

NewsLetter

Week of Nov. 8, 2004

Vol. 5, No. 23

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continues through Nov. 24
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Employee embraces way of the sword

Gerd Kunde of Subatomic Physics (P-25) has been studying the Japanese martial art laido for 10 years. Even though he already has a black belt in the 450-year-old martial art, Kunde is certain that laido will remain a large part of his life in the future, as his relationship with it continues to teach him many things.Page 8



What are the major safety-related things you do at home or on the job in preparation for winter weather? Learn what your co-workers had to say on Page 7.



Los Alamos instrument yields new knowledge of Saturn's rings

by Todd Hanson

Los Alamos scientists have begun to analyze data from an instrument aboard the joint U.S.-European spacecraft Cassini. Although Cassini has only been orbiting the planet Saturn since July 1, data from the Cassini plasma spectrometer already has begun to provide new information about the curious nature of Saturn's space environment.

CAPS had been detecting advance readings for several days before Cassini finally crossed the bow shock that exists in the solar wind ahead of the magnetosphere, a huge magnetic field bubble produced in the solar wind by Saturn's strong magnetic field. On June 28, the spacecraft entered into the magnetosphere itself and began taking data. From this very preliminary set of measurements, it is apparent that the outer reaches of Saturn's magnetosphere are probably populated by plasma captured from the solar wind, but closer to the planet the plasma comes primarily from the rings and/or the inner icy satellites.

According to Michelle Thomsen of Space Science and Applications (ISR-1), current Los Alamos CAPS project leader, "After many years of design, development and testing, and then the seven-year journey across the solar system, CAPS is finally doing the job it was built to do. We are quickly learning much, but I think we have only begun to understand what CAPS can teach us about Saturn and its space environment over the next few years."

CAPS consists of three separate analyzers designed to measure the electrically charged particles trapped within Saturn's magnetosphere. Los Alamos played a major role in the design and construction of two of them: an ion mass spectrometer, which incorporates a novel design developed at Los Alamos to identify the different atomic species in Saturn's magnetospheric plasma, and an ion beam spectrometer, which is based on a design used by Los Alamos scientists on several previous solar wind research missions.

During Cassini's first brief pass over Saturn's rings, CAPS identified a previously unknown low-energy plasma trapped on the magnetic field lines threading the Cassini Division, the name given to the gap between the main A and B rings. With the four-year mission just beginning, including more than 70 orbits of the planet, CAPS is poised to provide scientists with a new level of understanding about Saturn's space environment, as well as clues about some of the space physics processes that operate more universally in the solar system.

The CAPS team involves scientists and engineers from 14 institutions and six countries, including former Los Alamos staff member Dave Young, now the principal CAPS investigator at the Southwest Research Institute in San Antonio, Texas. At Los Alamos, the CAPS effort was made possible by the work of numerous members of International, Space and Response (ISR) Division and its predecessor organizations. The IMS was designed by Los Alamos staff member Beth Nordholt of Biological and Quantum Physics (P-21) and former staff member Dave McComas. In addition to Thomsen, current members of the team include Bruce Barraclough (lead investigator for the IBS), Dot Delapp, Jack Gosling, Dan Reisenfeld, John Steinberg, Bob Tokar and summer student Brian Fish, all of ISR-1.

Los Alamos
NewsLetter

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2004 Holiday Drive

The Laboratory's 2004 Holiday Drive to collect new toys and non-perishable food items for Northern New Mexico residents begins Nov. 22 and continues through Dec. 15. For more information, contact Debbi Wersonick of the Community Relations Office (CRO) at 7-7870.

Laboratory's United Way campaign continues through Nov. 24



Brittany Foster, 12, works on her tie-dye shirt at a workshop at Los Alamos Middle School. The workshop raised about \$800 for the Laboratory's 2005 United Way giving campaign and was led by Stephanie Hagelberg of Materials Dynamics (DX-2). Photo by Gary Warren, Los Alamos Monitor

Inset photo: Paul Weber, acting principal deputy associate director of threat reduction, got a face full — of pie that is — at a United Way fund raiser at the Nonproliferation and International Security Center (NISC) at Technical Area 3. The event was sponsored by Nuclear Nonproliferation (N) Division and the Threat Response Operations (TRO) Office. As of press time, Laboratory personnel have pledged or donated about \$332,600 to this year's United Way giving campaign. For more information, go to the Lab's United Way Web page at www.lanl.gov/orgs/cr/unitedway/index.shtml online.



Photo by Billy Pearl, Deployed Services (S-9)

For Your Safety



Better safe than sorry Preparing for winter storms

Northern New Mexico already has seen the first snowflakes of fall 2004. Can serious winter-like weather be far behind? Staying up on winter-weather conditions is an important part to staying safe during a winter storm. The following tips from the American Red Cross can help take some of the guesswork out of monitoring and reacting to winter-weather reports.

Know what winter storm watch and warning means

- A winter storm watch [or advisory] means a winter storm is possible in the area.
- A winter storm warning means a winter storm is headed for the area.
- A blizzard warning means strong winds, blinding wind-driven snow and dangerous wind chill are expected. Seek shelter immediately.

When a winter storm watch is issued ...

- Listen to NOAA Weather Radio, local radio and TV stations, or cable TV such as the Weather Channel for further updates.
- Be alert to changing weather conditions.
- Avoid unnecessary travel.

When a winter storm warning is issued ...

- Stay indoors during the storm.
- If you must go outside, several layers of lightweight clothing will keep you warmer than a single heavy coat. Gloves (or mittens) and a hat will prevent loss of body heat. Cover the mouth to protect the lungs.
- Understand the hazards of wind chill, which combines the cooling effect of wind and cold temperatures on exposed skin. As the wind increases, heat is carried away from a person's body at an accelerated rate, driving down the body temperature.
- Walk carefully on snowy, icy sidewalks and wear sensible shoes with good traction.
- After a storm and when shoveling snow, be extremely careful. It is physically strenuous work, so take frequent breaks. Avoid overexertion.
- Avoid traveling by car in a storm, but if [travel] cannot be avoided, carry a disaster supplies kit in the trunk.
- Keep the car's gas tank full for emergency use and to keep the fuel line from freezing.
- Let someone know your destination route and expected arrival.

Stuck in a storm?

- Stay with the car. Do not try to walk to safety.
- Tie a brightly colored cloth (preferably red) to the antenna for rescuers to see.
- Start the car and use the heater for about 10 minutes every hour. Keep the exhaust pipe clear so fumes won't back up in the car.
- Leave the overhead light on when the engine is running so the car can be seen.
- Move arms and legs to keep blood circulating and to stay warm.
- Keep a window located away from the blowing wind slightly open to let in air.

Los Alamos National Laboratory NewsLetter

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Los Alamos enhances global security by ensuring safety and confidence in the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction and improving the environmental and nuclear materials legacy of the Cold War. Los Alamos' capabilities assist the nation in addressing energy, environment, infrastructure and biological security problems.



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'Lead stringers,' a success story

by Kathy DeLucas

Solid Waste Operation (FWO-SWO) recently removed seven lead stringers, one of many steps toward the completion of a proposed closure plan for the Material Disposal Area (MDA) L at Technical Area 54. MDA L is a 2.58-acre tract within TA-54 that has historically been used as a storage site for the Laboratory's generated hazardous and mixed low-level waste.

"This is a real milestone," Los Alamos Area Site Office assistant manager for environmental projects James Nunz said. "This was originally designated as a 'no path forward' waste that has now been safely removed and transported to a permitted treatment and disposal site in Utah. It's a real success story that demonstrates a Lab-wide cooperative effort to reduce the Laboratory's waste."

Duratek Federal Services provided the muscle to retrieve the stringers from 30-foot burial shafts. After months of planning and many pre-job safety meetings, walk downs and cold testing exercises, Project Manager Marty Kline of Duratek was finally given approval by Los Alamos officials to remove



Stephanie Jacquez of Operation and Facility (Industrial Hygiene and Safety) Support (HSR-8) and Rob Ruby of Health Physics Operations (HSR-1) observe the snipping of a lead stringer that is held by a crane and dropped into a lead-lined cask. Photo by Patricia Leyba, Risk Reduction and Environmental Stewardship (RRES) Division

the concrete caps, exposing the shaft's openings. Workers, hooked up to safety restraint equipment, snared the first stringer to the crane.

Once the stringer was pulled out of the shaft, the crane positioned the stringer over the cask, where a hydraulic shear head cut the stringer into two-foot sections, which dropped into the lead-lined cask. Once all the waste volume was reduced, the cask was sealed and

shipped to a DOE approved, licensed waste treatment and disposal area in Utah.

The lead stringers were originally used and designed to push targets in and out of the linear accelerator beam line for radioisotope research. Their dimensions were 7 inches wide and 26-feet long of hollow steel. The lower end cavity of the hollow steel was filled with cement, sand and lead shot therefore, making this a mixed low-level waste. These stringers were used for 13 years ending in 1988, and had accumulated substantial amounts of radioactivity, mostly cobalt-60, an activation product.

Claus Construction in conjunction with Crane Services of Albuquerque provided the crane and heavy equipment. All subcontractors were small area businesses.

The lead stringer activity was conducted on a weekend and completed in one day. The cask was shipped the following Monday to Utah for treatment and disposal.

"What was so great about this project," said lead stringer project leader, Avril Millensted of FWO-SWO, "was that we had initiated meetings on this activity many months ago and everybody knew their roles and responsibilities and the operation was meticulously thought through with all the necessary parties being notified."



Tom Bowles

Making it easier to do science

by Tom Bowles

We [Lab management] know that there is a sense across the Laboratory that there are too many new requirements and that we have imposed the implementation of more than has actually been required. This issue will be addressed. Over the course of the next year, both technical and operational staff will be engaged to assess Laboratory requirements, policies and procedures in order to determine how the requirements can be streamlined and reduced, while ensuring that we remain fully safe, secure and compliant.

This will take time and substantial effort, but I am convinced that the effort expended will be well worthwhile and that the result will be a reduction of work required for the Lab to meet its critical requirements. I ask for your patience and cooperation while we undertake this effort. As

we begin looking at specific issues, I will be sending out information on our activities and asking for your input.

Laboratory workers receive Defense Programs Awards of Excellence

Nearly 500 staff working in Los Alamos' nuclear weapons program and supporting divisions were honored recently with the National Nuclear Security Administration's Defense Programs Awards of Excellence for 2003 in ceremonies in the J. Robert Oppenheimer Study Center at Technical Area 3.

Everet Beckner, deputy NNSA administrator for defense programs, presented the 15 awards with assistance from Fred Tarantino, Laboratory principal associate director for nuclear weapons programs.

The 15 large and small teams whose achievements were recognized with the Defense Programs Awards of Excellence are listed below:

Actinide Analytical Chemistry; Digital Alpha Reconstitution; ESA Centrifuge Test-Analysis; High Pressure Materials Science; Inertial Confinement Fusion (ICF) Target Development; Isomeric Yttrium Cross Section; Lightning Project; Los Alamos Hydrotest; Metal Materials Specification; Non-Metal Materials Specification; Pit Manufacturing Software Quality Assurance; Proton Radiography of a Dynamic Test with U6Nb; Uranium Alloy — Neutron Diffraction Characterization; Validated Actinide Cross Section Database; and X-ray Fluorescence.

Cecilia Sanchez of Scientific Software Engineering (CCN-12) stands for a photo with Everett Beckner, National Nuclear Security Administration deputy administrator for defense programs, at a Defense Programs Awards ceremony in the J. Robert Oppenheimer Study Center at Technical Area 3. Sanchez was representing the Pit Manufacturing Software Quality Assurance team. Photo by LeRoy N. Sanchez



When it's snowing outside

by Kathy DeLucas

Wondering if the Lab will be open or delayed because of snow? Workers can call a toll-free hotline to find out about the status of Laboratory operations during inclement weather. That toll-free number is 1-877-723-4101. The toll-free number provides easy access to the Lab's UPDATE phone line, which employees should call to find out if the Lab's operating schedule is affected by winter storms. The hotline is the Lab's official, primary source for obtaining such information.

The local phone number for Santa Fe and Los Alamos residents is 667-6622. The message will not change unless there has been a change in schedule at the Lab or new information concerning an emergency.

The Laboratory's Early Dismissal/Closure/Delayed Opening Plan for determining the Lab's operating schedule because of inclement weather involves several resources. Gene Darling of Emergency Management and Response (S-8) said the duty emergency manager at S-8 keeps up with the latest local forecast and usually knows ahead of time if a weather system can potentially affect the Lab's schedule.

In the case of Lab closures or delayed openings, the process usually begins around 3 a.m. The duty emergency manager begins receiving calls from the Lab's support services subcontractor's roads and grounds group, Protection Technology Los Alamos and Utilities and Infrastructure (FWO-UI) to receive information on road conditions at the Lab. The duty emergency manager calls the State Department of Transportation, Los Alamos Police Department, the State Police and Meteorology and Air Quality (RRES-MAQ) for weather and additional information.

Once the duty emergency manager has received the

latest information concerning road conditions, the support services subcontractor's progress in clearing sidewalks and parking lots, current weather conditions and the forecast for what is expected to occur later that day, he or she discusses the situation with other S-8 personnel before contacting the Director's Office. There are several



backup contacts throughout each phase of the plan in case the primary cannot be reached.

That person then confers with Department of Energy senior managers. The final decision and authority on whether to close entirely, delay opening or dismiss early rests with the DOE/National Nuclear Security Administration's Los Alamos Site Office. Once such a decision has been made, the duty emergency manager is contacted; S-8 personnel call the primary contact in the Public Affairs Office. Public Affairs places the message on the UPDATE information hotline.

The entire process for delayed opening or Lab closure usually is completed before 5:30 a.m., giving Lab employees and contractor personnel time to find out what the situation is at the Lab. Darling said the plan works relatively well when bad weather occurs very early in the morning, but there's really not much S-8 can do in terms of warnings when bad weather strikes the area unexpectedly after 5 a.m. "There's just no time to adequately respond to the situation," he said.

If it's a delayed opening or closure, Public Affairs then calls various radio and television stations, asking them to report the Lab's operating status.

In the case of an early dismissal, a message is immediately recorded on the UPDATE Information Hotline and published in the Daily Newsbulletin. Electronic mail

announcing the early dismissal also is sent to all employees, including contractors.

Emergency Management personnel also contact the Los Alamos Public Schools superintendent, Los Alamos and State Police, PTLA and other organizations.

Personnel who are at work and want to know if the Lab is closing early can periodically call the UPDATE hotline (7-6622) or check the Daily Newsbulletin at <http://www.lanl.gov/newsbulletin> online. Remember to click the "Reload" button if you have previously accessed the site.

Lab workers who are at home and want to know if the Lab is on a delayed opening schedule or is closed for the day should call the hotline first, then listen to the news on radio or television stations. For more information about the Lab's Early Dismissal/Closure/Delayed Opening Plan, call 7-6211.



UC Santa Cruz astrophysicist awarded APS's 2005 Bethe Prize

The American Physical Society has awarded the 2005 Hans A. Bethe Prize to Stan Woosley, professor of astronomy and astrophysics at the University of California, Santa Cruz. The Bethe Prize recognizes outstanding work in the areas of astrophysics, nuclear physics and related fields.

Woosley, an expert in theoretical high-energy astrophysics, studies the most violent explosions in the universe — supernovae (the massive explosions of dying stars) and gamma ray bursts (mysterious blasts of intense radiation).

The Bethe Prize recognizes Woosley "for his significant and wide-ranging contributions in the areas of stellar evolution, element synthesis, the theory of core collapse and type Ia supernovae, and the interpretation of gamma-ray bursts — most notably, the collapsar model of gamma-ray bursts." The prize, consisting of \$7,500 and a certificate, will be presented at the American Physical Society meeting in Tampa, Florida, in April 2005.

Woosley earned a bachelor's degree in physics and a doctorate in astrophysics from Rice University. He joined the UC Santa Cruz faculty in 1975 and has served three times as chair of the Department of Astronomy and Astrophysics. The Division of Physical and Biological Sciences honored him last year with its Outstanding Faculty Award for 2003-04. In 2001, Woosley was elected to the American Academy of Arts and Sciences. He was elected a fellow of the American Physical Society in 1987.



ISEC KNOWS

The following is part three of four topics discussing new electronic technologies and vulnerabilities.

New technologies, new vulnerabilities

Wireless systems, e-mail, instant messaging and Internet protocol have opened security concerns

Only a few years ago, e-mail, the Internet and wireless networks were emerging technologies. Now e-mail has branched out in directions ranging from instant messaging to spam. The Internet is the pipeline not just for data but for phone calls and even video surveillance. Yet, with technological progress comes new threats.

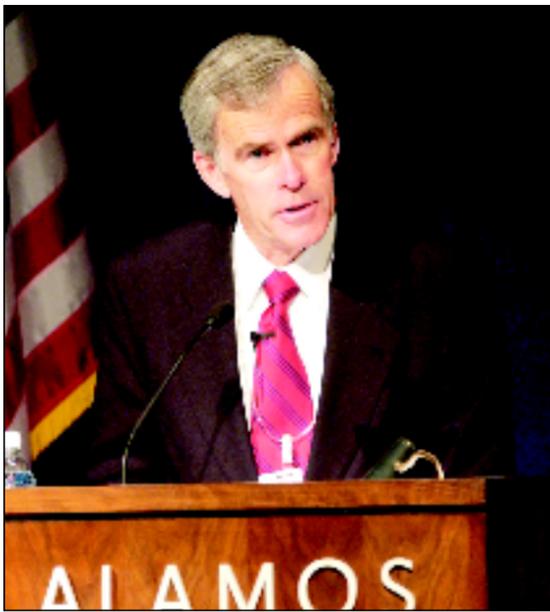
Battling spam

Legislative initiatives to combat spam have gained wide attention. Not nearly as well known, except among information/computer security specialists, are the many different technologies now emerging to stifle this electronic nightmare.

The main idea is to separate, or "quarantine" the spam from the "good" e-mail. Instead of automatically assigning mail to a "black" or "white" folder, however, some of the newer technologies send suspicious e-mail to a "gray" folder, so individuals can inspect messages to determine whether the e-mail are actually unwanted before the messages are gone forever. Rather than being sold as software products, some of the newer anti-spam offerings are operated as subscription-based services.

For more information on Operations Security (OPSEC), call 5-6090.

New Mexico senators visit, talk to employees



Sen. Jeff Bingaman, D-N.M.

Bingaman: Los Alamos 'pushes the frontiers of science'

by Brooke Kent

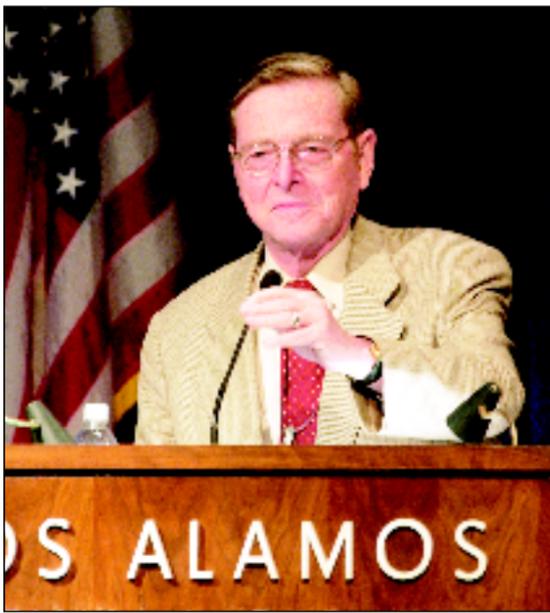
"I believe that the greatest contributions of this laboratory still lie in the future," U.S. Sen. Jeff Bingaman said at a "State of the Laboratory" talk in the Administration Building Auditorium at Technical Area 3.

Laboratory Director G. Peter Nanos introduced Bingaman, D-N.M., saluting him as a "a true friend of Los Alamos" who "stood with us during these difficult times."

Bingaman acknowledged the turmoil and uncertainty spawned by this summer's suspension of work and the upcoming contract competition. However, he argued that, "in my view, the best strategy for negotiating this kind of a difficult period is to focus our attention on [the] important work the Lab is engaged in."

Praising Los Alamos as a "broad-based center of excellence for science and technology," Bingaman outlined three priorities he conveyed to Washington: first, recognize Los Alamos' value as a comprehensive and multidisciplinary national laboratory; second, understand the important role that science and technology must play for this nation to surmount its most significant challenges; and third, apply the Lab's capabilities to address those challenges.

"Los Alamos continues to be at the forefront of science and technology to help us address
continued on Page 7



Sen. Pete Domenici, R-N.M.

Domenici: 'We have done well, but we must do better'

by Brooke Kent

"My support of what you do has not waned, and my feeling that you are great has not diminished," Sen. Pete Domenici, R-N.M. said at a "State of the Laboratory" talk in the Administration Building Auditorium at Technical Area 3.

Laboratory Director G. Peter Nanos introduced Domenici, hailing him as a steadfast advocate for Los Alamos and its science, no matter how tough the times.

Domenici commended the depth and breadth of the Lab's scientific endeavors calling it second to none. Citing the three E.O. Lawrence and five R&D 100 award winners as leading indicators, Domenici predicted that the Lab's "diversification will continue and ... grow, even though the cornerstone of the maintenance of this lab will be maintaining and securing our nation's nuclear weapons."

Domenici portrayed himself as a "true advocate of science and technology" or, what Nobel Laureate Richard Smalley calls a "technology optimist." Domenici noted that whenever the national laboratories confront significant challenges — be they augmenting a dwindling water supply or exploring alternative energy sources — "great scientists will respond ... and their response will be victory."

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Research Library receives Library of Congress grant

by Steve Sandoval

The Laboratory's Research Library recently was awarded a \$750,000 grant from the Library of Congress. The grant will be used to support research and development of tools that will help address complex problems related to collecting, storing and accessing digital materials.

"This grant is a significant recognition of the ongoing efforts of [Los Alamos'] Research Library to design, implement and operate a Digital Library repository capable of ingesting and storing the ever growing collection of digital scholarly assets," said Herbert Van de Sompel, principal investigator for the project and team leader of Los Alamos' Digital Library Research and Prototyping team. The Research Library is part of Los Alamos' Science and Technology Base (STB) Programs Office.

"Research papers that detail the design of our repository work attracted the interest of the Library of Congress. The modular and fully standards-based design suggested applicability beyond Los Alamos' Research Library. The Library of Congress funding will further focus our research and help us to explore the path of using our approach beyond [the Laboratory]," said Van de Sompel.

The federal grant was awarded through the Library of Congress' National Digital Information Infrastructure and Preservation Program. This is a congressionally approved plan to develop a national strategy, in collaboration with other entities, for policies, protocols and strategies for the long-term preservation of digital materials.

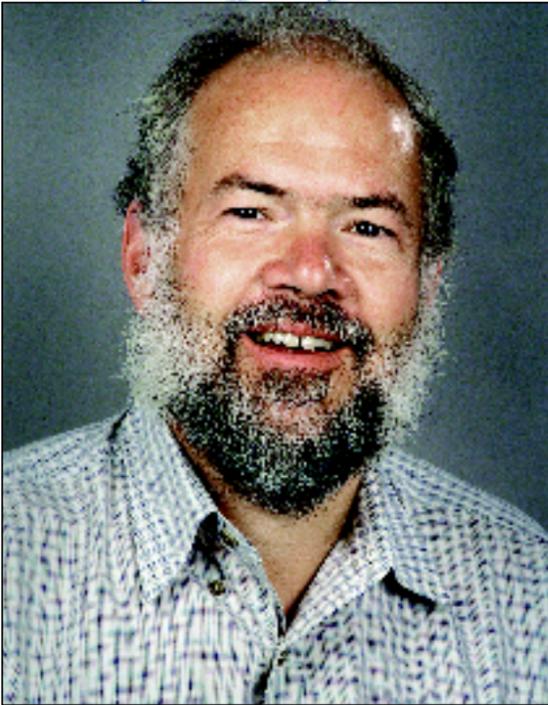
"The National Digital Information Infrastructure and Preservation Program is pleased to be working with Los Alamos National Laboratory on a project that is so critical to the preservation of our nation's history," said Laura Campbell, associate librarian for strategic initiatives of the Library of Congress. "Los Alamos is a world leader in developing cutting-edge technologies in a rapidly changing environment. We anticipate that this collaboration will move the

national digital preservation project closer to achieving its goals."

The Library of Congress is the largest library in the world. Through its National Digital Library Program, it also is one of the leading providers of noncommercial intellectual content on the Internet (www.loc.gov).

The NDL Program's flagship American Memory project, in collaboration with other institutions nationwide, makes freely available more than 9 million American historical items. In December 2000, Congress authorized the Library of Congress to develop and execute a congressionally approved plan for a National Digital Information Infrastructure and Preservation Program. A \$99.8 million congressional appropriation was made to establish the program. The goal is to build a network throughout the country of committed partners working through a digital library preservation architecture with defined roles and responsibilities.

The complete text of the "Plan for the National Digital Information Infrastructure and Preservation Program" is available at www.digitalpreservation.gov online. It includes an explanation of how the plan was developed, who the Library of Congress worked with to develop the plan and the key components of the digital preservation infrastructure. Congress approved the plan in December 2002.



Priedhorsky awarded Szilard Lectureship award

International, Space and Response (ISR) Division's chief scientist, **William "Bill" Priedhorsky**, has been awarded the 2005 Leo Szilard Lectureship Award by the American Physical Society. Priedhorsky shares this award with other members of the APS Study Group on Boost-Phase Intercept Systems for National Missile Defense.

The award is in recognition of a detailed study of boost-phase missile defense, performed by a blue-ribbon panel commissioned by the American Physical Society. The purpose of the work, started in the summer of 2001, was "an independent

study of the feasibility of intercepting ballistic missiles during their boost phase; that is, while their rocket motors still are firing, the rocket plume is easy to detect, and the payload has not subdivided into a mass of warheads and decoys," Priedhorsky said.

The objective of the APS study was to move this issue from the political to the technical domain, by analyzing what was and was not possible. The study team included staff and retirees from industry, national laboratories and universities. Their work culminated in a detailed report released by the American Physical Society in July 2003. The report will go into the scientific archives via the APS publication, "Reviews of Modern Physics."

The award was established to recognize outstanding accomplishments by physicists in promoting the use of physics for the benefit of society in such areas as the environment, arms control and science policy. Said Priedhorsky, "Analyses of this sort are something that the scientific community owes the public. For complex problems like boost phase missile defense, when scientists and technologists have a unique ability to inform the public debate with quantitative, dispassionate analysis, they have a responsibility to do so, and to share those results with the public who support them."

The Szilard Lectureship award will be presented at the APS April 2005 meeting in Tampa, Fla. The award is sponsored by donations from the John D. and Catherine T. MacArthur Foundation, the Energy Foundation, the David and Lucille Packard Foundation and individuals.

Consortium honors Lab employees and technologies

Several laboratory employees and technologies were honored at the 2004 Federal Laboratory Consortium Mid-Continent Regional awards banquet, held in South Padre Island, Texas.

Honored at the meeting was Technology Transfer (TT) Division project leader **Susan Sprake** for her work both as Mid-Continent Coordinator of the FLC and as an executive committee member of the Department of Energy Technology Partnerships Working Group in bringing together, for the first time ever, a combined FLC and TPWG National Meeting last May in San Diego.

In addition to Sprake, Chemistry (C) Division technical staff member

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In Memoriam

C. Eugene Busse

Laboratory retiree C. Eugene "Gene" Busse died on July 24. He was 81.

Busse was born in Delta, Colo. He served in the U.S. Navy during World War II in the Pacific, including the invasion of Okinawa in 1945.

Busse moved to Los Alamos in April 1951, newly employed as a machinist at the Laboratory. He retired from the Lab in 1985, remaining in Los Alamos.

He is survived by his wife of 61 years, Lois; daughter Karen Herin; son Michael of International Research, Analysis and Development (N-3) and wife, Bonita, of the Associate Directorate for Operations (ADO).

A memorial service has been held.

Robert Campbell

Laboratory retiree Robert H. Campbell died on Sept. 20. He was 84.

Campbell's career began in 1947 as an assistant scientist for Project Y in the former Shock Wave Physics (M-6) Division. Campbell also worked in the former GMX and Field Testing (J) divisions. He served as associate division leader and test director of J Division. Campbell worked at both Pacific Proving Grounds and the Nevada Test Site.

Campbell received his bachelor's degree in physics from Purdue University. He also served in the U.S. Navy in Washington, D.C., before moving to Los Alamos.

Campbell is survived by his wife, Grayce, and daughter Kathleen McFerrin. A memorial service has been held.

Dana Elliott

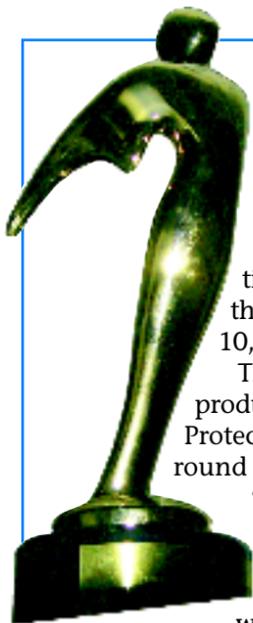
Laboratory retiree Dana Elliott died on Oct. 4. He was 81.

Elliott served in the U.S. Navy in 1945-1946 and was awarded the American Campaign and the World War II Victory medals. He received his bachelor's degree in electrical engineering from the University of Louisville in 1948.

Elliott began working at the Lab in 1954 in the former GMX Division. He also worked for the former Dynamic Testing (M) and Design Engineering (WX) divisions. He retired in 1990 and returned to the Lab in the Engineering Sciences and Applications (ESA) Division as a Lab associate staff member until terminating in 1997.

Elliott was preceded in death by his wife Dorothy. He is survived by his daughters Edith Cardwell, Joan Ellard and Jennifer York.

A memorial service has been held.



Lab wins Telly Award for safety walkaround video

The Laboratory received a 2004 Bronze Telly Award in the safety category for its video, "Walkaround — Safety Walkaround Process."

The Telly Awards showcase the best work of television stations, production companies, advertising agencies and corporate video departments throughout the world. The 2004 recipients were selected from more than 10,000 entries from all 50 states and five continents.

The "Walkaround — Safety Walkaround Process" video, which was jointly produced by Performance Surety (PS) and Health, Safety and Radiation Protection (HSR) divisions, illustrates the major dynamics of the safety walkaround process.

"In the video, David Herbert, a senior Fellow with the National Safety Council, demonstrates the process in three different Laboratory work environments. Herbert defines the six different safety-behavior observation categories and then applies them to the five elements of the walkaround process," said **Rob Nicholas** of Industrial Hygiene and Safety

(HSR-5), project leader for the video.

Laboratory personnel who contributed their talents and expertise to the video and groups that demonstrated the on-camera walkarounds are **Kirk Hollis, Randall Lewis, Kim Meadows** and **Craig Taylor** of Applied Chemical Technology (C-ACT); **Daniel Aragon, Thomas Gravlin, Paul Leslie** and **Lisa Woodrow** of Test Engineering (DX-5); and **Liz Abeyta, Thomas Anderson, Annette Fernandez** and **Lydia Winsemius** of Advanced Information and Business Application Development (IM-8).

The training modules were produced and directed by Nicholas; photography, **Fred Baker**, Information Records and Media Services (IM-9); audio recording, **David Apodaca**, Training and Development (HR-TD); Employee Development System logistics arranged through **Rick Reynolds**, Training Services (PS-13); Web feed, **Mike Kuchinsky**, IM-9, and **Jud Morhart**, HR-TD; VHS/DVD cover design, **Stacey Castro**, formerly of Communication Arts and Services (IM-1); Web design, **Lilly Anaya**, Information Management (HSR-7); and project management, **Marc Clay**, Performance Indicators (PS-7).

In addition to the required training for all managers and supervisors, Laboratory Director G. Peter Nanos has asked that all Lab workers be trained on the safety walkaround elements and that managers show and discuss the video at their group meetings, said Clay of PS-7.

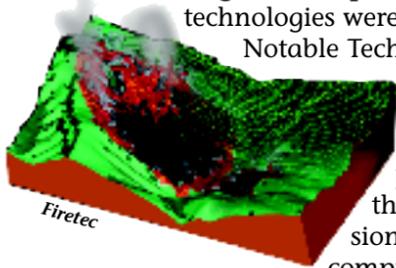
The safety walkaround training package has been distributed Labwide and includes both VHS and DVD formats. Group, division and program offices that haven't received their safety walkaround training package should write to safwalkaroundvid@lanl.gov online.

Consortium ...

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member **Ben Warner** received a Distinguished Service Award for his entrepreneurial activities.

The Laboratory's **Firetec** and the **Reagentless Optical Biosensor** technologies were awarded



Notable Technology Achievement awards. Firetec is a physics-based, three-dimensional (3-D) computer code

designed to simulate the constantly changing, interactive relationship between fire and its environment.

ROB is a hand-held biosensor that quickly identifies and quantifies pathogenic proteins in complex fluid samples, such as serum.

Since the focus of this year's FLC meeting was on clean cities, emergency response, public safety, fuel reduction and fire fighting technologies, the winning Los Alamos technologies were extremely appropriate.

The TPWG is a group of technology transfer professionals from across the DOE complex working as partners to improve the technology partnership activities of the laboratories/facilities and the department.

The Federal Laboratory Consortium is a nationwide network of federal laboratories that provides the forum to develop strategies and opportunities for linking laboratory mission technologies and expertise with the marketplace.



Reagentless Optical Biosensor

Bingaman ...

continued from Page 5

these very challenges," said Bingaman. Whatever the issue — be it ensuring nuclear nonproliferation, promoting cooperative threat reduction, preventing terrorist attacks at home or abroad, transitioning away from a declining supply of fossil fuels, or maintaining a stable and sustainable climate while preserving economic growth — the Lab "pushes the frontiers of science" and contributes in a significant, unique way, he added.

Bingaman positioned himself as a champion of science and national security, citing as one example his National Intelligence Reform Bill amendment, which will allow national laboratory scientists to continue assisting governmental agencies responsible for national security. Bingaman also said he supported creating a chief scientist position reporting to the new national intelligence director.

At its core, Bingaman argued, "science in the national interest is what this laboratory is all about." He said protecting America is a sweeping endeavor that extends beyond nuclear deterrence to alternative energy sources and sound environmental stewardship, and noted that Los Alamos' mission must be leveraging science and technology to meet these challenges. In turn, Bingaman pledged to "work with [the Lab] to make sure [it has] the resources necessary to make those contributions."

Domenici ...

continued from Page 5

Domenici emphasized that "in Congress, respect for work at the Lab has indeed grown." Nevertheless, given this summer's events and the upcoming contract competition, "it is incumbent on everybody here and the University of California to showcase the strengths of this Lab and to demonstrate that [the Lab] has overcome [its] shortcomings." The Lab bears an enormous public trust; as a result, Los Alamos must represent not just the best scientific research, but also the highest standards of safety and security, Domenici said.

Regarding the contract competition for management of the Laboratory, Domenici pledged that real, bona fide credentials, not politics, would drive the process. Collaborating with the University of California "created an environment that fostered world-class scientific research, including winning the Cold War," Domenici said to spontaneous applause. "I'm not in any hurry to break up a team with a superb scientific record."

In closing, Domenici urged employees to "work with Director Nanos, me and others who represent you to develop a strong science vision for the future ... We have done well, but we must do better." Safety and security must underpin great science, Domenici said. As long as this is true, Domenici said he is proud to represent the Lab, champion its interests and proclaim that "what you do and how you do it is absolutely second to none."



Q: What are the major safety-related things you do at home or on the job in preparation for winter weather?



Andrea Valdez of Training Services (PS-13)

Well, I changed my tires on my car to get ready for winter, and I've bought a lot of warm clothes.



Julie Johnston of PS-13

I have about 30 old cottonwood trees and their branches are being trimmed before they fall on the buildings. Plus lots and lots of leaves are being raked up and hauled off to the dump.



Mike Fogle of Diversified Facilities (FWO-DF)

I change the filters on my heating, ventilation and air conditioning unit. I also service all my vehicles and close off all my water hose bibs.



Jocelyn Buckley of PS-13

I call a professional to turn off my swamp cooler and to check the safety of my furnace prior to turning it on for the winter.



Gerald Lucero of Tritium Science Engineering (ESA-TSE)

I put insulation on the doors of my house, check the coolant in my car, secure all my windows and check my home furnace filter. I also make sure to wear clothing appropriate for the type of weather we are having. I make sure to have the tools and equipment in the trunk of my car for emergencies. And I always make sure to watch the weather reports the day before and during the day when storms are coming in.



Thomas Walker of PS-13

For me, dependable transportation is important especially in this area of the country. When winter comes I usually do a thorough check of the systems on my car, including checking the antifreeze, tires and windshield wiper fluid. I also make sure I have a windshield scraper handy. Tires are extremely important. Check your tire pressure and don't forget the spare, even if it is one of those small ones. I always take mine out and check it thoroughly. And for additional peace of mind, purchase a small toolbox, some jumper cables, flares and a flashlight to keep in the trunk along with a good breaker bar with the right size socket for changing the tire lug nuts should you get a flat.



Open Enrollment

This year's Open Enrollment period is Nov. 1 through 30.

During Open Enrollment, employees have the opportunity to make changes to several of their benefit plans.

For more information, go to the Human Resources (HR) Division Web page at <http://www.hr.lanl.gov/> online or call 7-1806.



Employee embraces way of the sword



Photo by LeRoy N. Sanchez

The main goal of an Iaidoka (practitioner of Iaido) is not to control their opponent, but to control themselves. ...

Iaido is a peace time martial art ...

*I = being. AI = harmony. DO = way.
Iaido. The art of reacting to a surprise attack by counter attacking with a sword.
Iaido. "The way of harmonizing oneself in action."*

by Chris Roybal

Gerd Kunde of Subatomic Physics (P-25) has been studying the Japanese martial art Iaido for 10 years. Even though he already has a black belt in the 450-year-old martial art, Kunde is certain that Iaido will remain a large part of his life in the future, as his relationship with it continues to teach him many things.

"It's a lifelong commitment," said Kunde. "You don't take martial arts, you do martial arts."

And while doing Iaido, Kunde has traveled around the United States, finally landing with the Laboratory a year ago after accepting a research position in the Physics (P) Division to study the quark gluon plasma.

Kunde, a native of Germany, came to the United States on a fellowship from the Alexander Humboldt foundation to work at the National Superconducting Laboratory in Michigan. While there, Kunde began studying Iaido under the accomplished martial artist and author Nicklaus Suino Sensei.

Kunde left Michigan for Yale University, where he was the youngest faculty member in the Physics Department in the position of assistant professor. Kunde realized his first opportunity to teach Iaido while at Yale; he offered two classes per term through the Yale Athletic Department.

The main goal of an Iaidoka (practitioner of Iaido) is not to control their opponent, but to control themselves. Wielding a sword, the Iaidoka executes various techniques against single or multiple imaginary opponents. All forms have in common that they start from a state of meditative rest, which is interrupted by the sudden draw of the sheathed sword at the moment of the imaginary attack, followed by a cut and then the return to the meditation. Iaido is a peace time martial art; the sword is always carried in a scabbard.

Kunde said one of the main reasons he was drawn to Iaido was the fact that the art is never practiced in a sparring manner. "There's no sparring, and for most people that's a big difference," Kunde said. "[Sparring] is not my cup of tea."

After leaving Yale University for New Mexico and the Laboratory, Kunde began teaching Iaido at the Pojoaque Wellness Center last spring. Kunde's classes are small (six people maximum) and limited to people 18 years or older. However, Kunde knows of one minor who already is very interested in the art: his son Balthazar.

Kunde has two daughters — Luca, 11, and Emma, 1, but 6-year-old Balthazar has shown the most interest in Iaido of the three.

Kunde said that Balthazar has his own small wooden sword with which he practices his "katas" (forms) very seriously for anyone who will watch.

"He really has the right spirit," said Kunde.

Kunde said the focus he has learned through practicing Iaido also has helped him in other areas of his life. Especially the mind control and stage presence acquired through Iaido practice improves his performance in teaching, presentations and meetings, he said.

"Martial arts, especially Iaido is a tool for self development," said Kunde.

For more information about Iaido, or to inquire about lessons, write to Kunde at iaido@gjkunde.com by e-mail. Although Kunde currently teaches only at the Pojoaque Wellness Center, he is now expanding to teach in Los Alamos and Santa Fe.

"If there's an interested group, I'd like to teach them," said Kunde.