



**alumni**  
association

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

Voice Mail: 650-859-5100

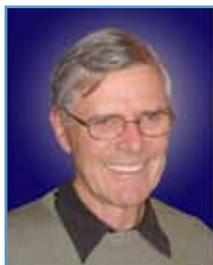
Email: [steering-committee-alumni@sri.com](mailto:steering-committee-alumni@sri.com)

Web Page: <http://alumni.sri.com/>

## AUGUST 2010 NEWSLETTER



### MESSAGE FROM PRESIDENT BOYD FAIR



*Boyd Fair*

Summer is almost over—can you believe it? That means it is time for the second of our triannual newsletters.

This issue could be subtitled the “International Edition” because it contains three very interesting articles from colleagues abroad. Andrew Flower has written an article describing how his hobby of restoring old cottages

outside London has transformed over the years into a new career. David Gibby explains that his and his wife’s sailing trips around the Mediterranean are not without a certain amount of work, detailing the logistics of maintaining the boat and getting provisions. Peter Duncan has changed careers and locations, from consulting in Jakarta to turning a former aromatherapy spa in the hills above Kandy, Sri Lanka, into an eco-friendly holiday resort. All these sound like fine travel destinations for alumni—a trip in the English countryside, a sail in the Aegean Sea, and a resort in Sri Lanka—with a friendly face at the location.

The History Corner takes us back to some of the work done in Joe McPherson’s Innovation Search program. The innovation theme that is so pervasive today was novel when Joe introduced it to clients back in 1970.

With all the headlines about smartphones in the news, make sure you read the details about the new Siri application that runs on the iPhone. Perhaps some of you are already using the application and didn’t realize that SRI helped make it happen.

You’ll get a taste of the Spring Fling that took place in May. This year, the Bay Area alums enjoyed a trip to the California Academy of Sciences in San Francisco, where we went to the head of the line and toured the facility at our leisure. We are now beginning to think about next year’s Spring Fling and welcome your suggestions for destinations. If we haven’t found a place or topic of interest to you in past Spring Flings, now is the time to speak up. Drop any of us an e-mail or leave a message on the alumni office phone.

That brings us to the annual reunion on September 21. This was one of the few open dates available for the I Building. (SRI is getting busy!) You will find information about the reunion and a sign-up form in the newsletter. Typically, about 100 people attend, and we hope more of you can make it this year. It is the one chance a year that local alumni or those visiting here can see and chat with old friends and hear about the current SRI that we all helped fashion.

We have made it simple for you. Pick up the stuffer that just fell out of the envelope, fill it out, attach your check (don’t forget to renew your membership at the same time), and mail it back immediately so we can finalize the reunion plans. And put a big red circle on your calendars on September 21. (Forgetting the event is not an acceptable excuse for missing it!) If you would like to help with the preparations and/or sign-in process, drop Tom or Joyce a note.

Now, read on and enjoy the rest of the issue. I look forward to seeing many of you at the reunion. I, for one, wouldn’t miss it!

— Boyd

## 2010 SPRING FLING

On May 17, 46 alumni and guests braved a drizzly day to tour the exhibits at the California Academy of Sciences in Golden Gate Park. The Academy's impressive facility, which opened in September 2008, houses a natural history museum, planetarium, aquarium, and four-story rainforest.

The building itself is a showcase of sustainable design and construction, including the living roof, which is planted with native plants. (The Academy received a Platinum-level LEED [Leadership in Energy and Environmental Design] rating from the U.S. Green Building Council.) Seeing it all in just a day is quite a challenge, so the attendees toured at their own pace.

Hearty thanks to Tom Anyos for planning this pleasant day for Bay Area SRI alumni.



## INTERNATIONAL JOURNAL

### What I Have Been Doing in the Three Decades Since I Left SRI

By Peter Duncan

Thank you, SRI: first, for the experience of almost 20 years of employment in a challenging environment; second, for providing most of the annuity that supports my present lifestyle; and, third, for setting up the SRI Alumni Association that keeps me in touch with a leader of the changing world of innovation. Thank you also to my good friends Wilson (deceased) and Lee Harwood, who contributed so much to my SRI experience. And, finally, thanks to Hoot Gibson and Ed Robison, whose establishment of the SRI International Associates Program\* led to my journey to Indonesia.

When I left SRI, I was living in Jakarta, and I did not wish to exchange the development chaos of sprawling Indonesia for life in compact and orderly Singapore. So I continued to live and work in Jakarta, first as an independent consultant and later as an associate of CastleAsia ([www.castleasia.com](http://www.castleasia.com)), the leading business consultancy in this then newly emerging country with the world's fifth-largest population. My fascination with Indonesia's politics, economics, and society continued while I worked as a development economist on a wide variety of projects. These projects were seriously disrupted by the South East Asia monetary crisis of 1988, which caused a 30% drop in the value of the Indonesian Rupiah and the fall of President Suharto.

I stayed on after the crisis, living in a stylish villa in the cool hills above Jakarta while scraping for business with little success and trying to keep a polo club going at the Jagorawi Golf & Country Club. This situation was not sustainable.

Forced at last to face reality, and without wife and offspring to deter me and against the advice of my friends, about 2 years ago I talked myself into leaving Indonesia and tackling my final folly of taking over a virtually bankrupt resort company in the tea country above Kandy in Sri Lanka. This company, WildFlower Hall Lanka (Pvt) Ltd (WFHL), is my retirement project. It was established 11 years ago as an aromatherapy spa. I am trying to convert it into an eco-friendly agroforestry holiday resort.

This task requires me to learn new skills ranging from guiding building renovation and guest house management through land use planning and no-till farming to my latest green enthusiasms, wind and mini-hydro energy and Food4Wealth. WFHL has 26 acres of leased land at just over 3,000-foot altitude. It is mostly steep abandoned



*Great Valley, Sri Lanka*



*Peter at WFHL*

tea plantation with depleted acidic soils. Its baronial hall overlooks spectacular views of the township of Deltota, Great Valley farmland, and the mountains beyond. I am thinking of promoting visitors with the slogan "Take a Break from Luxury and Tourist Sites." Its 15 rooms include 5 comfortable guest bedrooms and 2 large reception and activity rooms, and it has capacity for up to 30 guests in shared and dormitory accommodations. Activities for guests include enjoying the view and the cool, bracing air; walks around the tea and foliage gardens and up to the pine forest; and excursions to Kandy city and the historic Loolecondera pioneer tea plantation. In short, I am continuing my two overriding interests—in developing countries and in economic research—but this time at the do-it-yourself level.

The current status of my project is that, having passed on the aromatherapy business to a third party, I am now free to concentrate on green agroforestry, herb and foliage production, and no-till farming. Thanks to good rains since May, I have *Glyricidia* hedges and shade trees protecting China grass and *Cordyline* foliage, landscaping, and fruit trees growing and have made a stumbling start with strawberries, forage grasses, lavender, pepper, and other herbs. I will be planting citrus and dragon fruit this week—a really motley collection at this stage as I am trying to keep to a tight budget while I go through the learning process. The Internet is my ever-helpful adviser, and Sri Lankans I meet of all communities are generous with advice. I was lucky to get started just before the 30-year Tamil Tigers rebellion came to an end, starting, as widely expected, a new era of progress for this country full of surprises.

\*See Chapter 13, "The World of Business and Economics," in *A Heritage of Innovation: SRI's First Half Century* by Donald L. Nielson.

## INTERNATIONAL JOURNAL (Continued)

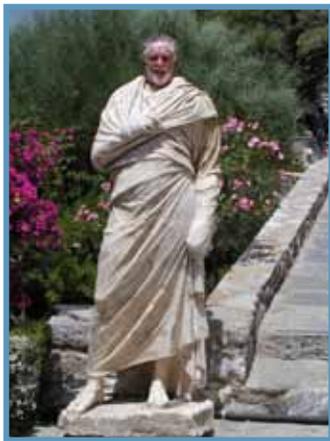
### The Answer to the Question, “What do you do on your boat all day?”

By David Gibby

Jeanette and I began our Mediterranean Odyssey in 2005, when we took 5 months to sail our yacht *Harbinger* from our home near Southampton down the Atlantic coasts of France, Spain, and Portugal to Portimão, on the Algarve. Each year since then we've sailed eastward for the months of May and June, enjoying life in T-shirts and shorts, but by July it's usually too hot for us, so we fly home to enjoy the summer months in England. We return to our boat for September and October and go home again for the winter months, after leaving her somewhere suitable, usually out of the water in a secure boatyard.

#### New Countries, Languages, Customs ...

In 2006 we sailed along the coast of southern Spain, through the Straits of Gibraltar, and north to Barcelona for the winter. In 2007 we sailed along the coasts of France and Italy, visiting Elba and Corsica, before leaving *Harbinger* in Tropea, on the toe of southern Italy. From there, in 2008, we went farther south to see the active volcano island of Stromboli and the other Aeolian islands, before spending several weeks sightseeing on Sicily and then heading farther south to Malta. Last year we sailed from Malta back up to Sicily and then along the coast of southern Italy to Corfu and the Ionian coast, where we left *Harbinger* for the summer. We continued eastward after the summer break, through the Corinth Canal to the Dodecanese islands of Greece. We've tried to learn some Greek but haven't progressed very far—yet! This year we've seen something of Turkey, yet another country, with a different language, customs, religion, and cuisine.



*David striking a classical pose in Bodrum, Turkey*

#### There's Lots to Do Aboard

We're sometimes asked, “What do you do on your boat all day?” as if it sailed itself, maintained itself, and kept itself clean! Our yacht usually sails at about 5 or 6 mph, so a 30-mile passage can take most of the day, depending on the wind strength and direction. It uses many different items of equipment, all of which must be kept in working order, so

there's always something to be done! In addition to the sails (which wear and sometimes tear, so need to be repaired) and the various ropes (which often get embedded with salt spray and airborne dirt such as fine Saharan sand or volcanic ash, so become stiff and difficult to handle and have to be washed), there is the “auxiliary” engine, usually a diesel engine, providing 64 hp in our case, to be maintained. The main purpose of this engine is to propel the boat in and out of harbours or anchorages where there is not sufficient space to manoeuvre a boat under sail. However, in the Ionian and other areas in the eastern Mediterranean, there is often no wind at all until the afternoon, so one can spend many hours using the engine. While this has the advantage of heating water (through a heat exchanger) and helping to charge the batteries, it is less pleasant than sailing and more expensive, the price of diesel being what it is these days. Since there are no handy gas/service stations when one is out sailing, it is important to ensure that the engine is fully operational, oil and water filters are replaced regularly and drive belts checked, and, of course, the fuel tank is kept sufficiently full.

#### Batteries

Batteries are an essential part of a cruising yacht's equipment; they not only power the navigational instruments, the VHF radio, and the various electrical pumps and other motors on board, but they also keep the fridge working. When it's hot, we drink a few litres of water a day in addition to beers and soft drinks, and these, of course, are much more refreshing when cool. Keeping the batteries charged is a constant challenge. Thanks to solar panels and wind-driven generators, this is easier to do than it was just a few decades ago, but there is never enough space on a medium-sized yacht (say 35 to 40 feet long) for all the solar panels one might like. Larger yachts tend to have generators, but these are expensive, take up space down below, are noisy, and, from what we hear, break down from time to time. Larger yachts may also have “watermakers” to produce freshwater from seawater, but these require special filters, and it's another engine to maintain.

#### Water

*Harbinger* has two freshwater tanks, each of 100 gallons capacity, which is twice what most boats of its size usually have. We use this water for cooking, tea/coffee, showers, washing clothes, cleaning, etc. One tank usually lasts us just under a week, but in many of the Greek islands, with their picturesque anchorages, it can be difficult to get freshwater to refill our tanks. Even if there is a “marina” (which in Greece is often unfinished, the European Union funds granted for its construction having been spent before the water and electricity supplies were to be installed), there may be only

## INTERNATIONAL JOURNAL (Continued)

a single water tap from which to fill a 5-gallon container, which is heavy to carry. In some harbours, an enterprising local may come along selling freshwater (or diesel) from a mini-tanker.

### The Toilet

One of the very important systems on board a cruising yacht is the toilet. Rules rightly limiting the discharge of “blackwater” to some miles offshore mean that most yachts have a holding tank, into which the contents of the toilet are pumped; the tank then has to be pumped out from time to time. If that pump fails, one really does have a problem!

### Food Storage

Perhaps the most important system on board is the digestive system. Planning and getting what we eat and drink is every bit as important as planning where we sail or motor to next. Shopping for food is a real pleasure in many of the places we’ve visited—the range and quality of fresh fruit and vegetables in local markets can be amazing, as can the range of meat and fish available. Yet what we buy is constrained, not just by what we can carry, but also by the space available to store fresh food. The fridge is tiny by comparison with the one at home, and even the rack for vegetables is rather small. If we know we are likely to be at anchorages overnight for a few days, we are almost certain to dip into our store of tins or packets of food. We use gas for cooking and so have to regularly check that we have enough, as it can be hard to find a replacement cylinder.

### Communications

One aspect of sailing that has been revolutionised in the last decade or so is the range of communication systems available to contact family and friends or access weather forecast information. When the previous owners of our boat were in the Mediterranean in the mid-1990s, they used an SSB HF radio to contact a ham radio friend of theirs, or they used land lines to phone home and relied on the VHF radio or Navtex system for weather forecasts. We have the benefit of the Internet—a few years ago by using Internet cafés and now increasingly by WiFi, often usable while at anchor without leaving one’s boat—for accessing e-mails, a range of specialised and detailed sailing weather forecast websites, and current news. We also have the benefits of mobile phone technology, so as well as making phone calls and sending/receiving text messages, we can access detailed weather forecasts even when out of WiFi range, in text form as provided by the organisation Inmarsat or in colour graphics from websites such as Windfinder.

### Red Tape

In recent weeks I’ve spent many hours dealing with the Greek and Turkish Port Police and other officials to comply with the bureaucracy involved in sailing in Greek waters and crossing from one country to the other. The Greeks are particularly anxious to prevent any “illegals” from entering their country, and hence the European Union, by sailing to one of their thousands of islands. I’ve lost count of the number of times our “ship’s papers” and passports have been photocopied and checked!

### The Rest of the Time

Although we spend a fair amount of time on “boat matters,” much of our time is spent enjoying the different sights and interesting places we visit. It’s been fascinating to see the wide range of types of scenery, from the snow-capped mountains of northern Spain to the beautiful sandy beaches of Sicily and from the barrenness of many of the Greek islands to the green, heavily wooded coasts of nearby mainland Turkey. We’ve loved walking along the streets of ancient cities such as Pompeii and Ephesus. It is humbling to see what the ancient civilisations accomplished: writings in the Linear B script devised over 3,000 years ago that tell today’s archaeologists so much about the way the Greeks lived then; the Lady of Kalymnos, a beautiful and incredibly detailed bronze statue recently recovered from a boat shipwrecked in about 400 BC; Greek/Roman theatres built to seat up to 25,000 people that are still in occasional use today; delicately coloured floor mosaics that lay buried for centuries; priceless manuscripts that date from the 5th century AD—the list is endless.

We’ve also met many interesting people. In one place a local insisted on driving us to see an otherwise inaccessible historic site, and in another a Greek Orthodox church group invited us to join in the feasting, music, and dancing to celebrate their saint’s day. Of course, we meet many other “yachties” from a wide range of countries, some of whom have sold their houses in order to fund their live-aboard lifestyle. We recently met a couple in their mid-70s from New Zealand who had already spent several years on their circumnavigation. However, we don’t meet many people in their 80s who are still living the dream. It seems that eventually problems with hips, knees, or perhaps travel insurance coverage let people know that it is time to sell up and live as normal people do! Fortunately, we’re both reasonably fit still and hope to spend most of next year in Turkey before heading west and north to Croatia, to spend a year or two there before having *Harbinger* transported overland to Holland. From there it should be a relatively short, if much colder, sail back home.

## INTERNATIONAL JOURNAL (Continued)

### Making the Most of a “Cottage Industry”

By Andrew Flower

As a business consultant in the London office of SRI between 1989 and 1998, my out-of-work activities never quite projected the carefree life of leisure one might associate with the profession. One of the attractive aspects of working with my SRI colleagues was that they often had interesting stories to tell about their hobbies and home lives. Thus, the fact that on weekends I swapped business suit for old jeans and wielded a carpenter’s plane and a builder’s shovel to renovate an 1850s cottage in the middle of England seemed to match the typical pattern reported by my fellow SRI employees.

#### An Early Passion

I had my first carpenter’s set as a Christmas present at the age of 7 and was already building box carts out of pram wheels recovered from a nearby wood at the age of 10. My real epiphany into carpentry came when I went to a technical grammar school, where we were taught how to make handcrafted coffee tables with dovetail joints from deep, rich mahogany woods. For a short while I even had a small sideline making commissions in timber for parents of friends in the village. I managed to “attend” woodwork class right till I was 18, even if it was not always on my official curriculum, and my proudest moment at school was being awarded the Woodwork Prize in my final year. I went on to study materials technology at university.

My practical skills were always evident as a teenager. At 16, I declared to my parents that I wanted to open a bicycle shop. But my father, who was a teacher, said to get my exams first, which is one reason why I ended up being a consultant at SRI. At 16, I also went on an Anglo/German youth tour of the Hanseatic Cities, arranged by the British Council. This led me to study German as a minor at university and to use it throughout my career—but more on that later.

#### Acorn Cottage

After university I was busy climbing the career ladder, and it wasn’t until about the time I joined SRI that I really started to use my handwork skills again. In 1986 we moved to Acorn Cottage, near Rugby. Originally two farm labourers’ cottages built in 1850, they had been extended and converted to one house over the years. The house was sadly in need of refurbishment when we arrived, and I turned my hand to new skills—digging foundations, concreting, roofing, electric wiring, plumbing and heating, dry lining—as well as carpentry. I had to build a new staircase, lower the upper

ceilings to insulate the roof, demolish walls and chimneys, and put in new joists and timbers.

This was my first major house renovation. I more or less gutted the cottage and tore away one-third so we could build an extension on the back. My neighbour kept saying, “Every time I look at your house there seems to be less of it!” At the time, it was really a venture into the unknown; I always said it was rather like setting out single-handed to sail round the world—you didn’t know if you were going to survive the course, but you were damn well going to try. It taught me a very valuable lesson: When venturing into the unknown, the hardest part is getting started.



*Acorn Cottage, before and after*

We couldn’t afford to do everything on the cottage at once, but I enjoyed the break and contrast from consulting on weekends. It took nearly a year, part time, to hand make and fit the kitchen units using reclaimed old pine doors. As I settled in to my job at SRI, we decided to rebuild the garage and add a study, so that it wasn’t until 1995 that we finally decided to hold a party to celebrate completion of the refurbishment.

## INTERNATIONAL JOURNAL (Continued)

There then followed a relatively calm period, just adding embellishments to Acorn Cottage and refurbishing a bungalow for my mother's retirement a couple of miles away.

### The Hobby Becomes a Full-time Job

When I do practical work, my mind is often in flow, and there is a deep natural satisfaction. This was one of the reasons that I changed my hobby into a full-time job in 2002.

In 2001 my friends and neighbours across the road had bought and moved to a farm house a couple of miles away. This proved to be a fortunate event for me, because since then they have become my biggest client. First, I helped to renovate the farm house, and then in 2004 I managed the project (and did a lot of the work) to convert the annex buildings to a children's nursery. Since then I have done various small improvements and extensions. In 2007 we built a traditional log cabin, imported from Finland, to extend the nursery.



*Log cabin extension to the nursery*

At the end, we had a bit of timber left over so we could get rid of the old plastic Wendy house (which, as you see, appeared to have been outgrown by some of the children) and make a new one in wood.

In 2009 we built a sun lounge as a messy room for the children on the back of the old nursery. The council suddenly woke up when we put the planning application in and declared that the farm house had been Grade II listed [designated as a building of special architectural or historic interest] since 2005, but nobody had told us. So we had to make it with a slate roof and "conservation windows."



*The Wendy house, before and after*

### More Family Projects

While all this work has been going on at the farm house, somehow I have found time to follow through on two other projects for ourselves.

In summer 2003 we bought a Victorian terrace house in London, while Aimee, my middle daughter, was a student. It needed quite a lot of tidying up and decorating, but it was ready for Aimee and three other students for the autumn term. In 2005 I made further alterations and improvements and was able to rent to five students for a year—a good return. But without Aimee in residence, managing the property at a distance was difficult. In 2006 I sold the house with a reasonable profit.

The second project was an even bigger extension to Acorn Cottage: an attic bedroom for daughter Georgina and a large lounge for myself. We ended up with a three-storey

## INTERNATIONAL JOURNAL (Concluded)

extension of over 120 sq m (1,270 sq ft) floor area. Apart from the bricklaying, plastering, and help with the roof, everything else was self-built over 4 years. It was hard trying to run a business in the day and work on the house in spare time, but eventually a very spacious home resulted, with five bedrooms. In the new lounge, in contrast to the solid oak floor and baby grand piano, I have installed a home cinema. I have to say that watching *Gone with the Wind* in the new lounge is not quite as impressive as when I visited the Stanford Theater in Palo Alto, but it still provides a lot of pleasure after all the hard work of building.

More recently (finished Christmas 2009), I built an extension to my daughter Aimee and her partner Mark's house in nearby Solihull.

### **Building Expertise in Eco-building and Alternative Energy**

Over the last 2 years, there have been significant changes in UK house building regulations. From 2016 all new houses built must be zero carbon in their energy use, i.e., totally driven by on-site renewable energy for both heating and power. New regulations coming into force later this year require an 80% improvement in energy efficiency over 2006 regulations. This means a significant change in the quality and skills of the building workforce and has given me chance to rethink my future direction and make wide use of the skills developed with SRI.

In autumn 2008 I started an MSc course in Architecture: Advanced Environmental and Energy Studies at the Centre for Alternative Energy in Wales, and I should finish my thesis this summer. In some respects, my project experience at SRI in areas such as environmental pollution, small-scale distributed power, and photovoltaics gave me a head start on this course. At the same time as studying, I have been using my German to establish contacts with companies in Europe that have products and know-how that can help the UK building sector meet the new environmental challenges.

Most of the best experience in building eco-houses today comes from North America and from Germany and Austria. Currently, I am working on a project to build a second wooden cabin for the nursery that has very low energy use, using either a Canadian or Austrian supplier.

I also hope that recent meetings in Germany, Austria, and the South Tirol will enable me to work as an agent for eco-building products in the UK for refurbishment and new building. Nearly 30% of our CO<sub>2</sub> emissions are generated from the fossil fuel energy used in buildings. Providing know-how as well as specialized products to reduce building energy consumption is a vital aspect of lowering CO<sub>2</sub> emissions and reducing the massive threat of global warming. It is a challenge for all of us, particularly in the developed nations. But, as I said earlier, the hardest part is getting started.

## HISTORY CORNER

### **Dr. Joseph McPherson and the SRI Program on Innovation Search**

By Joe Grippo, with Dick Knock, Barry Minkin, Fred Weil, Tom Anyos, and Don Nielson

SRI's programs on innovation originated from reports on creativity that Joe McPherson wrote for LRPS (Long-Range Planning Service) around 1970, the first while he was on a sabbatical from Dow Chemical. Joe decided to remain at SRI, where the second report and countless other contributions would follow.

Though enabling creativity is a more mainstream subject nowadays, this wasn't the case at that time. The reports were very popular with LRPS clients, and there came a desire within SRI to turn this work into projects in some

way. I was given the delightful task of collaborating with Joe to see how we could harness his work on creativity. Joe and the other principals involved were in the Management Consulting Division, and one of those who helped launch this work was Arnold Mitchell of the VALS (Values and Lifestyles) Program.

### **Beginning with a Seminar on Management of Innovation**

We first came up with an executive seminar, Management of Innovation, that we conducted wherever we had domestic and foreign SRI offices. People within the Management Consulting Division and from across SRI helped conduct these sessions and participated as needed specialists. Overseas, these included Don Fiske in London, Bill Royce in Japan, Jackie Almquist in Sweden, Atta Hamadani in Iran, Dieter Merbitz in Germany, and Neal Coberly in

## HISTORY CORNER (Continued)

Brazil. All the sessions were ably led by Joe, who had an unusual knack for patiently drawing participants to novel ideas or positions. That was, after all, the sometimes elusive but always sought-after goal.

The thesis of the seminars was that companies should be organized to foster innovation and that efforts to instill it should involve senior management. We discussed such topics as

- The creative process
- Recognizing the traits of creative people
- Management's role in establishing a creative climate
- Factors that initiate creativity and stifle it (i.e., bonds and barriers)
- How to organize for creativity as part of a company's planning process
- Tools for generating ideas (besides brainstorming, such tools as bionics, synectics [the gathering of diverse parts into a whole that is greater than the sum of the parts], design trees, hypothetical scenarios, and many more)
- Using such management concepts for fostering creativity as using product champions, creative partnerships, and "bridge people"; asking "demon questions"; and avoiding "idea killers."

Idea killers were important and their danger a cautionary preamble to every exploratory discussion. "That's beyond our responsibility," "It's against company policy," "It was tried years ago," "It's not new," "It's great but ahead of its time," and the universal bad guy, silence, were some of the thought terminators we strove to avoid.



*Joe McPherson (center) with Barry Minkin (left) at a session in Venezuela in 1977 that concerned oil production and came on the heels of the government's nationalizing a Dutch oil company operating there.*

Partly from insight but predominantly from experience, the program adopted techniques that led each project into the kind of exploratory atmosphere most conducive to innovation. Other linchpins of the process were captured in a book by Barry Minkin, one of Joe's collaborators.\* Among those tenets were that advance preparation is necessary; diverse parts of the organization, including managers, should be involved; smart, creative people from other disciplines help avoid channelization; a relaxed, informal environment for the sessions is essential; and a focused but stimulating direction, laced with humor, should be fostered to avoid the fatigue and low yield of free-floating, unstructured brainstorming.

### Birth of the Innovation Search

The use of these techniques in short executive seminars led to a second program, the Innovation Search. This program concentrated more on projects for industrial clients, projects that would help them find new or extended uses for their existing products, services, technologies, or other strengths. These sessions lasted much longer and were conducted both at SRI and on clients' premises. The searches included the top scientists and marketing staff from the client companies. In many cases, this process brought people from inside the company together for the first time, and the resulting dialogue often produced some unusually rewarding consequences.

For the Innovation Searches, we chose participants from myriad parts of SRI to help think of new ideas for the companies, using the techniques from the Management of Innovation seminar. An important factor was not only choosing participants who were familiar with a client's technologies under study, but choosing SRI "bridge people" from fields other than the client's technologies. These bridge people could envision new opportunities based on ideas or areas of technology that the client didn't possess and therefore couldn't easily foresee. Some of the SRI participants who come to mind are Dick Knock with electronic and economics expertise; Fred Weil in metallurgy and economics; and Charlie Rosen, Hew Crane, Ron Swidler, Tom Parks, and Gerry Andeen with expertise in so many areas. Others too numerous to mention (and remember) participated as well. Dick Knock recalls that Ron Swidler held the record among SRI staff by participating in 22 searches!

By the end of the week-long session, the result was a long list of new ideas and concepts for the client. The list was then

\*Barry Howard Minkin, *Econoquake*, Prentice Hall, 1993.

## HISTORY CORNER (Concluded)

distilled down to the most promising ideas for the client to pursue after the search project was concluded.

To understand a bit more of the detail and scope of one of these searches, take the case of exploring new concepts for a Japanese company. Three phases were involved: (1) data collection, with interviews in San Francisco and Los Angeles; (2) the search itself, which involved 18 members from the company, matched by an equal number of SRI staff from varied fields like VALS, chemistry, mechanical engineering, robotics and automation design, and artificial intelligence; and (3) an engineering evaluation of each aspect of the chosen innovation. A follow-up 6 months later showed that three new products were in development, as well as numerous improvements slated for the full product line.

### A Wide Array of Clients

Projects were conducted for clients as diverse as a foreign maker of bearings of all kinds, an insurance/finance company, the Brazilian beef industry, a consumer tool company,

a foreign turbine manufacturer, a chemical company, a metallurgy company, and a foreign heavy-equipment manufacturer. A Swedish bearing manufacturer, SKF, branched into the manufacture of more complex machine parts. Dart Industries, whose president participated in the search, broadened the products in its Tupperware Division. Black & Decker responded favorably to a suggestion for a compact battery pack that would make its portable tools truly portable.

### An Innovator Like No Other

The heyday of these projects at SRI was from about 1972 to 1982. Without question, their success centered on the talent of Joe McPherson and thus depended on him. In reflecting on the time, Tom Anyos, Joe's immediate supervisor from about 1978 to 1982, recently said, "When we lost Joe, the program faded away. Without him, it was just another brainstorming session, of which there were many being offered by SRI competitors. There hasn't been another Joe McPherson at SRI, ever!"

## NEWS FROM SRI

### Three SRI Staff Members Named 2010 SRI Fellows

SRI's Fellowship Award is the institute's highest honor for technical achievement. This year, three—instead of the usual two—SRI Fellows have been named: Thomas Kilduff, Elizabeth Shriberg, and Mary Wagner.

**Thomas Kilduff**, Senior Director of the Center for Neuroscience in the Biosciences Division, co-discovered the brain peptides known as the hypocretins. This discovery has been credited as one of the major discoveries in sleep research and in neuroscience more broadly because it led to the recognition that the sleep disorder narcolepsy is a neurodegenerative disease. Since the initial discovery, Tom has been instrumental in mapping the anatomy and electrophysiology of the hypocretin system, and he is currently involved in therapeutic development for the treatment of narcolepsy. Outside colleagues describe his contributions as consistently original, innovative, and of high impact. In 2010, he was named a Fellow of the American Association for the Advancement of Science.



**Elizabeth Shriberg**, Senior Research Psycholinguist in the Speech Technology and Research (STAR) Laboratory of the Information and Computing Sciences Division, has made fundamental contributions to speech science and technology. With colleagues at SRI and elsewhere, Elizabeth has used large databases to study how people really talk and has developed computational models



that have significantly advanced both automatic spoken language understanding and speaker recognition. The models capture beyond-words information such as prosody, and they have been applied to such tasks as modeling individual speakers, disfluencies, punctuation, dialog, turn-taking, emotion, and deception. The scientific impact of her work has been to show that natural communication is not a noisy version of written text, but rather a richer version—and one that we ultimately need to model for intelligent processing of found data and for natural spoken interfaces. In 2009, Elizabeth received the International Speech Communication Association Fellow Award.

## NEWS FROM SRI (Continued)

**Mary Wagner** is Co-director of the Center for Education and Human Services in the Policy Division. A past recipient of SRI's Mimi Award, Mary is a leading researcher in the field of special education and a preeminent pioneer in conducting large-scale, national-policy-relevant research on children and youth with disabilities. Mary has played a vital role in the transformation of special education in the United States. The National Longitudinal Transition Study, conducted under her direction, has completely changed the national landscape for secondary school education and for the transition from school to work for students with special needs.



SRI's 2010 Fellows have clearly demonstrated the intellectual and professional attributes associated with the Fellowship program.

### Apple Buys SRI Spin-off Siri: The Promise of Simplicity

By Don Nielson

It is clear that Apple Inc. is striving for both leadership and a dominant presence in the mobile communications and Web access world. Although not exactly evident today, simplicity in the use of small devices to connect to the Internet and retrieve a burgeoning amount of information will be at a premium, not only for operating the devices but also for being able to absorb easily and quickly the information presented. Apple's iPhone and iPod embody these design goals, but few would call them simple. One way to create that simplicity is to transition from today's search-based operating paradigm to something more akin to an aware and helpful virtual assistant.

Enter Siri, an iPhone application (or "app") that simulates a personal assistant. In April, Apple acquired Siri, Inc., the SRI spin-off that created the app. This article presents some background on the development of Siri and a description of its utility.

#### Roots in the CALO Project

In 2003, DARPA (the Defense Advanced Research Projects Agency) chose SRI to lead what would become one of the largest artificial intelligence (AI) efforts ever mounted. The participants included most major AI laboratories in the United States, some 31 in all. To see the aim of the 5-year,

\$200 million-plus project, it is instructive to look at its title: Cognitive Agent that Learns and Organizes (CALO). Given the military mission of DARPA, the name also significantly derives from the Latin *calo*, which means "soldier's servant." DARPA wanted to determine whether technology could provide a way to help military personnel in their ever-increasing need for vital awareness in a sea of information. The AI techniques brought to bear on the problem were natural-language understanding, situation- and goal-based reasoning, context development, and adaptation.

#### Taking the Concepts to the Commercial Sector

With that background and an integration role in the CALO program, SRI was in a unique position to apply what had been learned to the commercial sector. In 2008, SRI started Siri, and Adam Cheyer, the SRI project leader for CALO, left to lead Siri's technical effort.

Early in 2010, the first evidence of Siri's efforts came in an application for the iPhone (a free download at <http://siri.com>). Bringing a CALO-like capability to that point also involved about \$24 million in venture capital funding.

#### How Siri Helps the User

Now back to the question of simplicity and what probably attracted Apple to this app. Beyond use as a telephone, small handheld devices like the iPhone are not ideal input/output devices. Virtual keyboards are sensitive to touch and prone to error, and the limited display capability can make the winnowing of information from Web-based responses onerous. Siri alleviates this situation in several ways.

In addition to typing a request, Siri offers the user the ability to speak it using natural language. Second, and more important, it is oriented toward providing only the information needed to achieve a user-requested outcome. Under ideal conditions, this approach eliminates the need to cull through a list of search results to find the relevant information. But Siri also does more. As it performs the myriad tasks you ask of it, Siri learns your preferences, meaning that it should become easier to use and more accurate over time.



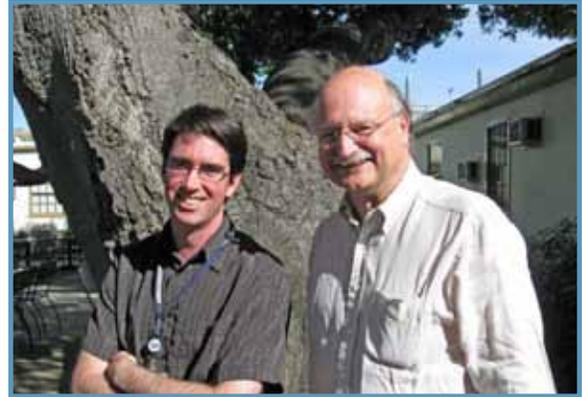
## NEWS FROM SRI (Concluded)

Let's look at an example of Siri's ability to simplify. Suppose you need to pick up someone at the airport. Usually, you search for the airline website and link to it, then locate the correct tab or frame for flight arrival, enter the flight number, perhaps answer another question, and finally get the estimated arrival time. With Siri on your iPhone, if you know the flight number, simply ask Siri, for example, "When will United Flight 367 arrive?" and the answer appears. If the same flight lands at more than one airport, Siri uses the time and the iPhone's location to determine which airport is the one of likely interest. If you don't know the flight number, just ask, "What flights arrive in San Jose in the next hour?" In either case, the same amount of finding and assembling information goes on, but the Siri assistant hides the process from you. Let this ability be overestimated, however, the flexibility of spoken English (e.g., homonyms, idioms) means that Siri's challenge will continue to be great, but it is a noble step forward.

You can see from this example why Apple was interested in Siri. The approach has the potential to create a profound difference in the way we use Web-based tools, particularly in a mobile environment.

Various news sources reported that Apple had acquired Siri on April 28, 2010. The purchase amount was not disclosed, but rumors on the Web indicated it was in the neighborhood of \$200 million to \$250 million.

It will be exciting to watch how well Apple seizes this opportunity to further improve its already trend-setting user interface. If you want to find more information about Siri, just go to its website. If you want to know what Apple intends to do with it, good luck!



*Adam Cheyer (left) and Ray Perrault*

### Technological Breakthrough

In an interesting discussion with Ray Perrault, the director of SRI's AI Center, a bit of technical history emerged. Back in 1979, Gary Hendrix left the AI Center to form a new company using an AI-aided database query system he called Q&A. Although many of the techniques now used in Siri were available then, the Q&A effort came to naught for at least one very important reason: the inability to anticipate and control the attributes of the databases being queried. Our ability to enter into dialogue with a virtual information space is severely limited when the required context cannot be easily established. One of the keys to Siri's remarkable accuracy is its ability to deal only with information sources that have that context predefined. By the way, Gary Hendrix's company, after failing in the area of Q&A, morphed into a security firm. But it still carries in its name a reference to its beginnings as a natural-language query system: Its name is still Symantec!

### RECENT DEPARTURES OF LONGTIME STAFF

Years of Service			Years of Service		
<b>March 2010</b>	- <b>Richard Rivell</b>	<b>17</b>	<b>May</b>	- <b>Michael Barravechia</b>	<b>11</b>
				- <b>Yolanda Churchfield</b>	<b>31</b>
	<b>April</b>	- <b>Sam Armacost</b>	<b>12</b>	- <b>Dallas Cook</b>	<b>37</b>
		- <b>John Armour</b>	<b>16</b>	- <b>Tom Gaffney</b>	<b>10</b>
		- <b>Thomas Blair</b>	<b>14</b>	- <b>Kai-Hung Lau</b>	<b>35</b>
		- <b>Valerie Crawford</b>	<b>10</b>	- <b>William Opsahl</b>	<b>17</b>
		- <b>James Gilkey</b>	<b>29</b>	- <b>Kelly Ward</b>	<b>21</b>
		- <b>Jeffrey Hodge</b>	<b>10</b>		
		- <b>Irene Lehan</b>	<b>24</b>	<b>June</b>	- <b>Roland Burkhead</b>
		- <b>David Richardson</b>	<b>37</b>		- <b>Stellare Griffin</b>
		- <b>Alicia Siciliano</b>	<b>37</b>		
		- <b>Eric Wachsman</b>	<b>21</b>	<b>July</b>	- <b>Harald Oser</b>
		- <b>David Wallace</b>	<b>22</b>		- <b>Harry Pettis</b>
					<b>48</b>

## CREDIT UNION NEWS

Through all of  
life's moments,  
you've been there for them.

As they graduate,  
SRI Federal Credit Union  
is here to help!



First steps, training wheels, studying for tests, learning to drive — you've guided your child with care. Now, your graduate needs access to financial products you both can trust. SRI Federal Credit Union can help you with our free, easy and convenient solutions.

### Checking and savings

- Free checking accounts with no minimum balance
- Free Visa® debit card for purchases or cash
- Free Visa® benefits including \$0 liability on unauthorized transactions
- Custom card design coming August 2010
- Use any ATM coast-to-coast and worldwide
- ATM checking surcharge rebate – every day
- Free Online Banking, eStatements and Bill Pay
- Overdraft protection to Visa® Credit Card
- E-mail alerts for account information
- Parents can transfer directly into student accounts once or on a recurring basis

### Visa® Credit Card

- Low 9.9% APR\* fixed
- No balance transfer fees or cash advance fees
- Overdraft protection for checking
- Free Visa® benefits including \$0 liability on unauthorized transactions
- Custom card design coming August 2010

### Visa® Gift Cards

Perfect for graduates, with a choice of designs

### Student Loans

- Zero origination fees
- Lower interest rates – Variable rate of 1-month LIBOR plus 3.75%
- Aggregate maximum total: \$75,000
- Apply online once – then draw as needed
- Flexible repayment terms
- Deferment of principal and interest while in school

Parents and students alike can  
rely on SRI Federal Credit Union  
as a trusted financial resource.  
Contact us today!



SRI FEDERAL CREDIT UNION



\*APR=Annual Percentage Rate

(800) 986-3669

[www.SRIFCU.org](http://www.SRIFCU.org) • [srifcu@SRIFCU.org](mailto:srifcu@SRIFCU.org)

## TWINS NEEDED FOR SRI FLU VACCINATION STUDY

SRI is seeking healthy fraternal and identical twins in the following age groups for a study on flu vaccination:

- 8–17 *identical twins only*
- 18–30 fraternal and identical twins
- 40–59 fraternal and identical twins
- 70–100 *identical twins only*.

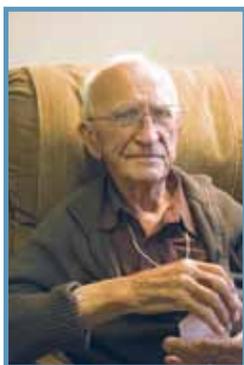
The goal of this study, led by Stanford University and sponsored by the National Institutes of Health, is to ultimately help scientists develop more effective influenza vaccines.

Study volunteers will receive a free flu shot at Stanford and will be required to return to Stanford for up to three follow-up visits. All information will be kept strictly confidential, and compensation will be provided. For more information, call 1-800-SRI-TWIN or e-mail [twin@sri.com](mailto:twin@sri.com). You may register on the website [www.sri.com/twin](http://www.sri.com/twin).

Only twins who did not participate in last year's study are eligible to volunteer for this one.

## ALUMNI NEWS

### Happy 100th Birthday to Emery Bator!



On August 3, Emery Bator celebrated his 100th birthday in Eureka, California. Emery was one of SRI's first employees, having joined the institute in 1947 with ID number 13. Hoot Gibson hired Emery to set up the accounting system for SRI. He ran a tight, very successful financial program until his retirement 28 years later as treasurer of SRI. Emery was

inducted into the SRI Alumni Hall of Fame in 1998 in recognition of his exceptional contributions to the enduring success of the institute.

The Alumni Association sends warmest regards and a hearty Happy Birthday to Emery!

### The Bookshelf

July saw the publication of two books by former and current SRI staff members. Both books are available from Amazon.com.

**Guy Benveniste, *From Paris to Berkeley: Memoir*. Published by CreateSpace (July 14, 2010).**

Guy Benveniste was an economist at SRI during the 1950s. His memoir, based on his extensive experience with international economic development programs, is a ground-level view of many of the great events of our times and of American political, economic, and cultural influence in the past six decades. The memoir covers his escape

from France in 1942; life in Mexico; studies at Harvard; settling in California; years at SRI; service in the Kennedy administration, the World Bank, and UNESCO; and appointment to the Berkeley faculty in the turbulent year of 1968. The SRI portion of his memoir provides some of the flavor of early days at SRI under Jesse Hobson and Finley Carter.

Guy spent 7 years at SRI, starting in 1954. "I really learned how to write at SRI," he points out in the memoir. At SRI, he joined Hoot Gibson's new International Programs group as assistant manager and worked on various economic development projects overseas, as well as on major international conferences sponsored by SRI and others. He left SRI at the beginning of 1962 to join the State Department in the Kennedy administration. He is Professor Emeritus at the University of California at Berkeley, where he was on the faculty for 25 years.

**Hewitt Crane, Edwin Kinderman, and Ripudaman Malhotra, *A Cubic Mile of Oil: Realities and Options for Averting the Looming Global Energy Crisis*. Published by Oxford University Press, USA (July 15, 2010).**

The central question that *A Cubic Mile of Oil* addresses is, How are we going to provide the vast amounts of energy that we will need or desire in the future? Using the energy in a cubic mile of oil (or CMO, 1 CMO being the world's current total annual consumption of crude oil) as a standard measure of the energy in other sources (coal, natural gas, nuclear, solar, wind, etc.), the book describes the various energy sources and how we use them, projects their future contributions, and delineates what it would take to develop them to annually produce a CMO from each of them. It

## ALUMNI NEWS (Continued)

also considers the roles of efficiency and conservation in meeting the daunting energy challenges of the future.

Hew Crane was one of SRI's visionaries and most prolific inventors. His long, multilevel career included disciplines ranging from vacuum tube electronics to digital technologies, neurophysiology, and cosmology. Hew died in 2008 (see the August 2008 Alumni Newsletter for an obituary).

Ed Kinderman has spent more than 50 years conducting and managing research, development, and evaluation activities dealing with energy technologies and their markets. Over a 38-year career at SRI, his studies evolved to focus on energy end uses and conservation, including analyses of the complete spectrum of alternative energy sources. Although he formally retired in 1994, he is still investigating environmental control policies and technologies and analyzing global energy issues.

Ripu Malhotra is an organic chemist who has worked extensively in the area of energy. Although most of his 30-year tenure at SRI has focused on the processing and analysis of fossil fuels and advanced materials, in recent years he has devoted increasing attention to the development of biofuels and other alternative energy sources. In 2009, he wrote an open letter to President Obama detailing the advantages of using the CMO unit for the public discourse on energy policy.

### 2010 Annual SRI Alumni Reunion

***Save the Date: The SRI Alumni Reunion Will Be in Menlo Park on Tuesday, September 21.***

The SRI Alumni Annual Reunion will be held at the International Building in Menlo Park on Tuesday, September 21, from 3 to 7 p.m. With slightly longer hours, you can enjoy chatting with old friends, catching up on the latest news, and just having a good time.

The food will be great, and beverages will be plentiful. We will also have a short program highlighting the status of the institute and what new marvels are being developed by SRI's Physical Sciences staff. Another year of fun and fascination! Don't miss it!

A signup sheet with details is enclosed with this newsletter. We look forward to seeing you there!

### You Could Be a Reunion Raffle Prize Donor!

Do you have a beach house? A ski cabin?

Do you give language lessons, walk dogs, house-sit, or provide other services?

Do you have a product that would be of interest to SRI alumni?

The SRI Alumni Association is seeking to expand the types of raffle prizes given at the reunion on September 21. If you have a vacation house, you might consider donating a weekend stay. If you provide a service or product, your donation would give an SRI alum its benefits.

We will have other raffle prizes, of course, but we thought it would be a nice touch to add contributions from alumni. If you'd care to donate something special, please contact Tom Anyos (tomanyos@aol.com) or drop him a note at SRI Alumni Association, SRI International, 333 Ravenswood Ave., Room AC-108, Menlo Park, CA 94025.

### ANNUAL ALUMNI MEMBERSHIP RENEWAL

A form for renewing Alumni membership for the year 2011 is included with this newsletter.

Membership renewals are due by October 15, 2010. You may include your renewal form when you make your reunion reservations (due September 14). Include both fees on one check for \$40 (\$15 renewal, \$25 reunion) if that is more convenient for you. This will help us avoid the expense of sending out renewal reminders. All members who renew by mid-December will be included in the 2011 Alumni Directory, which will be mailed in early January.

### DIRECTORY ADDENDUM

The enclosed directory addendum (covering the period April 10 to July 31, 2010) contains new members and corrections. Please add it to your 2010 Directory.

## ALUMNI NEWS (Concluded)

### 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, consider nominating that person to the SRI Alumni Hall of Fame.

All former SRI staff members are eligible, and nominations may be submitted by anyone. For criteria and 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

Or you can send it by e-mail to  
[steering-committee-alumni@sri.com](mailto:steering-committee-alumni@sri.com).

### Authors Wanted

Do you have a story to tell that would fascinate, entertain, or inform your fellow SRI alumni? Follow the sterling examples of Peter Duncan, David Gibby, Andrew Flower, and Joe Grippo et al., whose contributions appear in this issue.

Submissions of any length are welcome at any time. Send your articles to the editors by e-mail ([mary.campbell@sri.com](mailto:mary.campbell@sri.com) and [klaus.krause@sri.com](mailto:klaus.krause@sri.com)) or by postal mail at the Alumni Association address shown on the last page.

### WELCOME

The SRI Alumni Association welcomes two new members:

**Sally Rood**  
**Steven Shaker**

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

**See You at the 2010 Annual SRI Alumni Reunion!**

## IN MEMORIAM

### Jack J. Bialik

Jack Bialik, an SRI staff member from 1955 to 1984, died January 4, 2010, in Reno, Nevada, at age 85.

After military service during World War II, Jack attended the University of Michigan, where he earned a degree in electrical engineering in 1950. After graduation, he worked at Convair, the aircraft manufacturer, before joining SRI in December 1955. His career focused on computerization of corporate and military communications and data systems and processes, beginning with the ERMA project for the Bank of America, which revolutionized banking by making possible the automatic reading and computerized posting of checks. Later computerization clients included Landys+Gyr in Switzerland, the U.S. European Command, Encyclopaedia Britannica, Yellow Pages in Brazil, and police departments in Canada and Florida. In 1969, he became Manager of the new Applied Systems Group in the Information Science Laboratory. He continued to work on and manage groups designing computer systems until his retirement from SRI in 1984.

Jack and his wife, Veronica, spent his retirement years in Oahu, Hawaii, until 1992, when they moved to Reno. Jack is survived by Veronica, daughters Leslie and Laurie, and granddaughter Gemma. His ashes were scattered by family members in Kaneohe Bay, Oahu, on July 20, which would have been his 86th birthday.

### Larry Lee Gilbert\*

Larry Gilbert, an SRI staff member from 1981 to 1989, died March 1, 2010, in Rancho Mirage, California, at age 71.



With degrees in electrical engineering from the University of Washington and Stanford, Larry enjoyed a long cross-country career that included positions with the U.S. Army in New Jersey, the Naval Ordnance Lab and Sylvania in California, the Cornell Aeronautical Lab in New York, SRI in Menlo Park, and Boeing in Seattle. At SRI, he was Director of the Systems Evaluation Department in the Systems Development Division and headed the electronic warfare consulting program for the development of the then highly classified B-2 Stealth Bomber.

Larry retired from Boeing in 1994 and spent time as a City Councilman in Burien, Washington. He was a Life Master at duplicate bridge and enjoyed golfing, traveling, gardening, genealogy, and keeping up with friends made over the years.

Larry is survived by his wife, Anne; their sons, Brian R. D. Gilbert (and wife Lynn) of Irvine, CA, and Todd S. Hunter-Gilbert (and wife Denise) of Woodbridge, VA; and their grandchildren, Quinn D. Hunter-Gilbert and Helen C. D. Gilbert. Larry is also survived by three siblings: Bruce Gilbert of Shelton, WA; Jim Gilbert of Seattle, WA; and Charles (Chuck) Gilbert (and wife Lou Ann) of Seattle, WA.

### William Edward "Bill" Henderson

Bill Henderson died in Palo Alto, California, on May 16, 2010, at age 80. Bill began his career at SRI in 1968 and retired in 1995. He worked in Publication Services as a Mailing Specialist.

### Diane Sun Lee

Diane Lee, an SRI staff member from 1976 to 1996, died peacefully at home in Belmont, California, on June 1, 2010, after a long and courageous battle with breast cancer. She was 58 years old.

Born in San Francisco, Diane graduated from UC Berkeley with an M.A. in Applied Mathematics. She had a long and distinguished career as a computer programmer, research and software engineer, and manager for SRI, Sun Microsystems, and, most recently Oracle. She was a recipient of numerous awards and held a patent.

During her illness, Diane managed to run marathons in Hawaii, Boston, Chicago, and New York. In November 2009, she participated in a Habitat for Humanity project in China, where she built homes and met former President Jimmy Carter. She loved to explore new things and places, and traveled for business and pleasure to cities in Europe, Russia, Taiwan, and the Netherlands.

Diane is survived by loving sisters Gail, Lorraine, and Janice; brother Robert; sister-in-law Maggie; brothers-in-law Dwight and Alan; and many aunts, cousins, nephews, and nieces.

## IN MEMORIAM (Concluded)

### Raymond A. Nelson\*

Ray Nelson, formerly a Senior Research Physicist in the Geoscience and Engineering Center, died on June 1, 2010, in his home after a long battle with cancer. He was 84 years old.

Ray spent 42 years at SRI, beginning his career in 1955. He worked primarily on classified projects for the institute. After he retired, he continued to pursue his interests in organic gardening, folk dancing, cycling, singing in his church choir, and volunteering for the community of Pescadero, California, where he lived with his wife, Kay.

### David Nitzan

David Nitzan, a long-standing member of the robotics program at SRI, died suddenly at his home in Palo Alto on July 10, 2010. He was 84 years old.

David began his career at SRI in 1959. From the 1970s to 1990, he was a key member of SRI's Industrial Affiliates Program, which was critical to the early success of industrial applications of robotics. He went on to direct the robotics lab for a number of years and was very successful in building the reputation and quality of the program, which continues into today. He frequently reminded his staff to work only on topics that are important and was purely motivated to help solve interesting and difficult problems. David is remembered for his commitment to excellence in technical communication and for encouraging others to share that commitment. He semi-retired in 2002 and was a selfless contributor to the robotics program in the Engineering and Systems Division up to the day he died.

### Patricia Knight Urquhart\*



Patricia Urquhart died peacefully in the presence of her son and friends on the morning of March 22, 2010, in Carmel Valley, California, after fighting a rare form of cancer since July 2009. She was 77 years old.

After working as a secretary in San Francisco and Berkeley in the early 1960s, she began her career with SRI in 1965 in Washington, D.C., working as an executive secretary supporting research staff working on highly classified ICBM/ABM technology. Her contacts there led to a short stint in Paris to help close and move secure records for NATO headquarters and then eventually on to serving as an office staff manager for SRI in Bangkok, Thailand, and Stockholm, Sweden. Despite further offers from SRI to work in London and elsewhere, she chose to return to the United States in 1971 so her son could attend high school and be fully "Americanized." Finding the job market in the Bay Area very difficult without a college degree, she had to start again at the bottom as a clerk in the Geriatric Programs of the City of San Francisco's Public Health Department. She eventually earned her B.A. in Community Health Education (cum laude) and M.S. in Health Science from San Francisco State University, followed by a Ph.D. in Public Administration from Golden Gate University. After working her way up in the geriatric and mental health programs of the City, she finished her career as Business Director of the Department of Radiology at San Francisco General Hospital in 1992.

Patricia is survived by brothers Tom Paterson of Rohnert Park, Ray Paterson of Walnut Creek, and Jimmy Paterson of New York City; and by son Kevan and grandson Caelan Urquhart and daughter-in-law Carrie Theis of Carmel.

---

\*Member of the SRI Alumni Association