Wheeling* docked in Pago Pago, American Samoa

#### Women on Board

In late June 1973, when the *Wheeling* set sail on the first leg of its second mission, three of SRI's female scientific programmers were on board. The ship's captain had misgivings: "What! Women on board a military ship?" The women remained on board as far as Pearl Harbor. Remember, this was 1973!

# **HISTORY CORNER (Concluded)**

#### Addition of a Vessel

That year it was decided to augment the previous year's experiments with some helicopter-borne equipment. For that, another naval platform was needed. The USNS *Corpus Christi Bay*, a ship designed for helicopter operations, was chosen (see photo).

En route to Mururoa, the *Corpus Christi Bay* started to leak so badly that it needed immediate repair. According to the law of the sea, a ship in distress can enter the nearest port, and that turned out to be Papeete on Tahiti, French Polynesia. As a courtesy, the U.S. Navy repair crew that had been dispatched from Pearl Harbor was permitted to go ashore without passports. But everyone else associated with the operation, such as the Hawaii-based DNA and Navy personnel, needed a passport to set foot on Tahiti. I was in Menlo Park during this mission, and the DNA project monitor in Hawaii called asking me if I had a valid passport. I did, so he asked me to fly to Tahiti to represent him. So, for me and those aboard the *Corpus Christi Bay* lucky enough to have passports, it was a pleasure to visit French Polynesia.

#### The Conclusion of the Missions

In 1974, the third and final year of these operations, the ship used was the USNS *Huntsville* (see photo). The use of helicopters was dropped, and instead remotely piloted vehicles were launched from the *Huntsville*.

After successfully accomplishing these missions in the field, SRI was responsible for analyzing the collected data and reporting the results. The sponsor was very happy with the outcome, and four of the project leaders were given medals by DNA for outstanding performances.



USNS Corpus Christi Bay



# **ALUMNI NEWS**

## SRI Alumni 2010 Spring Fling

SAVE THE DATE **Monday, May 17** California Academy of Sciences

Buses will leave SRI at 9:00 a.m. and return at 3:00 p.m. See the enclosed flyer for details and to sign up.



CALIFORNIA ACADEMY OF SCIENCES

# Do You Know an SRI Hero? Nominate That Person to the SRI Alumni Hall of Fame

Do you know someone who has made an exceptional contribution to the enduring success of SRI in any area of research, management, or service? If you do, it's time to nominate that person to the SRI Alumni Hall of Fame.

All former SRI staff members are eligible, and nominations may be submitted by anyone. Just send us about 300 words showing how your candidate meets the following criteria:

- Significant and lasting contributions to the success of SRI
- Contributions recognized by staff, management, or clients
- Contributions in any area of research, management, or service, such as
  - Establishing a new laboratory or a new field of research
  - Performing an outstanding recognized service
  - Clearly demonstrating qualities of leadership, vision, and creativity
- What did the person leave behind?
  - Enhanced reputation for SRI
  - New or enhanced research, business, or support activity or facility

For examples of previous Hall of Fame write-ups, go to http://alumni.sri.com/fame.html.

You can send your nomination by mail to SRI Alumni Association 333 Ravenswood Avenue, AC-108 Menlo Park, CA 94025-3493

If you want to e-mail it, send it to kittareeds@gmail.com. **Deadline is June 1, 2010.** 

# WELCOME

The SRI Alumni Association welcomes new members:

Brian Adair Robin Auger Katherine Baisden Peter Duncan Linda Hawke-Gerrans Maude Honemann Richard Lee Patricia McKenzie Robert Molder

We look forward to your participation in the Alumni Association and hope to see you at our next group event.

# **HELP WANTED**

# Volunteer Needed to Help the SRI Alumni Association Membership Chair

Given all her activities with the Alumni Association, Joyce Berry would like some help in performing her duties as Membership Chair. Joyce is responsible for:

- Maintaining the membership database in FileMaker Pro
- Receiving payments for dues and giving them to the Treasurer to deposit in the Association's Credit Union account
- Mailing membership packets to new members
- Sending membership renewal notices annually and following up with reminders, as necessary
- Compiling and publishing an annual Membership Directory
- Working with the Steering Committee to promote and maintain membership.

Joyce currently goes in to SRI one day a week and would like to have a backup person to call on when she needs to take some time off. Proficiency in FileMaker Pro would be helpful.

This is a great opportunity to become involved in the Alumni Association and reconnect with colleagues. To volunteer or get more information, e-mail: steering-committee-alumni@ sri.com.

# ALUMNI NEWS (Concluded)

SRI International Alumni Association Cash Flow/Income and Expense Year To Date, December 31, 2009				
CASH BALANCE, 12/31/08		\$19,893.56		
INCOME				
Cash income from membership dues and fees	\$8,077.98			
Dividend income on bank account funds Contributed funds	\$21.69			
SRI Federal Credit Union	\$2,500.00			
SRI International	\$1,500.00			
Total Income	\$12,099.67	\$12,099.67		
EXPENSE				
Services provided by SRI International				
Report production services	\$4,444.83			
Postage and mailing expense	\$2,328.06			
	\$6,772.89			
Special events and awards				
Annual Reunion	\$4,034.75			
Spring Fling				
Lunches	\$293.94			
Computer History Museum donation	\$300.00			
Hall of Fame plaque: 2009 name plates	\$54.00			
	\$4,682.69			
Other expenditures and expenses				
Office supplies	\$141.10			
Epson projector	\$1,956.94			
	\$2,098.04			
Total Expense	\$13,553.62	\$13,553.62		
CASH BALANCE as of 12/31/09		\$18,439.61		

# **CREDIT UNION NEWS**

# Our VISA® Gold Cards Outshine the Competition!

SRI Federal Credit Union VISA<sup>®</sup> Gold Credit Card Rates starting at 9.9% APR\* Fixed



Using your SRI Federal Credit Union VISA® Gold Card makes you a winner. Match our VISA® Gold Card's features against other financial institutions to see how we stand out:

- No foreign currency transaction fees
- Low fixed rates
- Same rate for purchases and cash advances
- No cash advance fees
- No annual fee
- Easy access through home banking

#### Choose from two winning VISA<sup>®</sup> Gold cards:

VISA<sup>®</sup> Gold with Extra Awards Program

- Fixed APR\* of 13.5%.
- Every dollar you make in purchases on your SRI Federal Credit Union VISA<sup>®</sup> Gold Card earns a point.
- Points are redeemable for gift and travel awards.
- Points can be applied towards airline tickets, free hotel rooms and rental car upgrades.

#### VISA<sup>®</sup> Gold

• Low fixed APR\* of 9.9%.

• Choose from two SRI-inspired designs.

Other cards simply can't compete with SRI Federal Credit Union! Grab a golden opportunity to save.

Apply today at www.srifcu.org!



\*APR=Annual Percentage Rate

# **IN MEMORIAM**

#### Jeannine Dionne

Jeannine Dionne died peacefully on January 27, 2010, at age 74, after a battle with an aggressive cancer. Jeannine worked at SRI from 1981 to 1995. She last worked as an Administrative Assistant in the Chemical Marketing Research Center of the Process Industries Division, which later became SRI Consulting.

Known for her deep French-Canadian accent, Jeannine was as professional as she was witty. She was a familiar face in downtown Menlo Park, and after she retired, met and fell in love with another Canadian. They became snowbirds, commuting between Arizona and Quebec, and eventually married. She was able to keep in touch with her friends from SRI until the very end and will be greatly missed by those she laughed with.

#### **James Harsch\***

Jim Harsch died in Menlo Park on November 22, 2009, at age 81. He worked at SRI from 1974 to 1993, last serving as Principal Consultant in the Process Industries Division.

#### John Herndon\*

John Robert Herndon, Sr., died in Palo Alto on December 12, 2009, at 83 years of age, after struggling with Alzheimer's disease for many years. He began his SRI career in 1959 and retired in 1991 as a Principal Computer Applications Analyst in the Computing Systems & Services Department. His 32 years working at SRI and the friendships he developed there were among his happiest memories. John is survived by his devoted wife of 63 years, Clifton; his sister Margie; and nine children—Anne, John, Felix, Peter, Mary, Louise, Elizabeth, Mathew, and Benjamin—and their families.

#### Louise Mason

Louise Mason died unexpectedly at age 69 on January 9, 2010, while on a cruise in Hawaii. She joined SRI in early 1980 and left her position as Projects Coordinator in the Speech Technology & Research Laboratory in 1995. She is survived by her husband, Brad (also a former staff member), and by the Mason children and their families: son Steve and his wife, Mary Louise; daughter Kim and her husband, Rich Hill (a current SRI employee); and three grandchildren.

#### John Nelson

John Nelson died peacefully at home in Redwood City on January 8, 2010, at age 73. John joined SRI in 1962 and served as Electronics Technician and Engineering Associate in various Engineering groups for more than 40 years. He is survived by his wife, Audrey.

#### Dean Robinson

Dean Robinson died January 10, 2010, in San Francisco at age 81. Dean was Manager of the Computer Security Program in the International Management and Economics Group from October 1978 to September 1981.

#### **Robert Rowe**

Bob Rowe died peacefully surrounded by family and close friends on September 26, 2009, at the age of 89.

Bob was raised in Rochester, New York. Following service as an instructor at the Coast Guard Academy in Connecticut during World War II, he entered Tufts University, where he graduated *summa cum laude* in electrical engineering. Upon graduation, Bob was pursued by a number of prestigious companies and decided to leave the East Coast for the Bay Area, accepting a position at SRI. He was an engineering staff member at SRI from 1951 to 1957. As Bob's professional interests evolved, he worked and consulted for a number of companies locally and nationally, ultimately working for the Stanford Linear Accelerator Center until his retirement.

Bob had a wide range of interests outside his work. He was known as a tinkerer, loving everything mechanical. In his off hours, Bob collected and restored antique clocks, enjoyed home and auto repairs, and generously shared his talents with friends and neighbors. Perhaps his greatest passion was the ocean. At the age of 60, Bob took early retirement to sail the seas with his wife, Jeanie, ultimately circumnavigating the Earth over the course of the next 24 years.

Bob is survived by Jeanie; his two daughters, Helena Rowe and April Holman; and grandchildren Rebecca and Robert Holman.

# **IN MEMORIAM (Concluded)**

#### **Ronald Schusterman**



Ron Schusterman died February 11, 2010, at Stanford Hospital; he was 77 years old.

Ron was born in New York and grew up in the Bronx. As a young boy, he explored the city with frequent trips to the zoo, where he loved watching the animals, laying the foundation for his later career. After serving in the Army during the Korean War,

he received a bachelor's degree from Brooklyn College and went on to receive a Ph.D. in psychology at Florida State University. In 1963, Ron joined SRI as a Research Scientist, studying the behavior and sensory physiology of pinnipeds (seals and sea lions). Among other accomplishments, he is credited with dispelling the idea that pinnipeds locate objects by sensing echoes of sound waves. He established one of the first marine mammal labs in the country at Coyote Hills in the 1960s, and throughout his career he became one of world's foremost experts on the behavior of nonhuman primates and marine mammals. After leaving SRI in 1971, he continued his work as a Researcher and Professor at California State University Hayward (now CSU East Bay). In 1985, his research program moved to the Long Marine Laboratory at the University of California, Santa Cruz, where it continues today.

Ron was a founding member of the Society for Marine Mammalogy and was inducted as a Fellow in the California Academy of Sciences. He traveled extensively in the United States and Europe as a guest speaker with a passion to communicate to others the unique and special nature of the behavior and cognitive abilities of marine mammals. In retirement, he was writing a book about his work with marine mammals.

Ron is survived by his wife, Francie Moore Schusterman; his three daughters, Marisa De Mello, Nicole Montez, and Lesli Schusterman; and seven grandchildren.

#### Gene Edward "Jim" Tallmadge\*



Jim Tallmadge died quietly on January 7, 2010, in Brentwood, California, at age 81.

Jim grew up in Illinois, received a bachelor's degree from Northwestern University, served

in the U.S. Navy, and then earned a master's degree in electrical engineering from Stanford. Focusing on applied engineering, he began his career at Levinthal Electronics, one of the early tenants of Stanford Industrial Park, where he made small high-power electronic components. After working on many projects around the globe, he joined SRI in 1976.

At SRI, Jim quickly gained a reputation of being an engineer's engineer. He worked on a fascinating array of design projects, including a mechanical joint for a satellite solar array, nuclear fusion equipment, a microwave communications system for Taiwan, lumber processing with microwaves to make pressboard, use of complex computer programs for circuit analysis, neutron beam accelerators, and nuclear power plant control equipment, to name a few. However, it was in the area of megawatt power radar transmitters that Jim excelled and was world famous. He designed, installed, and improved such transmitters for radar research facilities in Peru, Puerto Rico, Alaska, Greenland, and Norway.

In 1984, Jim was promoted to Assistant Director of SRI's Radio Physics Laboratory, a laboratory of more than 100 people, where he supervised all the hardware engineers and electronics technicians. He was highly respected by his staff for his superb technical competence, as well as his open and fair-handed management style. Jim's greatest strengths were his ability to define a problem, analyze it, and then design and implement a practical and workable solution. He retired from SRI on August 21, 1999, after a distinguished career.

Jim is survived by sons David and Scott and by stepchildren Linda Corbett, Becky Peterson, and Jeff Corbett.

\*Member of the SRI Alumni Association

The SRI Alumni Newsletter is published three times a year (in April, August, and December) by the SRI Alumni Association, 333 Ravenswood Avenue, Room AC-108, Menlo Park, CA 94025. Editors: Mimi Campbell and Klaus Krause Layout: Linda Hawke-Gerrans