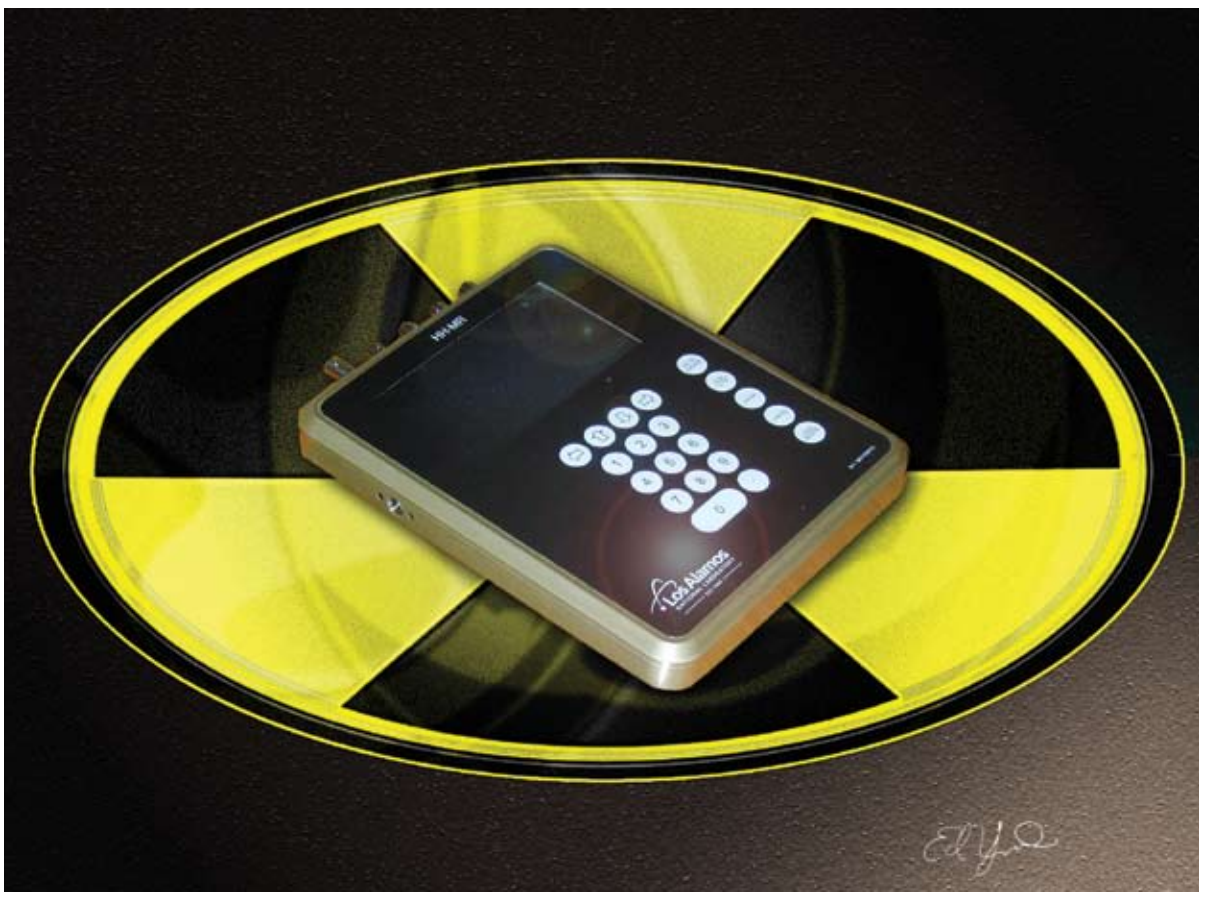
Los Alamos NATIONAL LABORATORY EST.1943
NewsLetter
Week of March 12, 2007 Vol. 8, No. 6

Agreement paves way for next generation of radiation-detection devices



Hildi T. Kelsey

One of the key components of the Laboratory's national security mission is "developing technologies to reduce threats from weapons of mass destruction." To honor such a commitment to the country, Los Alamos must ensure that its technology keeps pace with the evolving nuclear threat posed by rogue nations and terrorist groups.

With this in mind, Matt Newell of Safeguards Science and Technology (N-1) and his team are collaborating with Canberra Albuquerque Inc. (*http://www.canberra-abq.com/*) to develop and commercialize a new generation of multiplicity shift registers — benchtop or handheld devices used to detect plutonium and other radioactive materials.

These instruments, first developed by the Lab more than 15 years ago, count and analyze pulse streams generated by neutron detectors to quantify radioactive materials. They are used by the International Atomic Energy Agency to ensure that radioactive materials are not lost, stolen, or used for military purposes. Scientists also foresee the use of the updated shift-registers in homeland security applications domestically and abroad.

According to Newell, the new multiplicity shift registers are needed because the current devices are nearly 10 years old and becoming incompatible with other detection technology used by the IAEA.

"We were contacted by people who use the current technology, asking us to do some new development," Newell said. "Many of the parts used to make the current shift register are obsolete or becoming obsolete."

Under a Cooperative Research and Development Agreement, Canberra Albuquerque will fund the development of a new multiplicity shift register, which can continuously store neutron measurements automatically without an operator present, for use in remote or unattended operations. In addition, the company will validate the use of a handheld, battery-operated multiplicity shift register already developed by Newell and his team. Both devices will be faster, easier to use, compatible with new measurement instrumentation, and designed in accordance with IAEA guidelines.

The Laboratory and Canberra expect testing and commercialization to take approximately two years, after which Canberra Albuquerque intends to manufacture the instruments at its Albuquerque facilities.

"Our collaboration with Los Alamos National Laboratory is vital to Canberra's work extending the boundaries of neutron-counting technology," said Markku Koskelo, vice president of special projects. "Together, we have built a roadmap for the next generation of shift registers."

'Our collaboration with Los Alamos National Laboratory is vital to Canberra's work extending the boundaries of neutron-counting technology.'

Los Alamos NewsLetter
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LALP-07-001

For Your Safety

Lessons learned from recent electrical incident

An electrical incident that occurred in late January proves that neatness counts. Good housekeeping in the incident prevented a potential fire from erupting in the Study Center. An employee used a small "hotpot" to heat water for tea or coffee and kept the device in the cubicle. The cord connecting the small pot caught on fire creating 6-inch high flames, but it quickly extinguished itself. There were no injuries. The cord burned through the base of the pot leaving exposed wires. The fire left a 4-inch circular shaped soot covered area on the tabletop, but did not damage the table.

Facility Operations Director Andrew Erickson reminds employees of the following lessons learned from this incident:

- Housekeeping matters. The employee's workspace was neat, organized, and clutter-free. If there had been papers close by, a fire could have quickly escalated.
- In the event of any spark, flame, or overheating, call 9-1-1 and explain the situation to the dispatcher. The dispatcher will alert the Fire Department, which will respond appropriately, even if the flame has been extinguished.
- Always check such appliances for damage or wear, at home and at work.
- Minimize the use of personal water heaters in the workplace and use microwaves instead.
- Do not use computer surge protectors with equipment other than computers, monitors, printers, scanners, or other computer equipment. Surge protectors are not designed to handle anything with a heating element or that requires a large electrical draw.

Los Alamos NEWSLETTER

The *Los Alamos NewsLetter*, the Laboratory bi-weekly publication for employees and retirees, is published by the Communications Office in Communications and Government Affairs (CGA). The staff is located at 135 B Central Park Square and can be reached by e-mail at *newsbulletin@lanl.gov*, by fax at 5-3910, by regular Lab mail at Mail Stop C177 or by calling the individual telephone numbers listed below. For change of address, call 7-3565. To adjust the number of copies received, call the mailroom at 7-4166.

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Los Alamos National Laboratory is a multidisciplinary research institution engaged in strategic science on behalf of national security. The Laboratory is operated by a team composed of Bechtel National, the University of California, BWX Technologies and Washington Group International for the Department of Energy's National Nuclear Security Administration.

Los Alamos enhances national security by ensuring the safety and reliability of the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction, and solving problems related to energy, environment, infrastructure, health and global security concerns.

National Nuclear Security Administration

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Terry Wallace named principal associate director for STE

Principal Associate Director for Science, Technology and Engineering Terry Wallace speaking on his vision of the STE directorate in the Physics Building Auditorium. Laboratory Director Michael Anastasio earlier announced that Wallace will continue to serve as the STE directorate leader. *Photo by LeRoy N. Sanchez, Records Management/Media Services and Operations*

'If you look at our innovative science and dedication of the staff, I think we can have a very bright future.'
—Terry Wallace, principal associate director for science technology and engineering

by Hildi T. Kelsey

After Laboratory Director Michael Anastasio told Laboratory employees that Terry Wallace is the new principal associate director for science, technology, and engineering, Wallace outlined his vision for the future of science programs at Los Alamos.

As a champion of the Laboratory's current Grand Challenges effort to maintain and enhance the intellectual vitality of the Laboratory by highlighting support for fundamental science and engineering at Los Alamos, Wallace pointed to the original grand challenge solved at Los Alamos — designing the first nuclear weapon.

The success of Project Y, Wallace said, was due in large part to an interdisciplinary team that worked together every day. "The Trinity Shot was the result of the fruits of their labor," said Wallace, adding that Los Alamos staff must build on this rich history as a national resource to continue to solve the country's difficult problems using an interdisciplinary approach.

"This culture has served this Laboratory well in those 60 plus years. We have seen this cross-discipline, collaborative approach work many times," he said.

Wallace said it is essential that the Lab "be agile" — innovate, anticipate, and deliver. This includes building and strengthening collaborations with universities and other research institutions, as well as establishing a large customer base to "bring work" to the Laboratory. This is a time of evolving changing missions of the Laboratory, he said. "We need to serve the national interest and solve truly complicated problems. This spans the range from basic science to the delivery of systems."

Wallace addressed three primary areas underlying the capabilities for supporting national security in which the Laboratory must focus:

1) science that really matters
2) how we do our work
3) revolutionizing the campus

Science that matters

Wallace said information science and technology, experimental science — materials for the future — and fundamental science for chemical/biological/nuclear threats are three areas that crosscut the Grand Challenges in the science arena. The Laboratory should pursue these areas over the next decade, according to Wallace.

He stressed that information science and technology requires a combination of high-performance computing and applied mathematics, as well as a focus on both hardware and software to address future simulation and modeling needs.

However, Wallace emphasized that "scientists must experiment" in order to validate such simulations. Under this umbrella, he provided examples such as materials science, solar cells, and the importance of systems engineering. He also profiled Laboratory scientists' work with protocells to understand the life cycle of systems, which in the near future may allow the Lab to create self replicating materials that can heal themselves and eventually have implications for the medical field. Then, Wallace discussed scientists' efforts to detect weakly interacting massive particles and determine the nature of dark matter.

He also talked about the need to reduce threats by understanding chemistry, biology, and nuclear science. And he noted the Laboratory's successful history of keeping track of nuclear weapons proliferation in other countries, including North Korea, by monitoring seismic activity.

How we do our work

"Lab employees should take the values of interdisciplinary work from the past and combine them with future changes," said Wallace.

As part of the new future of science at Los Alamos, Wallace recommended that the Lab seek

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Upgrades completed at Laboratory's liquid-waste treatment facility

by James E. Rickman

The Laboratory has completed refurbishments to its high-level Radioactive Liquid Waste Treatment Facility waste tanks and collection system at Technical Area 50.

The plant upgrade clears the way for the RLWTF to once again accept high-level radioactive liquid waste from stockpile mission activities at the Laboratory's Plutonium Processing Facility at TA-55.

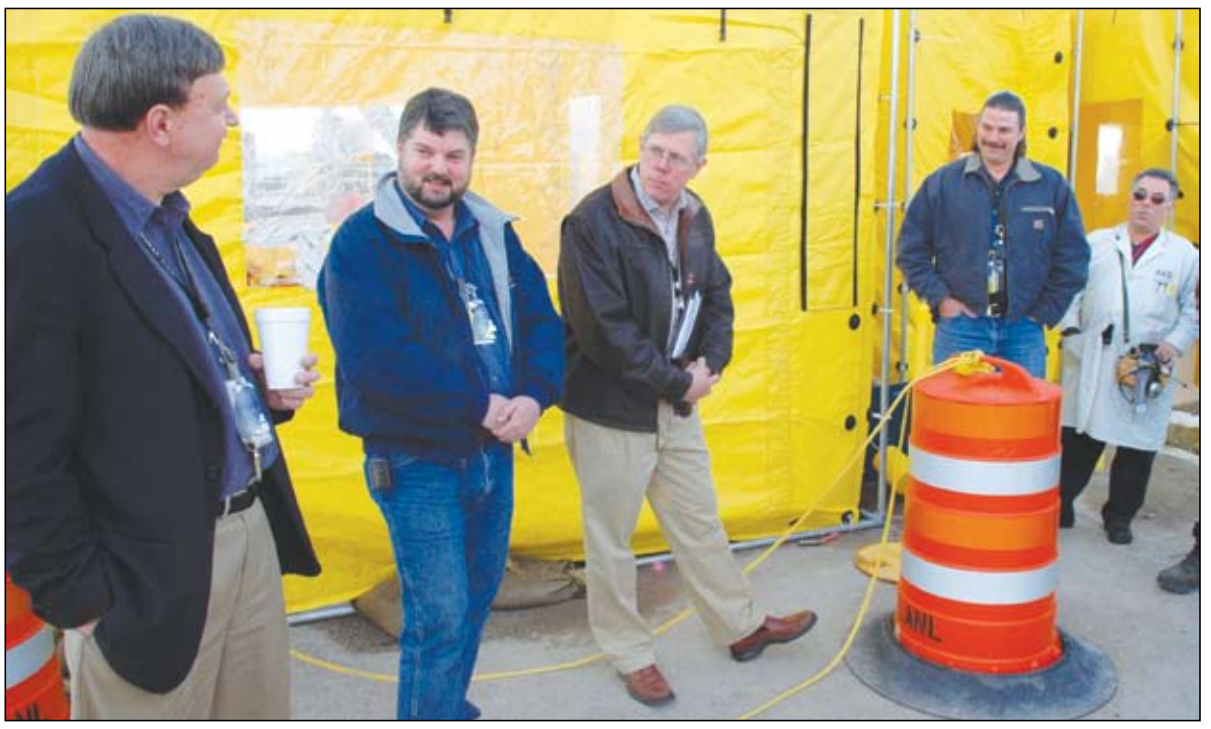
"The personnel at the RLWTF are to be commended for their steady and conscientious actions to safely bring the 43-year-old plant's capability back on line to treat high-level waste while a replacement facility can be planned and constructed," said Andy Phelps, former associate director for environmental programs, which has responsibility for the facility.

"Successfully restoring this important capability at RLWTF allows us to sustain important stockpile stewardship activities at TA-55, which are vital to our overall success in maintaining the U.S. nuclear deterrent," said Glenn Mara, principal associate director for weapons programs. "The hard work and perseverance of everyone who worked this issue is greatly appreciated."

Since the fall of 2003, the RLWTF has accepted and processed high-level waste on a strictly limited basis, after infrastructure and worker-safety concerns curtailed some plant activities. Since then, plant personnel have replaced, refurbished, or upgraded several key components of the plant, completing the final upgrades last week.

Infrastructure improvements to the plant include

- maintenance of treatment equipment in Room 60 last May;
- replacement of a 2,500-gallon caustic waste holding tank in November;
- replacement of a failing retaining wall in November;
- and installation and switchover to new underground waste lines last week.

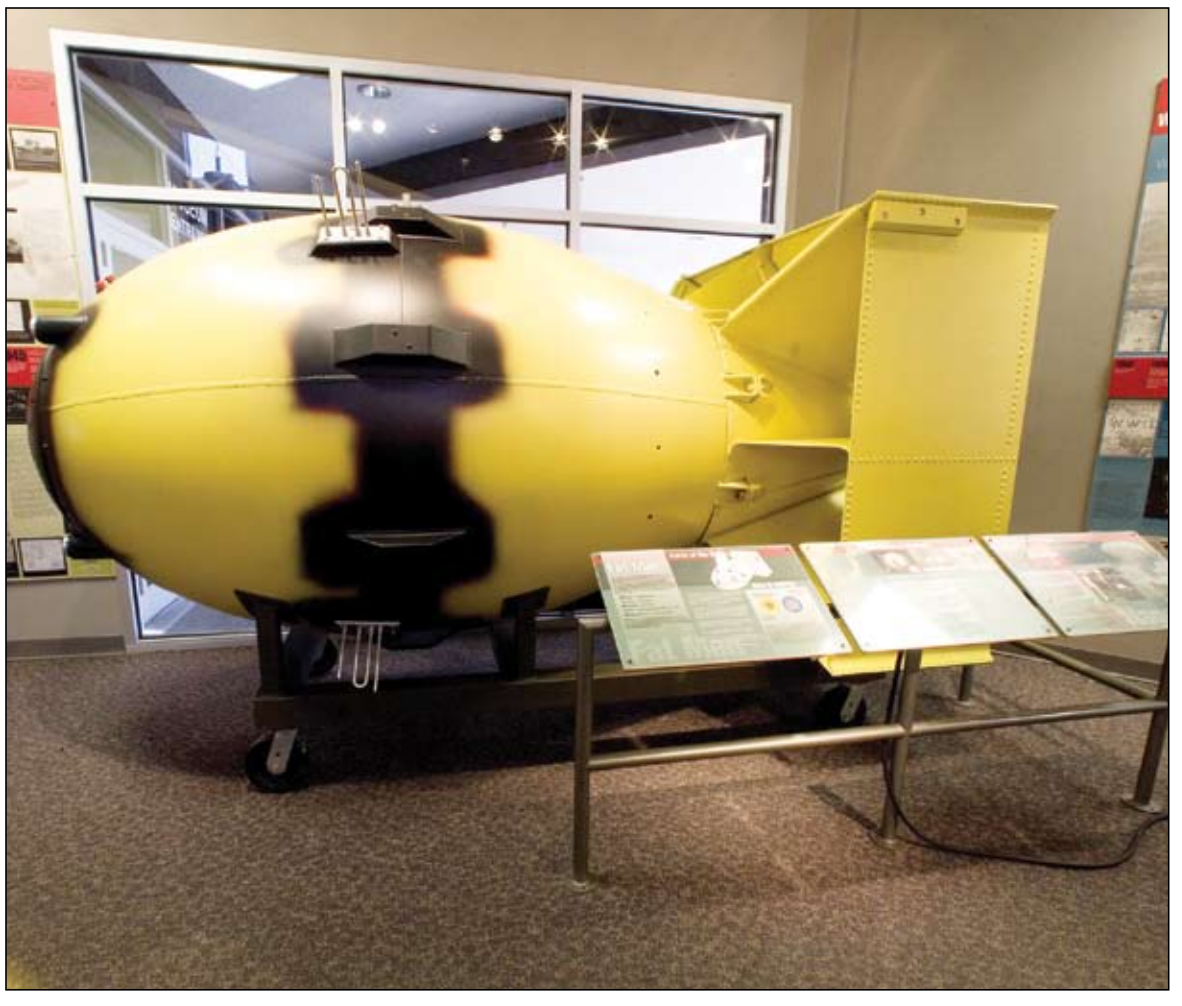


Glenn Mara, left, principal associate director for weapons programs, congratulates Radioactive Liquid Waste Program Manager Craig Douglass, second from left, and Radioactive Liquid Waste Treatment Facility personnel at a celebration of refurbishments to the facility. Andy Phelps, center, former associate director for environmental programs, praised the efforts of all personnel involved, including the work of Health Physicist Joe Bainconi, second from right, and Radiological Control Technician Gary Padilla, right. Radiation control personnel were crucial to RLWTF refurbishment activities. Personnel spent a total of nearly 3,500 person-hours inside confined radiological areas during maintenance activities, many of which took place in oppressively hot or frigidly cold conditions. Maintenance activities inside the confined spaces did not result in any injuries or contamination incidents. *Photo by James E. Rickman*

In addition, legacy radioactive contamination was removed from numerous areas of the plant, and new and updated operation and safety procedures and protocols have been adopted for plant operations.

In the coming year, the Laboratory's Plutonium Processing Facility is scheduled to create about 2,000 gallons of high-level radioactive acid waste and 4,500 gallons of high-level radioactive caustic waste that must be treated at the RLWTF. Solid waste from the treatment of the high-level waste is disposed of at the Waste Isolation Pilot Plant near Carlsbad, New Mexico.

A replacement plant for the current RLWTF is scheduled to be complete by 2012, with construction commencing as early as 2008.



A new Fat Man comes to the Bradbury

The Bradbury Science Museum recently received a new model of the historic Fat Man bomb. Fat Man and Little Boy were the two nuclear weapons developed during the top secret Manhattan Project in Los Alamos. The first nuclear weapons in history to be used in warfare, Fat Man and Little Boy were dropped on Hiroshima and Nagasaki, Japan, in August 1945, helping to bring to an end the Pacific conflict and World War II. Damian Andrus of Synthetic Authentics along with Rob Pfaff of Mineola Pipe and Steel fabricated the new model using the original plans, correct color, scale, and design — complementing the newest version of Little Boy also on display at the museum. The older Fat Man model eventually will be displayed at the Laboratory's newly restored V-site, where the Gadget, which became the prototype for the Fat Man bomb, was assembled for testing at Trinity site in southern New Mexico on July 16, 1945. The Bradbury Science Museum is part of the Community Programs Office. *Photo by Richard Robinson, Records Management/Media Services and Operations*

Getting the 'L' Out

NSSB converts to Q-cleared only

by Kathy DeLucas

The National Security Sciences Building (NSSB) at Technical Area 3 is now a Q-cleared only, Limited Security Area. It previously was an L- and Q-cleared Limited Security Area.

A Q-cleared-only, Limited Security Area allows unescorted access only for Q-cleared personnel.

L-cleared and uncleared personnel now will require escorts. Except for the lobby in which the coffee kiosk is located, the escorting requirement for L-cleared personnel applies to the entire building and to the auditorium for all events.

The ratio for escorting within the entire building will be one Q-cleared to five non-Q-cleared, unless more stringent requirements are within the NSSB Exclusion Areas (fourth and fifth floor). Offsite visitors who are Q-cleared still are required to report to the badge office or to be escorted by a LANL Q-cleared individual.

Facility crews will install three additional badge reader/hand geometry units on the first floor double doors facing the Administration Building, the third floor southwest side double doors facing the Metropolis Center, and on the third floor west loading dock pedestrian door. Training and badge re-enrollment will not be necessary as a part of the transition to the new access control system.

Within the NSSB, requirements for the handling of classified material do not change. The differences in requirements for Exclusion Areas versus Limited Areas can be found at *http://policy.lanl.gov/pods/policies.nsf/MainFrameset?ReadForm&DocNum=ISD201-2&FileName=ISD201-2.pdf* online (Adobe Acrobat Reader required).

Residents of the NSSB will be limited to only Q-cleared employees — no L-cleared and uncleared personnel will have offices in the NSSB. The current L-cleared and uncleared residents must relocate outside the NSSB on a permanent basis or until receipt of an upgraded clearance to a Q.

L-Cleared and uncleared persons must log in before entering the NSSB, either using the hard copy logs in the NSSB lobby or electronically via the online TA-3 Limited Area Complex U.S. Citizens Escort Log. A computer with access to the electronic log is available in the lobby. Log in requires the use of a cryptocard. The log is located on the Web at *https://weblogin.lanl.gov/login.php?referer=http://int.lanl.gov/security/personnel/escort/sm43/*.

The building and auditorium security plan is at *http://int.lanl.gov/orgs/fme/institutional/nssb/docs/20070307100135790.pdf* online.

KSL work-control employees to join Los Alamos National Security, LLC

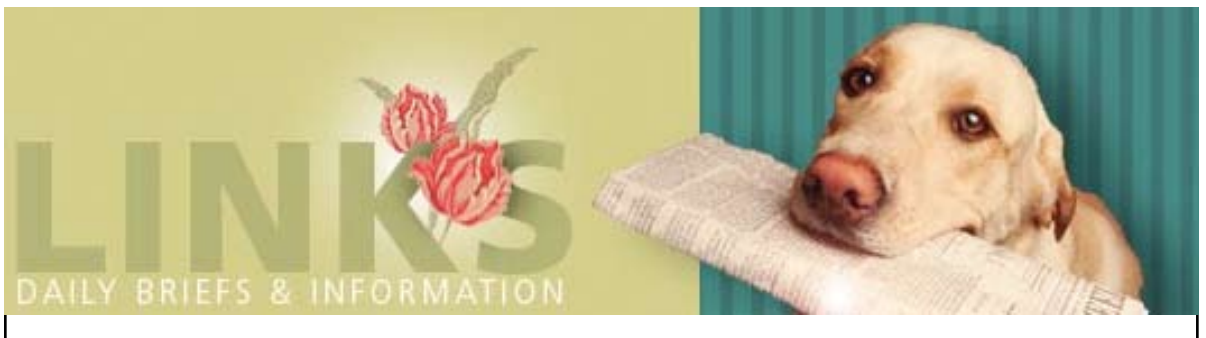
A number of KSL Services employees will soon join the ranks of Laboratory staff. The Laboratory is set to assume responsibility for work-control operations currently performed by KSL Services, and approximately 79 KSL Service employees who perform these duties will transfer over to the Laboratory, effective in April.

KSL Services, the Laboratory's site services subcontractor since 2003, provides facilities maintenance and repair, utility operations, roads and grounds maintenance, waste removal, and custodial services for the Laboratory. Work-control operations include work planning and scheduling for these types of functions.

The transfer of this responsibility will help establish clearer lines of authority and accountability, according to Jerry Ethridge, associate director for infrastructure and site services. "Moving the work-control operations over to the Laboratory is an important strategic step to ensure proper alignment between responsibility and the Laboratory's accountability for safe and secure work control," Ethridge said.

Ethridge also noted that moving the work-control operations to the Laboratory has been a collaborative effort with KSL Services. "KSL has been very supportive in helping ensure that the transition planning went smoothly and has limited impact on its transitioning employees," he said.

The affected workers at KSL Services in the work-control function are salaried, non-management employees, who will be integrated into the Maintenance and Site Services (MSS) Division and deployed to the Laboratory organization for which they currently are doing work — in the near term, there will be very little change in the kind of work they do before and after the transition. The Laboratory and KSL will hold employee-information sessions to address questions or concerns employees may have relevant to their becoming Laboratory employees. Affected KSL employees will receive employment offers at the sessions.



Links, a new internal communication tool, is sent to employees via e-mail by 7 each morning. Links also may be accessed on the Laboratory's intranet at *http://int.lanl.gov/news/links/*, where an archive is maintained.

Director names ...

continued from Page 2

multiple customers to ensure a steady flow of work, and find ways to improve the Laboratory's ability to respond to the needs of these different customers.

Campus for the future

Wallace said the size of the Laboratory's campus is driving up costs. He said that Laboratory facilities span 40 square miles, or 9 million square feet. "Our Laboratory has on average six times more square footage per employee than any other national laboratory," he said.

According to Wallace, $88 million is budgeted this year to maintain the campus — twice as much as the maintenance costs for other national laboratories. The high cost of maintaining a large antiquated campus, he said, makes it imperative to compress the size of the Laboratory.

He also shared that the Laboratory's proposed Science Complex still is being pursued. He identified a need to define a Signature Facility to attract researchers to the Laboratory and noted that employees are submitting pre-proposals to be considered for the upcoming Signature Facility workshop.

The Los Alamos Proton Accelerator Research Complex (L-PARC) — an integrated, interdisciplinary suite of capabilities utilizing energetic and intense proton, neutron, and photon drivers and probes at the scale appropriate for a national laboratory — is an example of a potential candidate for a Signature Facility, he said.

Wallace closed his talk by stressing the importance of the work force. "We must continue to focus on hiring the best and the brightest," he said. Since fifty percent of the technical staff member new hires come from postdoc conversion, Wallace said they were "perhaps the most important part of our pipeline at Los Alamos."

Despite potential budget adjustments, Wallace remains positive about his vision of the science and technology future at the Laboratory. But he emphasized that for transitions in this area to succeed, all employees must be engaged.

"The future of the Lab is not management's prerogative — it is everyone's prerogative."

Meeting the nation's demand

LANSCE extends run cycle for medical radioisotopes

by Clay Dillingham of Communication, Arts, and Services (IRM-CAS)

The national demand for radioisotopes is extraordinary. Radioisotopes are vital to medical treatment and research, industry, agriculture, environmental science, and for defense applications. To meet the high demand for the strontium-82, a medical isotope critical for cardiac imaging, the Department of Energy asked the Isotope Production Facility (IPF) at the Laboratory to stay in production beyond its normal run cycle schedule and run overtime.

"If we hadn't run the IPF facility in an unprecedented dedicated mode, there would have been a nationwide shortage of strontium-82," said Kevin John of Inorganic Isotope and Actinide Chemistry (C-IIAC), acting site-program-manager for the National Isotope Program.

"Strontium-82 is used in Positron Emission Tomography (PET) to help diagnose heart disease. Hospitals nationwide diagnose about 400 patients every day using PET. By staying in production, we produced a five-to-six-week supply, enough to support more than 10,000 patients."

The accelerator-based isotope production facility at the Los Alamos Neutron Science Center (LANSCE) is one of only two such facilities in the United States — the other is at Brookhaven National Laboratory in New York, which also is supported by the DOE.

The production of isotopes at Los Alamos requires a number of steps, beginning with the linear accelerator at LANSCE, which accelerates a beam of protons to 40 percent the speed of light, to an energy of 100 million electron volts. These high-energy protons are steered onto a special target at the IPF. Like a pool queue ball traveling at 40 percent the speed of light and smashing the other racked balls to begin the game, the protons' intense impact breaks apart the target's atoms and sends subatomic particles scattering throughout the target. These subatomic particles are absorbed by other atoms, creating isotopes. Chemistry (C) Division then extracts the isotopes from the target material and prepares them for shipment to customers nationwide.

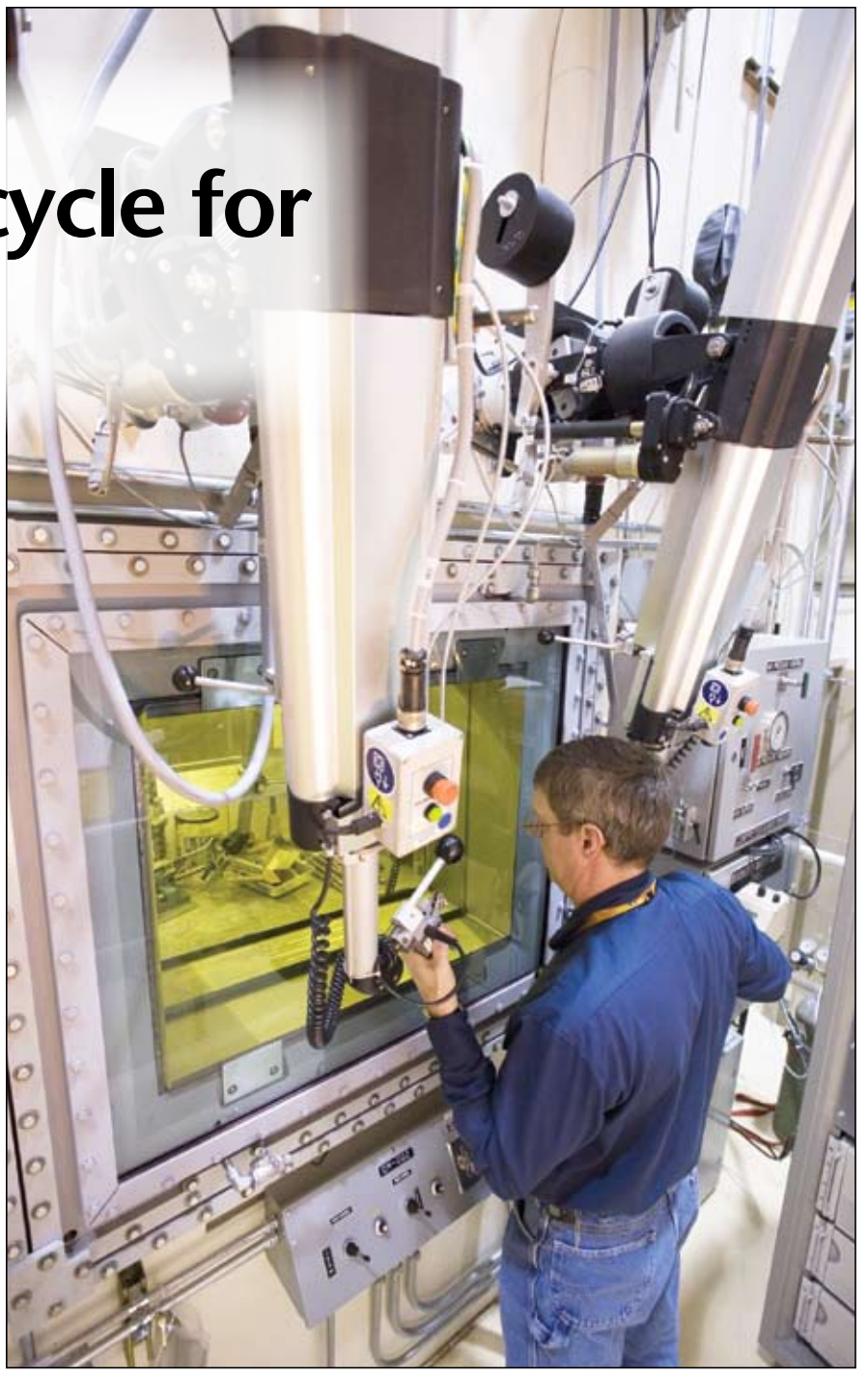
The shortage of isotopes developed because the demand for strontium-82 is rising, and the increased demand hasn't allowed production facilities to shut down for regularly scheduled maintenance work.

Normally, these isotope production facilities schedule shutdowns in a sequence that maintains a steady supply of medical isotopes. This year, however, the demand outstripped the predicted supply. With other production facilities down for regularly scheduled maintenance, and the nation's supply of strontium-82 running out, the DOE's Office of Nuclear Energy asked the Lab to postpone its scheduled shutdown and dedicate an additional 14 days of operation to mass producing the critical isotope.

The Isotope Production Facility, which can produce about 100 different isotopes for use in research, industry, and defense, focused its efforts on producing enough strontium-82 to meet the nation's medical needs for the next month or so, until an isotope facility in Russia starts up again this month.

"We need to do the maintenance, which takes months to complete, and we will. But the need for a steady supply of isotopes is more important, so we stepped in and did a dedicated production run, and filled the isotope-gap," said Kevin Jones of the Accelerator Operations and Technology (AOT) Division. "It was really a heroic effort on the part of our employees. We had to work 24-7 for two weeks to do it."

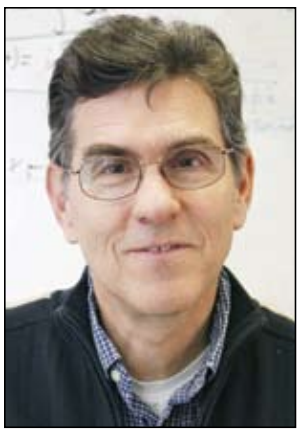
Los Alamos' IPF was commissioned in 2004 to help the nation reduce its dependence on foreign isotopes. Radioisotopes, which decay, have become a critical resource for medicine, research, industrial, agricultural, and defense applications. Radioisotopes decay by giving off subatomic particles, like positrons. This decay helps to distinguish the isotope from the normal, often more stable form of the element. The decaying process also makes the isotope visible to instruments, like those in PET. Doctors can inject radioisotopes, such as strontium-82, into patients and track their movement and location to see, for example, if organs, like the heart, are functioning properly. The decay from other radioisotopes is used to bombard and destroy cancer cells. Industry uses isotopes to check the integrity of a weld, to sterilize instruments, and for "well-logging" to detect the presence of certain desirable materials in a well. Isotopes also are used to kill germs and sterilize food.



Michael Connors of Inorganic Isotope and Actinide Chemistry uses the hot-cell manipulators in the Laboratory's Isotope Production Facility at the Los Alamos Neutron Science Center. *Photo by LeRoy N. Sanchez, Records Management/Media Services and Operations*

'If we hadn't run the IPF facility in an unprecedented dedicated mode, there would have been a nationwide shortage of strontium-82.'

Bender is Lab's new Ulam Scholar



Carl Bender

Carl Bender is the Laboratory's 2007 Stanislaw M. Ulam Distinguished Scholar.

Bender was selected as the Ulam Scholar by the Center for Nonlinear Studies Executive Committee. He will work at the Center for Nonlinear Studies (T-CNLS) during the 2006-2007 academic year and also will contribute to groups in Theoretical (T), Physics (P), and Computer, Computational and Statistical Sciences (CCS) divisions, said Robert Ecke of the Center for Nonlinear Studies.

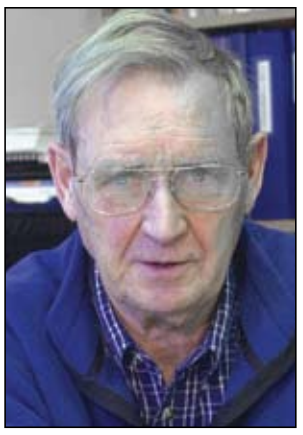
"I made numerous extended visits to Los Alamos over the last three decades, so I had a good idea what a one-year visit to the Lab might be like," Bender said about his experience at the Lab. "The Lab has many well-known senior scientists and bright postdocs to meet. I have enjoyed making new research contacts as well as resuming collaborations with old friends.

"This is a great place to get work done — I have finished six papers since September."

Bender is a Fellow of the American Physical Society and a Fellow of the United Kingdom Institute of Physics. He received a Sloan Foundation Fellowship, a Particle Physics and Astronomy Research Council (UK) Fellowship, Fulbright Fellowship to the UK, and a John Simon Guggenheim Memorial Foundation Fellowship to the UK. He is editor-in-chief of the *Journal of Physics A: Mathematical and Theoretical,* and was awarded a visiting professorship by the Mathematics Department at Imperial College in London. Bender also is co-author of *Advanced Mathematical Methods for Scientists and Engineers*.

The Stanislaw M. Ulam Distinguished Scholar is an annual award that enables a noted scientist to spend a year carrying out research at the Center for Nonlinear Studies. The position honors the memory of Ulam, a Polish-American mathematician and Manhattan Project member who is considered a father of nonlinear science.

Frauenfelder receives Willis E. Lamb Award



Hans Frauenfelder

Hans Frauenfelder of Theoretical Biology and Biophysics (T-10) recently received the 2007 Willis E. Lamb Award.

The Willis E. Lamb Award for Laser Science and Quantum Optics is presented each year for outstanding contributions to these fields. The award is sponsored by the Physics of Quantum Electronics (PQE) conference, said Ben McMahon of T-10.

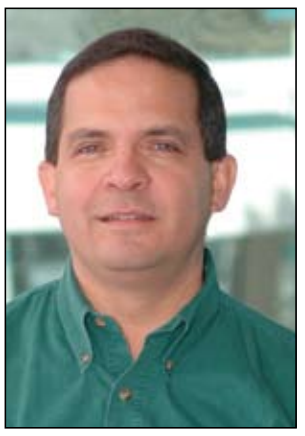
Frauenfelder received the award for his "pioneering contributions to radiation biophysics" and his work in biological physics and protein physics over the last thirty years.

"I was very happy when I learned that I would receive the Willis E. Lamb Award," said Frauenfelder. "I was particularly delighted that the award was given for my work in biological physics — a new field that still needs more recognition and will be of tremendous value for the Laboratory."

"His studies of proteins using optical and infrared spectroscopy and of the Mossbauer effect have given the field a mechanistic understanding of proteins, particularly myoglobin," said McMahon.

Frauenfelder received his doctorate in physics and is a Lab Senior Fellow. He was elected to the National Academy of Sciences, the American Academy of Arts and Sciences, the Academy of Leopoldina, the American Philosophical Society, and the Royal Swedish Academy of Sciences. He began working at the Lab in 1992 after spending forty years as a professor and researcher at the University of Illinois.

Kimberly Zeilik



Christopher Fresquez

Dereck Willis

Zeilik, Fresquez, Willis new group leaders in ASM Division

Acquisition Services Management (ASM) Division has three new group leaders. **Kimberly Zeilik** and **Christopher Fresquez** are new group leaders for Purchasing (ASM-PUR) and **Dereck Willis** is the new Subcontracts (ASM-SUB) group leader.

Zeilik has twenty-two years of experience in contract administration at the Laboratory and has worked in almost every purchasing group at the Lab. She was lead contract administrator for the Contingent Worker Project, team leader, and acting group leader in Purchasing. She received her bachelor's degree in business administration and master's degree in public administration from the University of New Mexico.

Fresquez has sixteen years of procurement experience at the Lab in cost/price analysis, negotiations, file documentation, and contract administration. He has held several supervisory positions and is focused on customer service and process improvement. He earned his bachelor's in business administration from New Mexico State University and holds a certified purchasing manager certificate from the Institute for Supply Management.

Willis, who has twenty-two years of experience in contracts, has been at the Lab for five years. He has held positions as team leader and acting group leader and has worked for the military, private industry, and federal government. Willis received his bachelor's degree in business administration from Regis University and his master's in procurement and acquisitions management from Webster University.

In Memoriam

Raymond McCormick

Laboratory retiree Raymond McCormick died December 22, 2006. He was 74 years old.

McCormick began working at the Lab in 1968 as a machinist in the former Shops Department (SD). He worked for several organizations, including the former Mechanical Fabrication (MEC) Division, before he retired in 1993 as a machinist fabrication technician in the former Health and Safety (HS) Division Office.

McCormick served in the U.S. Army from 1953 to 1955.

He is survived by his wife, Yvonne; daughter Kathy of Rio Rancho; sons Mike of Accelerator Operations (AOT-OPS) and Don of Rio Rancho; sister Mae Chabot of Alberta, Canada; brother Leland of Pomerene, Arizona; and five grandchildren.

Adela Mynaugh

Laboratory retiree Adela Mynaugh died December 30, 2006. She was 84.

Mynaugh joined at the Laboratory in 1951 in the former GMX Division. At the time of her retirement in 1982, she was working in the former Chemistry–Metallurgy "Baker" (CMB) Division.

She is survived by siblings Mary Marquez of Las Vegas, New Mexico, and Ben (Pat) Romo of Las Cruces; and numerous nieces and nephews.

William Fox

Laboratory retiree William Fox died January 7. He was 75.

Fox joined the Laboratory 1949 in the former Engineering (ENG) Division. He retired in 1988 while working in the former Mechanical Fabrication (MEC) Division.

He is survived by his wife, Helen, and son Douglas.

Genaro "Jerry" Maestas

Laboratory retiree Genaro "Jerry" Maestas, died January 16. He was 67.

A U.S. Army veteran who served in the Korean War, Maestas joined the Laboratory in 1971 as an electronics repairman in the radio shop. He also worked at the former Accelerator Operations Technology (AOT), Meson Physics (MP) and Site Engineering (ENG) divisions. When Maestas retired from Los Alamos in 1999, he was working at the Los Alamos Neutron Science Center (LANSCE).

Maestas is survived by his wife, Flora; son Jerry, of Albuquerque; daughters Barbara Tubb of Santa Fe and Mary Beth of Arlington, Virginia; sisters Mary Naranjo and Sally Roybal of San Pedro; brother Phil, of San Diego, California; and three grandchildren.

Q: March is Women's History Month in the United States. What woman "pioneer," in any field of study or occupation, do you most admire and why?

Ron Moses of High Power Electrodynamics (ISR-6)

Rosalind Franklin, who was an X-ray crystallographer in England and who took the first definitive X-ray image of DNA. Her work, in my opinion, was surreptitiously acquired by James Watson, and led to Watson and Francis Crick's correct structuring of DNA, for which they won the Nobel Prize in medicine. Sadly, she died before this Nobel Prize was awarded and never received due credit for her work.

Toru Aida of Applied Science and Methods Development (X-1)

Amelia Earheart because she was a pioneer in her own field. I only know a little about her, but I am sure she attained a number of firsts as an aviation pioneer.

Pete Prince of the Applied Physics (X) Division

I would have to say Nancy Pelosi, United States Representative, D-California and Speaker of the House. She has the guts equivalent to most men, and she shows a great deal of ambition that is to be admired given that she is in one tough position.

Christina Medina of the Government Affairs Office (CGO-GAO)

Oprah Winfrey, because of her contributions and her dedication to making a better world. With her book club, financial counseling shows, and the fact that she is very big on women's health, she just seems to be a very positive person.

Michelle Garcia of the Service Center (HR-SVSCTR)

I would say Hillary Clinton because of her success in politics and the fact that she is running for president. And she has come into her own, even after being the wife of a former president.

Calling in the dogs

Above: Matt Nguyen of Security Assessments walks an explosives sniffing Czech Shepherd named Vitus past a government vehicle at Post 10. All commercial delivery vehicles and large private vehicles, including RVs, must stop at Post 10 to receive an inspection and vehicle pass before driving through the Visitor Access Portals on East Jemez Road. The Laboratory contracts with K-9 Search On-Site for the bomb-sniffing canines.

At right: Mike Hartmann of Security Assessments rewards bomb sniffing dog Max with some positive reinforcement after a successful training exercise. Max, a Belgian malinois, found the hidden training device on a government vehicle. For his effort, Max receives a tennis ball and a hug. *Photos by Kathy DeLucas*

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Good boy!
Ivan wins Best in Breed at Westminster Dog Show

by Krista D. Wilde

"Are you sitting down?" This is what a friend asked Leslie Carlson-Elliott when she called with the news that Ivan, Carlson-Elliott's Finnish Spitz, won Best in Breed at the Westminster Dog Show.

"I was in shock when she told me the news. He's a wonderful dog, but I wasn't sure if this was his year because he was competing against several great dogs. To win against such strong competition is an added bonus. In many ways, it was a dream come true," said Carlson-Elliott of Space Data Systems (ISR-3).

Ivan's full title is Ch Jayenn's Ivan of Tsankawi. The Ch indicates that Ivan is a champion, Jayenn is the name of his kennel, and Tsankawi is a reference to the ruins of an Indian Village at nearby Bandelier National Monument.

Ivan was invited to Westminster because he was ranked in the top five of his breed. The dogs are ranked according to points they earn in other dog show competitions throughout the year. They receive points for every dog in their breed that they defeated. Also, all of the dogs that compete at Westminster are required to be champions. Dogs become champions by meeting the requirements outlined by the American Kennel Club, explained Carlson-Elliott.

"Ivan loves to compete, and he has a great time in the ring," said Carlson-Elliott. "He is a challenge because he gets so excited and sometimes does bunny hops and spins in the ring."

Ivan was awarded Best in Breed, which means that he, more than the other dogs he competed against, matched the breed standard. The standard is based on the dog's function and what it was bred to do. The judges look for characteristics, such as good construction, color, movement, and temperament.

'Ivan loves to compete and he has a great time in the ring.'

Brian Livingston, a professional handler from the Dallas area, handled Ivan at the Westminster Dog Show because Carlson-Elliott was unable to attend this year's Westminster competition. She has, however, attended past Westminster Dog Shows with other dogs including Ivan's father. "Westminster is held in Madison Square Garden. It's very crowded and busy, but most of all, it's exciting," said Carlson-Elliott.

Ivan and Carlson-Elliott prepared for Westminster through conditioning, grooming, and diet. Ivan ran on a treadmill for thirty minutes every other day and had regular playtime outdoors. He also received a bath once a week leading up to the event and is on a raw food diet.

Most of all, Carlson-Elliott says the dog must want to compete. "It has to be fun. Like any other sport, the dog has to enjoy competing and have a presence to win."

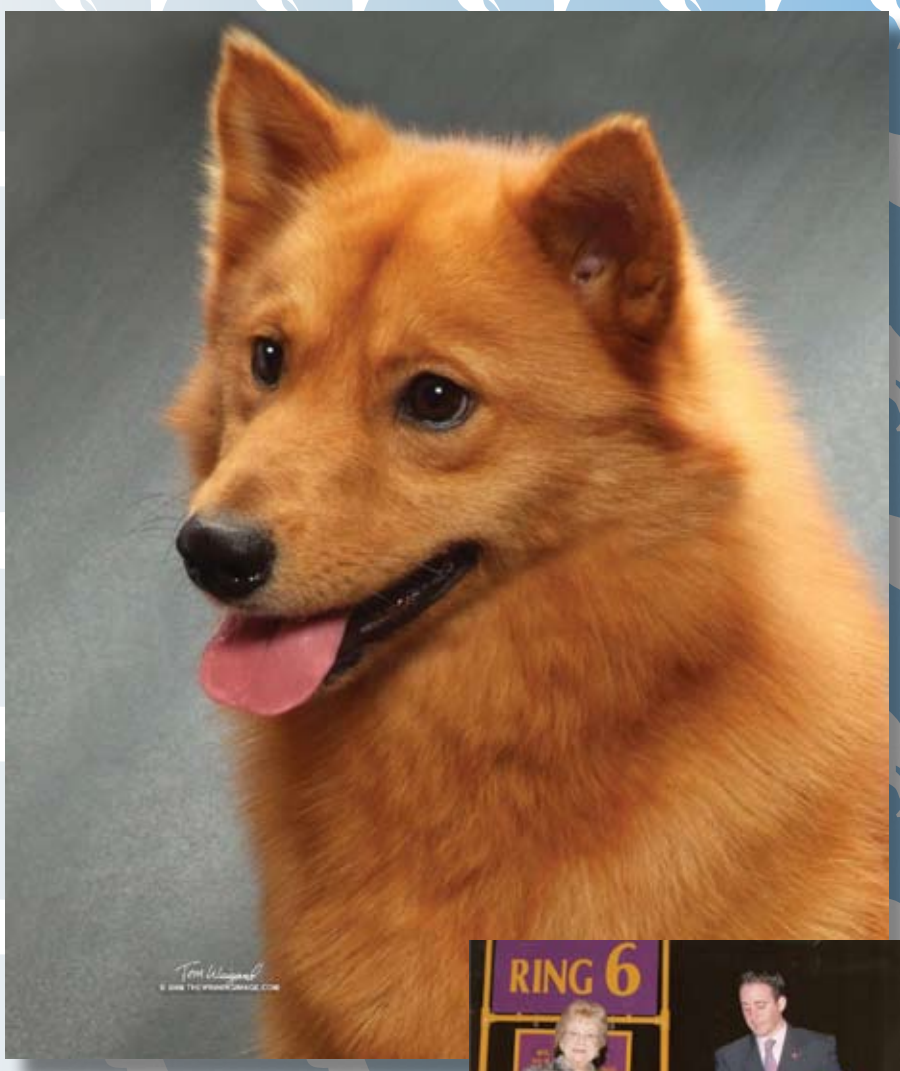
Ivan will continue to compete for a few years in conformation and agility. Carlson-Elliott said she would like to see him win Best of Breed at his National Specialty.

"He is just starting out and has done very well for a new dog. I have high hopes for him," said Carlson-Elliott.

Carlson-Elliott's husband, John Elliott of Radiation Protection Technical Support (RP-3) also is part of the winning combination. "He helps with every aspect of preparing the dogs. I couldn't do any of this without him. He is so proud of the dogs and really loves them," she said.

Carlson-Elliott started showing Shelties when she was thirteen. "It kind of hooked me. I love doing things with my dogs," she said. Carlson-Elliott started showing dogs in obedience, she then added agility competitions, and has been showing dogs in conformation for about ten years.

A genuine dog-lover, Carlson-Elliott also teaches obedience classes, runs the National Rescue for the Finnish Spitz, and serves as president of the Finnish Spitz Club of America. Carlson-Elliott and her husband also own Ivan's father, Nicc, two chow-mix rescue dogs, a border collie, and a Nova Scotia duck-tolling retriever.



At right, Ivan stands with handler Brian Livingston ready to receive his ribbon for Best in Breed from Loraine Boutwell, a judge at this year's Westminster Dog Show in Madison Square Garden. Ivan, who's full title is Ch Jayenn's Ivan of Tsankawi, is owned by Leslie Carlson-Elliot, below, of space Data Systems. *Above photo by Tom Weingard of The Winning Image; Photo at right by Ashby Photographers; photo of Carlson-Elliot by Ed Vigil*