

Los Alamos
NATIONAL LABORATORY

NewsLetter

Week of Aug. 19, 2002

Vol. 3, No. 16

Los Alamos a world leader in pulsed-magnetic-field research

by Shelley Thompson

Over the past 11 years in the world of magnets, Los Alamos National Laboratory has gone from being recognized for pulse-megagauss-explosives-field work to being the world leader in pulsed-magnetic-field research and home to the world's most powerful controlled-pulse magnet. When the Lab's facility first opened in 1992, there was one magnet with one user working on one project. Today, the facility has five working magnet cells, two large superconducting magnets, a 60 tesla long-pulse magnet in rebuild and a 100 tesla magnet in design. The facility also hosts over 130 users a year from around the world working on more than 100 projects.

The National High Magnetic Field Laboratory at Los Alamos functions as the pulsed-magnet facility of the National High Magnetic Field Laboratory — a consortium of three labs. The consortium members include Los Alamos; Florida State University, Tallahassee; and the University of Florida, Gainesville. The NHMFL is one of nine laboratories of its kind in the world and the only one in the Western Hemisphere. It is funded through the National Science Foundation, the state of Florida and the Department of Energy.

The NHMFL consortium provides state-of-the-art facilities for high-magnetic-field-related research in all areas of science and engineering, including biology, medicine, chemistry, geochemistry, bio-engineering, materials science and physics. These facilities are open to all qualified users, generally without cost, through a peer-review proposal process. Users come from universities, private industries and government laboratories worldwide.

NHMFL was born in August 1990 when Don Parkin of Materials Science and Technology Division Office (MST-DO), Jack Crow from Florida State University and Neil Sullivan from the University of Florida received word that NSF had granted their proposal to build the three campuses of the high-magnetic-field laboratory.

"There was stiff competition with Massachusetts Institute of Technology for this award and the NSF made a bold forwarding move to award the NHMFL to our team," Parkin said.

In February 1991, a small group of physicists, engineers, designers and



Shown above is the 1.4 GVA generator. It can deliver 750 mega joules of energy to the magnets at the National High Magnetic Field Laboratory. It was used to power the 60T long-pulse magnet before the magnet's failure and will power both the 60T rebuild and the 100T magnet, both still in production. The inset photo is the 50T mid-pulse magnet. This mid-pulse magnet is used for high precision magnetotransport and optics measurements. Above photo by Kevin Roark; inset photo by Rebecca E. McIntosh, NHMFL.

technicians formed to build the NHMFL pulsed-magnetic field laboratory at Los

Alamos. This group brought together previous Laboratory expertise and experience in pulsed-high-magnetic-field research, pulsed power engineering, magnet engineering, cryogenics and materials. That summer, NHMFL broke ground in Tallahassee, and a few months later in spring 1992, Los Alamos received its first magnet, a 50 tesla short-pulse, given to the NHMFL through a collaboration with the Katholieke Universiteit in Leuven, Belgium.

The Laboratory moved quickly to establish itself as a user facility, and in 1992 NHMFL-LANL had its first user, James Brooks from Boston University, who conducted both flux compression experiments "... Transport Study of YBCO Epitaxial Critical State Behavior ..." and the first 50 tesla short-pulse experiment, "Fermi Surface Investigation of Molecular Conductors." By the end of 1993, NHMFL-LANL had grown to nearly 20 users conducting around 50 experiments.

By 1997, NHMFL-LANL had four pulsed magnets on line and started to commission the 60 tesla long-pulse magnet. In 1999, the NHMFL-LANL ceased all operations for

eight months to upgrade its facilities. When it reopened in the spring of 2000, it was equipped with five cells — five rooms capable of interchanging magnets — and increased capability to host more users.

Two months after the facility upgrade, the 60 tesla long-pulse magnet failed at peak magnetic field and was destroyed in the resulting explosion. Although it is in pulsed magnets' nature to fail, this one was premature. Engineers are in the process of rebuilding this magnet, along with designing an even larger 100 tesla magnet — both magnets are expected to be completed by early 2004.

NHMFL-LANL now has a full-time staff of 20 scientists, engineers and technicians and routinely hosts more than 130 users a year. The Laboratory staff scientists design new magnets, conduct experiments, maintain the facility and collaborate with the user groups. Between the Lab's staff and users, the magnets are used nearly 900 times a year. The projects conducted at the Los Alamos facility vary greatly from looking at whether pulsed-magnetic fields could destroy *Escherichia coli* to looking for new, stronger, lighter and more heat-resistant materials for plutonium research.

continued on Page 2

Inside this issue ...

Lab selects new team for support-services contract

The Laboratory has selected a team led by Kellogg Brown and Root Inc. as its new site-support-services contractor. The newly formed joint venture includes partners Shaw Infrastructure Inc. and Los Alamos Technical Associates Inc. in addition to KBR. Page 3

New revisions to Laboratory's foreign travel-policy in effect



New Laboratory official-foreign-travel policy revisions went into effect Aug. 1. These changes are intended to streamline internal processes and to address some growing Department of Energy concerns. Page 3

Lab responds to NMED draft order

Officials at the Laboratory last month filed the Laboratory's response to a draft order for corrective action issued by the New Mexico Environment Department. Page 4

Laboratory's archives: 'A microcosm of late-20th-century history'

It takes 5,000 cubic feet of shelf and drawer space to store the historical Lab records collected from the earliest days of the Manhattan Project to the present. Roger Meade, leader of Information and Records Management's (IM-5) Records Management team, oversees this storage. Page 8



FROM THE TOP

Director's Q&A

The following questions are from the July 24 installment of "Ask the Director" located at <http://www.lanl.gov/worldview/news/director/ask-director.html> online



Where is RevCom?

Q Where has RevCom gone? The URL last printed in the Newsbulletin now goes to a Department of Energy site that doesn't give the option of choosing Lab administrative policy. The last word I heard was that all policy that affected the terms and conditions of employment would go out for employee comment on RevCom ... but now that we don't have a policy office, who knows? (Received 8/29/01, #169)

A RevCom has been replaced with the Review and Comment Bulletin Board. When a policy that affects terms and conditions of employment is ready for employee feedback, an all-employees memorandum will notify employees of the comment opportunity and provide the URL for the Review and Comment Bulletin Board. The rules governing the use of the Review and Comment Bulletin Board are similar to those that applied to RevCom, so employees may comment anonymously and respond to other responders' comments. An example of the Review and Comment Bulletin Board can be found at <http://dominoapp.lanl.gov/am/am711.nsf>.

Access to Ask the Director

Q Was there some really important reason for closing [online] access to Q&A under "Ask the Director"? I would suppose that I am not the only retiree who has clicked on the Newsbulletin link to the Q&A to find that I'm now being asked for Z number, etc., etc. (Received 10/31/01, #234)

A Following the events of Sept. 11, 2001, we moved the employee Intranet behind a firewall. "Ask the Director" provides a forum for the work force to ask the director about issues and concerns. Having this forum behind a firewall allows for a fuller discussion than would be possible on the public site and reduces the risk of providing information on current events at the Laboratory that might be of use to a potential adversary.

If retirees or nonLab employees have questions about the Lab, there are many points-of-contact for those questions, including the Ombuds Office, the Community Relations Office and Public Affairs.

Sanctioning clubs

Q You mention in Part 44 of "Ask the Director" that the process of sanctioning clubs is under review. However, they have been under review for quite a long time (circa two years I believe). I have been waiting patiently for new clubs to be able to be sanctioned. Is there any way to speed up the process? Thanks. (Received 12/12/01, #270)

A I very much appreciate your patience while the Laboratory-sanctioned organization program has been undergoing review. As a result of the review, we have decided to leave the moratorium on new organizations in place indefinitely. Our conclusion is that the program has grown too large and complex. Therefore, while we do not wish to take away privileges enjoyed by organizations that already are Laboratory-sanctioned, we will not be expanding the program by allowing the addition of any new organizations.

TEC-8s?

Q Back when the current technical series was formed, the people promoted to TEC-7 were told that in a few years the TEC-8 level would be introduced. What ever happened to the TEC-8 level? What is the advancement opportunities for those of us who have been TEC-7s as long as there have been TEC-7s? All the TEC-7s, that I know, put in long hours without overtime pay and are often thought of as technical staff, but of course with considerably less pay. As I approach retirement, I was just wondering if any one else has my concerns or if anyone really cares? (Received 10/31/01, #238)

A You raise a good question. I will ask Director for Human Resources Helga Christopherson and the Laboratory's Compensation Policy Board to evaluate the merit of implementing a TEC-8 series/level designator.

Los Alamos a world ...

continued from Page 2

Scientists use pulsed magnets to subject material samples to strong magnetic fields to learn about the material's physical composition and characteristics. During this time, measurements are taken regarding the material's behavior and certain vital characteristics. The 60 tesla long-pulse magnet was revolutionary for this type of research, not only because of its strength (a million times that of Earth's magnetic field), but also because of the "long pulse" (one tenth of a second), during which hundreds more measurements are taken than in a "short pulse."

"The technological jump, the amount of energy we can store and what we can do from the short-pulse to long-pulse magnet, is huge," said Alex Lacerda, head of the Los Alamos NHMFL users program. "The range of experiments using the long-pulse magnet is very different than the short pulse. For example, making thermodynamic measurements with the short pulse is almost impossible, but in collaboration with scientists from Condensed Matter and Thermal Physics (MST-10), we have proven the possibility of conducting such experiments with the long pulse."

The Laboratory gets its magnets in three different ways: It designs some of its magnets and then has them built by industry, purchases magnets from commercial companies or obtains magnets specially designed and built by NHMFL-Tallahassee.

"When first established in Los Alamos in 1992, the magnet lab needed to compete with veteran pulsed-field laboratories in Europe and Asia," said Greg Boebinger, NHMFL center leader. "Today, the MST-NHMFL is the leading research laboratory in the world in condensed-matter, pulsed-magnetic-field research."

Los Alamos NewsLetter

The Los Alamos Newsletter, the Laboratory bi-weekly publication for employees and retirees, is published by the Public Affairs Office in the Communications and External Relations (CER) Division. The staff is located in the IT Corp. Building at 135 B Central Park Square and can be reached by e-mail at newsbulletin@lanl.gov, by fax at 5-5552, by regular Lab mail at Mail Stop C177 or by calling the individual telephone numbers listed below.

Editor:

Jacqueline Paris-Chitanvis, 5-7779

Associate editor:

Judy Goldie, 5-0297

Managing editor:

Denise Bjarke, 7-3565

Graphic designer:

Edwin Vigil, 5-9205

Contributing photographers:

Rebecca McIntosh (MST-NHMFL), 7-7654

Kevin Roark, 5-9202

LeRoy N. Sanchez, 5-5009

Contributing writers:

Nancy Ambrosiano, 7-0471

Michael Carlson, 5-9178

Earlene Hammock (IM-1), 7-5239

Betty Katz (IM-1), 7-8292

Kathryn Ostic, 5-8040

Kevin Roark, 5-9202

Steve Sandoval, 5-9206

Shelley Thompson, 5-7778

Linn Tytler, 7-1455

Los Alamos National Laboratory is operated by the University of California for the National Nuclear Security Administration (NNSA) of the U.S. Department of Energy and works in partnership with NNSA's Sandia and Lawrence Livermore national laboratories to support NNSA in its mission.

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.



Printed on recycled paper.
Please recycle.



The business of spying

by Kevin Roark

All intelligence or security services follow some kind of recruitment cycle in seeking intelligence sources, that is, finding and exploiting people for information through a logical systematic plan. The recruitment cycle is a little bit like market analysis, only the business is spying. A recruitment cycle can take as long as several years or be as short as a few days. In most cases the recruitment cycle has five basic steps:

1. "Spotting" — identifying the potential source;
2. "Assessing" — learning as much as possible about the potential source;
3. "Recruitment" — the actual enticement of a source to provide information;
4. "Handling" — the on-going relationship of the source and handler;
5. "Termination" — the ending of the source/handler relationship.

So, where does the average Laboratory employee fit in the recruitment cycle? As a Department of Energy badgeholder who travels outside the United States, holds a passport or has applied for a visa, all employees can assume they've been spotted. According to Internal Security (ISEC), most intelligence and security services routinely screen visa applications from official travelers.

Employees who have been spotted and are considered interesting to an intelligence service may be subject to the next step, assessment. An intelligence service might begin by debriefing the employee's foreign contacts, and while many of them might object to this debriefing, experience has shown that most will cooperate. In many countries there is no choice.

In the next step, employees might find themselves being recruited to divulge privileged information either classified or unclassified. The information could be about an employee's work, organization's work or personal information about him or her, or that of colleagues. And importantly, employees might not even know they're being recruited, because a common tactic of the intelligence service is elicitation.

Elicitation appears simply as normal, non-threatening conversation and is the technique most likely to be used to extract information, according to ISEC. The terms elicitation and recruitment are somewhat interchangeable; they accomplish the same goal: the acquisition of privileged information. However, there are other more overt methods of recruitment, such as the offer of financial gain, that are less subtle than elicitation.

If an employee feels uncomfortable discussing anything with a foreign contact, it's important to know that the employee has no obligation to continue the discussion and should either end the conversation or change the subject.

When on foreign travel employees need to remember

- the world has changed, but the need for information has not;
- spies look and act like normal people;
- in a foreign country, the visitor does not control the environment;
- all travelers are subject to foreign-intelligence scrutiny;
- even unclassified information may require protection; and
- to report suspicious situations to ISEC upon returning from travel.

For more information on the recruitment cycle, contact ISEC at 5-6090.

New revisions to Laboratory's official-foreign-travel policy in effect

by Kathryn Ostic

New revision to the Laboratory's official-foreign-travel policy went into effect Aug. 1. These changes are intended to streamline internal processes and to address some growing Department of Energy concerns.

According to Allen Hartford, director of the Science and Technology Base Programs (STB) Office, "The DOE has become increasingly critical of the number of foreign-trip requests that the Laboratory submits late. These late submissions put the Laboratory at risk of having many of its trips disapproved by the National Nuclear Security Administration, and that could jeopardize the Laboratory's ability to conduct essential programmatic work and engage with the international scientific community."

The following is a summary of the new foreign-travel-policy requirements:

- All official foreign travel must be entered in the online Travel System.
- Foreign travel requests to a sensitive country or involving a sensitive subject must be submitted 45 days before departure date; travel requests to a nonsensitive country not involving a sensitive subject must be submitted 35 days before departure date.
- Late submission of a travel request requires an Exception Waiver Form 1829 approved by the division leader.
- Official conference, seminar or workshop information must indicate beginning and ending dates.
- Country Clearance cables (these grant clearance for a person to enter a specific country) are mandatory for all official foreign travel.
- The Lab now requires a benefit statement for all Laboratory-Directed Research and Development (LDRD) funded travel is required.
- The travel request must be reapproved if additions or deletions of one or more cities and/or countries occur, if there is a cost increase in excess of 25 percent or the departure or return dates change by more than three days.

The official-business-foreign-travel-policy revisions, which were detailed in a July 23 master-management memo, are posted on the Lab's home page under Foreign Travel at <http://int.lanl.gov/memos/> online.

For more information about the new foreign travel policy revisions, contact Debbie Martinez of Foreign Travel (STB-FT) at 5-3096 or write to dmmartinez@lanl.gov by electronic mail.

Laboratory selects new team for support-services contract

by Steve Sandoval

The Laboratory has selected a team led by Kellogg Brown and Root Inc., as its new site-support-services contractor.

The newly formed joint venture includes partners Shaw Infrastructure Inc. and Los Alamos Technical Associates Inc. in addition to KBR.

The Laboratory selected the KBR-led team after a competitive procurement process that generated six proposals. The contract, valued at about \$145 million per year, carries a five-year term and is the largest contract at the Laboratory. Services provided under the contract include facilities maintenance and repair, utility operations, waste removal,

roads and grounds maintenance and custodial services.

The KBR-led team will bring in its own senior managers but will retain the other employees of the current support-services company, Johnson Controls Northern New Mexico.

"We are extremely pleased that the KBR team will join the Laboratory as one of our key operating partners," said Laboratory Director John Browne. "We will draw upon the demonstrated experience and expertise of the team members in our continued drive toward sustained excellence in facilities management and operations."

"We were fortunate to have received proposals from six outstanding teams. The

continued on Page 4

Students receive scholarship checks at foundation luncheon

Jose Gallegos of Questa High School speaks with Laboratory Director John Browne at a Los Alamos National Laboratory Foundation scholarship awards presentation Aug. 6 in the J. Robert Oppenheimer Study Center at Technical Area 3. Gallegos was one of 40 Northern New Mexico students who received scholarships through the Los Alamos Employees' Scholarship Fund program.

Gallegos, who received a \$1,000 Endowed Leadership scholarship, plans to attend the University of Colorado at Boulder this fall. Photo by LeRoy N. Sanchez, Public Affairs



Lab responds to NMED draft order

by Linn Tytler

Los Alamos National Laboratory officials last month filed the institutional response to a draft order for corrective action issued by the New Mexico Environment Department.

The Laboratory's response strongly reaffirms its overall institutional commitment to environmental stewardship, yet challenges the draft order's statement that legacy contamination at the Laboratory represents an "imminent and substantial endangerment" and objects to the department's attempt to regulate radionuclides and other substances that are regulated by other agencies.

In a letter to Peter Maggiore, cabinet secretary of the state Environment Department, Laboratory Director John Browne and Ralph Erickson, director of the Department of Energy's Office of Los Alamos Site Operations, request that "... NMED withdraw the imminent and substantial endangerment determination and take no further action on the draft order."

"For many years the Laboratory has had a productive and cooperative relationship with the New Mexico Environment Department in which the Laboratory and the department have agreed on an overall environmental stewardship strategy that protects the environment and accelerates the cleanup of legacy waste," said Jim Holt, associate director for operations. "Although we have fundamental disagreements with the language and regulatory scope of the draft order, we agree with the department that environmental stewardship should remain a core discipline in Laboratory operations."

The Laboratory and the department have worked cooperatively for the last decade on a number of environmental cleanup and environmental monitoring strategies designed to minimize potential risk to people and the environment from legacy and ongoing operations at the Laboratory.

By developing these strategies in concert with NMED and federal regulatory agencies, the Laboratory prioritized its cleanup and stewardship activities based on a risk-driven approach — areas that represent the greatest potential risk to people or the environment are given the highest cleanup priority. The first attachment to the Laboratory's response to the draft order examines its cleanup strategy in detail and can be found on the Web at www.lanl.gov/worldview/news/pdf/Attachment_1A.pdf (Adobe Acrobat required).

"We believed we were on the right track in our environmental monitoring and cleanup strategies and that NMED was in agreement with these strategies," said Holt. "The draft order, we believe, incorrectly assigns a finding of 'imminent and substantial endangerment' to the Laboratory, attempts to give the department regulatory authority in areas in which no such authority exists; and — worst of all — prolongs and delays cleanup of key sites by assigning actions that are overly broad and prescriptive."

"NMED, the Department of Energy and the Environmental Protection Agency recently signed a letter of intent that would complete cleanup of legacy contamination and waste 15 years ahead of schedule," Holt continued. "That letter and the related

Performance Management Plan gets us back on track to what we feel is most important — environmental restoration and continued environmental monitoring that will result in the greatest reduction of potential risk."

The Laboratory's response to the May 2 draft order points out that nothing in the official record or in the department's previous communications to the Laboratory indicates any regulatory or risk basis for a finding of endangerment. Independent audits conducted by outside parties and agencies similarly have not shown any basis for such a finding. The Laboratory therefore objects to the finding on its face and says that in its response.

In addition, the Laboratory's response objects to the department's attempt to assert regulatory authority over radionuclides and other substances not regulated under the Resource Conservation and Recovery Act or New Mexico's Hazardous Waste Act. By law, other agencies, not NMED, have regulatory authority over those substances.

Laboratory selects ...

continued from Page 3

competition was rigorous, and our final decision was not an easy one," said Joe Salgado, principal deputy Laboratory director, who served as the source selection official. "I am fully confident that we selected the team that offered the best value and capability to the Laboratory, and I look forward to working with KBR and its partners to continue the process begun by Director Browne to strengthen Laboratory management and operations."

The proposal from the KBR-led team includes several features that Laboratory officials believe will strengthen facilities management and operations, including

- outstanding demonstrated leadership by the key personnel, including the general manager and the deputy general manager; exceptional approach to work-force management and revitalization and clear plans for engaging with the unions to support apprenticeship programs;
- standards-based work-control processes and a risk-based approach to facility maintenance;
- a service delivery model that incorporates project formality;
- fixed-price job-order contracting strategy; and
- innovative cost-reduction initiatives.

The management team for the new support services contractor will be led by General Manager Gary Thurber, currently vice president of strategy and operations for KBR in Arlington, Va., and Deputy General

Manager Len Pasquini, currently senior vice president of Los Alamos Technical Associates in Denver, Colo.

KBR's headquarters are in Houston, Texas; Shaw's headquarters are in Baton Rouge, La., and LATA's headquarters are in Los Alamos.

"In addition to helping the Laboratory strengthen facilities management and operations, KBR and its partners are committed to playing a key role in the economic and social vitality of Northern New Mexico," said Browne. "I look forward particularly to their expanded use of small-business contractors in the area and to their support of the Northern New Mexico Math and Science Academy and other community initiatives."

The transition from JCNNM to the KBR-led team is expected to begin Oct. 1, according to Salgado. "We appreciate the service provided to Los Alamos National Laboratory by Johnson Controls Northern New Mexico since 1997 and for the leadership of General Manager Mike Barr. Mike and his team have assured us of their commitment to a smooth transition period, and we have agreed to facilitate the transition process for both companies," he said.

Salgado reiterated that the decision to compete the contract was driven by internal realignment efforts and changes in the way the Laboratory approaches facility maintenance. "Our decision to compete this contract was not based on dissatisfaction with Johnson Controls. Johnson Controls is an outstanding company and the Laboratory is open to working with them on opportunities of mutual interest that may present themselves in the future," he said.



NEWS FROM UC

UC Merced appoints chief information officer

The University of California, Merced has filled a crucial position on its senior management team with the appointment of Richard M. Kogut as chief information officer, effective Aug. 1. Kogut comes to UC Merced from Georgetown University in Washington, D.C., where he had served as chief information technology architect since 1998.

As the founding CIO, Kogut will take the lead in designing, deploying and managing information technology and telecommunications systems to serve current and future UC Merced faculty, students and staff. He will ensure that information science and systems are the hallmark of cross-disciplinary research and instruction at UC Merced, collaborating with faculty and academic leadership to develop the vision and strategic plan for those technologies.

On his initial agenda, Kogut plans to create an inventory and timeline of technological elements that must be in place prior to the scheduled campus opening in fall 2004 and to create a strategic plan in concert with the rest of the UC Merced team. His ultimate goal is for the campus to provide faculty, students and staff with very simple access to all information and services. As an example of technology catering to the individual, Kogut said he envisions portal systems that automatically open up appropriate resources upon identification of the computer user.

A native of Far Rockaway, N.Y., Kogut earned a bachelor's degree in electrical engineering and a master's degree in computer science from Brown University.

Diversity/Affirmative Action Board set

by Steve Sandoval

Twenty-two Laboratory employees comprising a broad cross section of Laboratory cultures, genders and job series have been selected to serve on the new Diversity/Affirmative Action Board.

The Diversity/Affirmative Action Board is a joint venture of the Diversity Office (DVO) and the Office of Equal Opportunity (OEO) and is designed to help the Laboratory more effectively address multicultural institutional decisions, reduce or eliminate duplication of effort and help the Laboratory “walk the talk” when it comes to diversity, according to Lisa Gutierrez, DVO leader. The board replaces the existing Diversity Council.

“We are looking forward to using the board’s input and collective talents to address diversity issues across the Laboratory,” said Gutierrez.

Sixteen of the slots on the board will be filled by Laboratory employees from the seven diversity working groups and the present Diversity Council. There also are seven at-large members of the board.

Delegates from the diversity working groups are the following:

Vera Aquino of Manufacturing Quality Systems (NMT-6) and Stefanie Lawson of Space and Remote Sensing Sciences (NIS-2), from the American Indian Diversity Working Group.

Jasmine Pan of Advanced Information and Business Application Development (IM-8) and Sriram Swaminarayan of Structure/Property Relations (MST-8), from the Asian American Diversity Working Group.

Aden Jackson of Performance Indicators (PS-PI) and Al Hutchinson of IM-8, from the African American Diversity Working Group.

Debi Guffee of CMR Facility Operations (NMT-13) and Linda Nonno of Restoration (RRES-R), from the Women’s Diversity Working Group.

Angelique Neuman of 238Pu Science and Engineering (NMT-9) and Theresa Cull of Industrial Hygiene and Safety (HSR-5), from the Lesbian, Gay, Bisexual, Transgender and Intersex Diversity Working Group.

Eluterio Garcia of Tritium Science and Engineering (ESA-TSE) and Deirdre Espinoza of Waste Management and Environmental Compliance (NMT-7), from the Hispanic Diversity Working Group.

Jim Ogle of Electronic and Data Systems (DX-7) and Labriano Lucero of Imaging Services (IM-4), from the Deaf Awareness Group.

Gloria Garcia of the Business Operations (BUS) Division Office is a delegate to the D/AAB from the former Diversity Council.

Terry Lowe of the Quality Improvement (QIO) Office, Stevie Strottman of the Science and Technology Base (STB) Programs Office, Armando Vigil of Weapon Response (ESA-WR), Roger Byrd of NIS-1, Russell McFadden of Military Systems Analysis and Simulations (D-5), Charlotte Garcia of Training Services (PS-13) and Vann Bynum of the Associate Directorate for Weapons Engineering and Manufacturing (ADWEM) are at-large members of the board.

Laboratory Director John Browne and the Senior Executive Team approved the new board, which also includes the Lab’s

three current diversity champions, Gutierrez said.

The diversity champions are Rich Mah, associate director for weapons engineering and manufacturing; Don Cobb, associate director for threat reduction; and Tom Meyer, associate director for strategic research.

Initially, the board will meet twice a month for two hours, said Amy Sahota, leader of the Lab’s Office of Equal Opportunity (OEO). The existing diversity working groups will act as “subteams” to the Diversity/Affirmative Action Board while continuing to address specific concerns, hold monthly meetings and

otherwise function as they have been, Sahota added.

Gutierrez said all terms on the new D/AAB are for 12 months, and a person may serve no more than two consecutive terms. For the start-up period, half of the delegates from DWGs will serve for 12 months and half for 18 months, but subsequent terms will all be for 12-month periods. After the first year, these staggered terms will allow new members to join the board every six months, she explained.

For more information, go to <http://www.lanl.gov/orgs/dvo/Teams> online or call DVO at 7-5665.

Tips for motorists and children



Driving through construction zones

As drivers approach construction zones they may experience delays. Drivers should remain extremely alert to changing road conditions and traffic-flow patterns for their own safety and for the safety of construction crews. Utilities and Infrastructure (FWO-UI) urges drivers to observe the following safety guidelines in and around work zones:

- Plan ahead: Allow plenty of time to take into account any construction projects you may encounter.
- Slow down: Follow posted speed limits. When you see a sign that says, “Road Work 1,500 Feet,” you will be in a construction zone very quickly. Don’t resume normal speed until you see the signs indicating it’s safe to do so.
- Stay alert: Watch for warning signs and changing conditions at all times. Avoid cell-phone or radio distractions, as well as those of stopped cars or construction.
- Leave room: Maintain a safe distance between you and the car ahead and an adequate safety zone when stopped to allow time for defensive driving. Keep a safe distance between your vehicle and traffic barriers, construction equipment and workers. Note: According to Allen Jones of Industrial Hygiene and Safety (HSR-5), the Lab’s traffic safety coordinator, the proper following distance is four seconds.
- Keep your cool: Don’t allow impatient or speeding motorists to cause you to alter your own good driving habits. Remember, the temporary inconvenience of a construction zone will pay off with an improved road.
- Buckle up: Always wear a seat belt. Buckle up and make sure young children are seated in an approved car safety seat installed according to vehicle and car seat manufacturers’ recommendations.



Children returning from summer break

Children in Northern New Mexico are gearing up to return to school, and with the start of school comes an increase in the number of children out and about during commuting times.

The Laboratory reminds employees to be extra aware of their surroundings when driving to and from work. Employees also are reminded to observe all traffic laws, especially lower speed limits in school zones, usually noted by flashing signals.

And remember, motorists are required to stop completely and not pass when a school bus stops to pick up or drop off children. In fact, it is illegal to go around *any* vehicle in a school zone.

- Adults should remind children to
- choose the route with the fewest streets to cross.
 - go directly to and from school, and don’t talk to strangers along the way.
 - cross the street at intersections only; do not cross the street between parked cars.
 - cooperate with the local police, school safety patrol and adult crossing guards.
 - look in all directions before and while crossing any street.
 - obey all traffic signals.
 - walk, don’t run, when crossing the street. Allow plenty of time.
 - walk bicycles when crossing the street, if riding a bicycle to school.
 - watch for turning vehicles.
 - face traffic when walking alongside roads without sidewalks, and walk single file.
 - be extra alert in bad weather.
 - wear something white or reflective, or carry a light if walking near traffic when it is dark.



Wampler new CCN-7 group leader

Cheryl Wampler is the new group leader of High-Performance Computing Systems (CCN-7).

Wampler served as CCN-7 deputy group leader since 1998. She also served as team leader of the Scientific Computing Resources team in 1997.

Wampler first joined the Laboratory as a "Women in Science" intern in 1990. She became a staff member in 1996.

"This is a terrific group that fulfills a vital function in providing high-performance scientific computing services to the Laboratory," said Wampler.

A former Fulbright Scholar, Wampler was a recipient of the Lab's Distinguished Performance Award in 1999 for contributions on the Blue Mountain team.

Wampler has a master's degree in computer science from the University of New Mexico, a bachelor's degree in music from Oberlin College in Ohio and a master's and doctorate in music from the University of Texas at Austin.



Cheryl Wampler

Admiral picked for key threat reduction role



George Nanos

Vice Admiral George Nanos this month joined the Laboratory as principal deputy associate director for threat reduction.

Nanos comes to the Lab from a position as Commander, Naval Sea Systems Command in the U.S. Navy. Before that he commanded the Navy's strategic nuclear program.

"I am very pleased that a leader of the caliber of Pete Nanos has joined the Laboratory," said Laboratory Director John Browne. "He brings a wealth of knowledge and experience in nuclear forces and related matters."

As principal deputy, Nanos will share responsibilities with Associate Director for Threat Reduction Don Cobb, including supervision of the three threat reduction divisions: Bioscience (B), Decision Applications (D) and Nonproliferation and International Security (NIS). He also will interact extensively with the sponsors and stakeholders of threat reduction, including the Department of Energy, National Nuclear Security Administration and the Defense, State and Justice departments.

Nanos' naval career began in 1978 and included management of the technical development effort for the Navy's high-energy laser program, especially for field testing and risk-reduction experiments for the mid-infrared chemical laser. He later became deputy director of warfare systems engineering in the Space and Naval Warfare Systems Command.

He has guided completion of the submarine inertial navigation system to support

deployment of the Trident II weapons system, and in 1994 he became commander, Strategic System Programs. Immediately before joining Los Alamos, he had oversight for the operations of 10 defense laboratory divisions with more than 20,000 employees.

Nanos was a Trident Scholar at the U.S. Naval Academy, receiving a bachelor's degree in engineering in 1967. He received a doctorate in physics from Princeton University in 1974.

McLaughlin named American Nuclear Society Fellow

Thomas McLaughlin is a Fellow of the American Nuclear Society. McLaughlin, group leader of Nuclear Criticality Safety (HSR-6) has been at the Lab since 1967 when he was a graduate research assistant. He came on board as a staff member in 1972.

The award reads, "Thomas P. McLaughlin is named an ANS Fellow for his efforts in fostering international cooperation, educating and mentoring many young engineers, providing detailed descriptions of accidents occurring world-wide and the development of consensus standards. He has provided consultation to companies and emergency teams and enhanced the perspective of many management personnel."

The ANS honored both McLaughlin's lifetime career achievements and major, specific-focused efforts. In particular, the ANS recognized his 27-year career of continuous, sustained effort in providing nuclear criticality safety training to thousands of individuals throughout the departments of Energy and Defense, the Nuclear Regulatory Commission and their contractors and the Laboratory.



Thomas McLaughlin

Also, the ANS acknowledged McLaughlin's work over the last 10 years in documenting Russian criticality accidents that occurred largely in the 1950s and 1960s. No reports had been written about these accidents, and after the breakup of the former Soviet Union, McLaughlin worked with his Russian counterparts to construct reports from their memories of what happened.

McLaughlin said he "was quite pleased," especially by support in the form of letters of reference submitted by colleagues whom he "admires and respects."

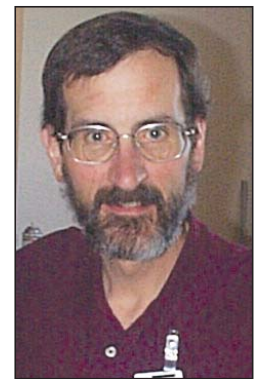
McLaughlin earned his bachelor of science degree in both nuclear and mechanical engineering from Lowell Technological Institute, Lowell, Mass. His doctoral degree is in nuclear engineering and physics from the University of Arizona, Tucson.

Kemper selected CCN deputy director

Chris Kemper has recently been named the new deputy director for Technology in the Computing, Communications and Networking (CCN) Division. He replaces John Morrison, who is now CNN Division leader.

Kemper has been at the Lab for 14 years and has served in various capacities including a recent stint as group leader of Network Engineering (CCN-5). Before joining the Lab, Kemper worked as an electronics designer at a number of places, including Bell Labs and a start-up company.

Kemper earned his bachelor of science degree in electrical engineering from Case Western Reserve in Cleveland and a master's degree in electrical engineering from Johns Hopkins University.



Chris Kemper

Trehwella to serve as associate editor of ACS journal

The editor of the American Chemical Society's journal, "Biochemistry," invited Jill Trehwella, Bioscience (B) Division leader, to serve as the publication's associate editor for a three-year renewable term. "Biochemistry" is a leading journal that publishes research results that span the fields of molecular biochemistry and biophysics.

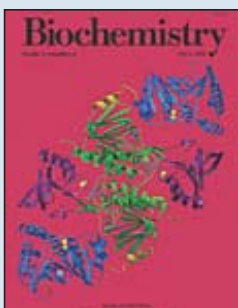
According to the journal, Trehwella's selection was based upon her broad knowledge in those fields and wide range of technical experiences at the Laboratory.

"Editing 'Biochemistry' will be a new experience for me," said Trehwella. "I feel honored that I was asked to serve in this position. 'Biochemistry' is a weekly publication of work at the forefront of the field and my editorial responsibilities provide an excellent

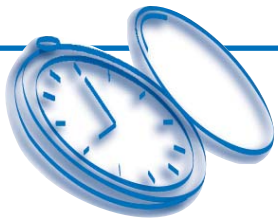
opportunity to keep abreast of the most up-to-date research in the field of biochemistry and biophysics — both of which are highly relevant to Bioscience Division's work."

Trehwella's duties as an associate editor include receiving manuscripts for review, assigning reviews, selecting manuscripts for publication based on reviewers' comments and her own expertise, and communicating with the authors and the journal's editorial office. In a typical year, an associate editor will screen approximately 300 manuscripts.

The American Chemical Society is a professional society for chemists that is funded in part by membership fees. The society provides its members services in the form of publishing specialty journals, organizing professional meetings and providing education and information on careers in chemistry.



Jill Trehwella



August service anniversaries

35 years

Alan Hack, DX-4
Robert Judd, CCN-12
John McAfee, DX-DO
Timothy Neal, ESA-DO
James Stovall, SNS-DO
Lynn Veaser, P-22

30 years

Kenneth Bostick, EES-10
Ross Garcia Jr., PM-DS
M. Evelyn Lucero, IM-5
Michael Lynch, LANSCE-5
Alton McNeil, CCN-18
Charlie Stallings, X-3
Donald Wolkerstorfer, ADWEM

25 years

Richard Bowers, X-2
Deborah Clark, P-25
William Clark, LANSCE-1
George Eccleston, NIS-NP
Alexander Gancarz, BUS-DO
Gary Garrett, FWO-IIM
Samuel Gonzales, CCN-18
William Hults, MST-6
John Ireland, NIS-DO
Michael Jensen, HSR-4
Edward Lopez, FWO-WFM
Richard Martin, ESA-GTS
Doreen Montoya, IM-5
John Newmyer, ESA-WSE
Harvey Rose, T-13
Richard Ryder, LANSCE-6
Walter Sandoval, C-ACT
David Schiferl, C-PCS
Robert Sebring, MST-7
Milton Shaw, T-14

20 years

Billy Baker, MST-6
Bruce Carlsten, NIS-10
Eileen Carter, DIR
Carl Geisik, MST-OPS
Brenda Grasmick, NIS-8
Edward Hoth, FWO-UI
Kevin Jones, LANSCE-DO
Paul Littleton, DX-5
Carolyn MacDonell, RRES-MAQ
Dean Preston, X-7
Robert Roussel-Dupre, EES-8

Earl Salazar, BUS-2
David Trujillo, ADWEM

15 years

Lee Ankeny, CCN-12
Ernest Aragon Jr., DX-5
Francisco Bailon, NMT-5
George Busch, C-ADI
Phillip DeVargas, ESA-WMM
Geraldine Edwards, IM-1
Randall Edwards, MST-6
Dino Farfan, ESA-WMM
Jessica Fernandez, ESA-FM-ESH
Danny Gallant, ESA-AET
Wilma Garcia, NMT-3
Richard Gonzales, BUS-1
David Hayden, ESA-WMM
William Heimbach, CER-1
Perry Hewlett, S-4
Jacqueline Hurshman, BUS-2
Michael MacInnes, X-2
Susie Marquez, ADWEM
Roberta Martinez, BUS-2
Daniel Naranjo, ESA-WMM
Charles Nylander, RRES-DO
Joyce Ortega-Tapia, NMT-15
Steven Painter, CCN-12
Timothy Pierce, MST-7
Timothy Pollat, DX-5
Margarita Salazar, IM-8
Clyde Sanchez, BUS-3
Ronnie Trujillo, MST-OPS
George Valdez, BUS-4
Robert Webster, X-3

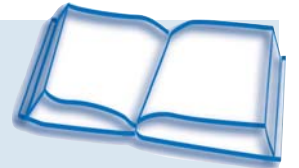
10 years

Michael Altherr, B-1
Alice Baumann, RRES-MAQ
Alan Bond, NMT-5
Lynda Brashar, C-ACS
Gregory Cunningham, DX-3
Raymond Flesner, DX-2
Claire Harmon, BUS-1
Karen Hill, B-1
Shuling Hou, T-13
Brenda Kelley, PM-4
Michelle Kirsch, RRES-R
James Loud, PS-DO
Cynthia Mahan, C-ACS
Michael Mallett, HSR-4
Emily Martinez, HSR-2
Mona Mosier, STB-RL

Judith Mourant, B-3
Adan Ortega, HSR-3
Diane Otero-Bell, NMT-4
David Padilla, FWO-UI
Paige Pardington, B-2
Donald Sandoval, X-4
Vickie Saye, PM-DO
John Taschner, S-10
Dan Thoma, MST-6
Nancy Vaughn, BUS-2
Maxine Valdez, HSR-4
Richard Wight, IM-3
Carolyn Zerkle, IFC
Theresa Zhangwilliams, AA-3

5 years

Ella Andazola, ESA-FM-ESH
Janelle Armendariz, S-DO
Donna Baker, D-1
Terri Binder, NMT-DO
Doris Bryant, IM-8
Loren Byers, NIS-8
Michael Calhoun, IM-3
Leisa Davenhall, C-ACT
Christina De La Torre, P-24
Patricia Dickerson, MST-6
Timothy Germann, X-7
Denise Herrera, NIS-2
Ronald Herrera, IM-8
Elaine Hickman, DX-1
Mark Hoverson, DX-3
Brenda Joyce, NMT-3
Casey Keith, DX-6
Evangeline Martinez, NIS-DO
Laura McNamara, D-1
Ferenc Mezei, LANSCE-12
David Miera, SNS-02
Robert O'Day, IM-8
Shane Perkins, DX-6
Craig Rasmussen, CCS-1
David Rector, P-21
Andrew Saab, MST-11
David Smith, S-OSI
James Stalker, EES-8
Joe Strotman, NIS-10
Darla Thompson, DX-2
Michael Torrez, MST-10
John Valdez, ESA-TSE
Gregory Van Tuyle, NIS-DO
Nancy Welborn, PM-18
Dianne Wilburn, RRES-SA
Xiaomei Yan, B-2



This month in history ... August

1492 — Italian explorer Christopher Columbus sets sail from the Spanish port of Palos in command of three ships — the Santa Maria, the Pinta and the Niña — on a journey to find a western sea route to China, India and the fabled gold and spice islands of Asia.

1753 — Charles Stanhope, maker of the calculator and a British earl, is born Aug. 3. He invented two early mechanical calculators as well as a printing press, a microscope lens and various other scientific devices

1846 — After a decade of debate about how best to spend a bequest left to America from English scientist James Smithson, President James K. Polk signs the Smithsonian Institution Act into law. Smithson decreed that the whole of his estate would go to “the United States of America, to found at Washington, under the name of the Smithsonian Institution, an Establishment for the increase and diffusion of knowledge.” A fellow of the venerable Royal Society of London from the age of 22, Smithson published numerous scientific papers on mineral composition, geology and chemistry. In 1802, he overturned popular scientific opinion by proving that zinc carbonates were true carbonate minerals, and one type of zinc carbonate was later named smithsonite in his honor.

1945 — The Association of Los Alamos Scientists, ALAS, formed.

1949 — President Harry S. Truman signs the National Security Bill, which establishes the Department of Defense.

1953 — Less than one year after the United States tested its first hydrogen bomb, the Soviets detonate a 400-kiloton device in Kazakhstan. The explosive power is 30 times that of the U.S. atomic bomb dropped on Hiroshima, and the mushroom cloud it produces stretches five miles into the sky. Known as the “Layer Cake,” the bomb is fueled by layers of uranium and lithium deuteride, a hydrogen isotope.

1955 — The discovery of einsteinium (‘52) and fermium (‘53), elements 99 and 100 respectively, is reported in The Physical Review by researchers from Los Alamos National Laboratory, the University of California and Argonne National Laboratory.

1958 — The U.S. nuclear submarine Nautilus accomplishes the first undersea voyage to the geographic North Pole.

1963 — Representatives of the United States, the Soviet Union and Great Britain sign the Nuclear Test Ban Treaty, which prohibited the testing of nuclear weapons in outer space, underwater or in the atmosphere. The treaty was hailed as an important first step toward the control of nuclear weapons.

1977 — The U.S. Energy Research and Development Administration and other federal agencies are combined to create the U.S. Department of Energy.



FOR YOUR BENEFIT

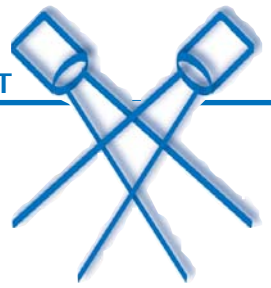
Health Care Spending Account reimbursement

Do you need to submit a claim for reimbursement on your Health Care Spending Account? If you chose to participate in the new Health Care Spending Account offered by the Laboratory and administered by SHPS Inc. this year, you may be wondering how you go about obtaining reimbursement.

The SHPS Claim Form is available at http://www.shps.net/myshps/index_download.html online or in hard-copy format in the Lab's Benefit Office in the Otowi Building. Once you obtain the form, you will need to complete it and attach either itemized receipts for services rendered or an “Explanation of Benefits” from an insurance company.

You have the option of faxing the form and attachments to (502) 267-2233 or mailing it to SHPS Inc., FSA Processing Center, P.O. Box 34700, Louisville, KY 40232-4700.

Always be sure to retain copies of your reimbursement claims for your own records. If you choose to fax the form and you include an e-mail address in the employee information section, you can expect to receive an e-mail from SHPS confirming receipt of your claim. SHPS should process and issue reimbursement within eight days of receiving your claim.



Laboratory's archives: 'A microcosm of late-20th-century history'

by Betty Katz,
Communication Arts
and Services (IM-1)

Included in the archives are memos from Robert Oppenheimer [the first director of Los Alamos National Laboratory] about the altitude at which the bombs, Fat Man and Little Boy, would be detonated ...

It takes 5,000 cubic feet of shelf and drawer space to store the historical Lab records collected from the earliest days of the Manhattan Project to the present. Roger Meade, leader of Information and Records Management's (IM-5) Records Management team, oversees this storage and commented, "This body of knowledge is a microcosm of U.S. history in the late 20th century."

Meade's workspace, the archives of IM-5, contains records that represent what he calls "the U.S. drive and capacity to build the first fission weapons, to carry out Cold War policy and to adjust to the changes brought by the post-Cold War era."

Included in the archives are memos from J. Robert Oppenheimer [the first director of the then-Los Alamos Laboratory] about the altitude at which the bombs, Fat Man and Little Boy, would be detonated, as well as Edward Teller's [Manhattan Project pioneer and Lawrence Livermore National Laboratory director emeritus] notebooks on the principles of weapons design. All of the correspondence of each Lab director and the letters of the Lab's Nobel Prize winners also are preserved.

This is an active storage space. Requests to use the archived scientific and historical information come from Lab researchers working on technical projects, from academics writing books and articles, from TV and newspaper writers seeking background facts and even from spy novelists. "The human side of all of this history is represented in these documents," Meade said.

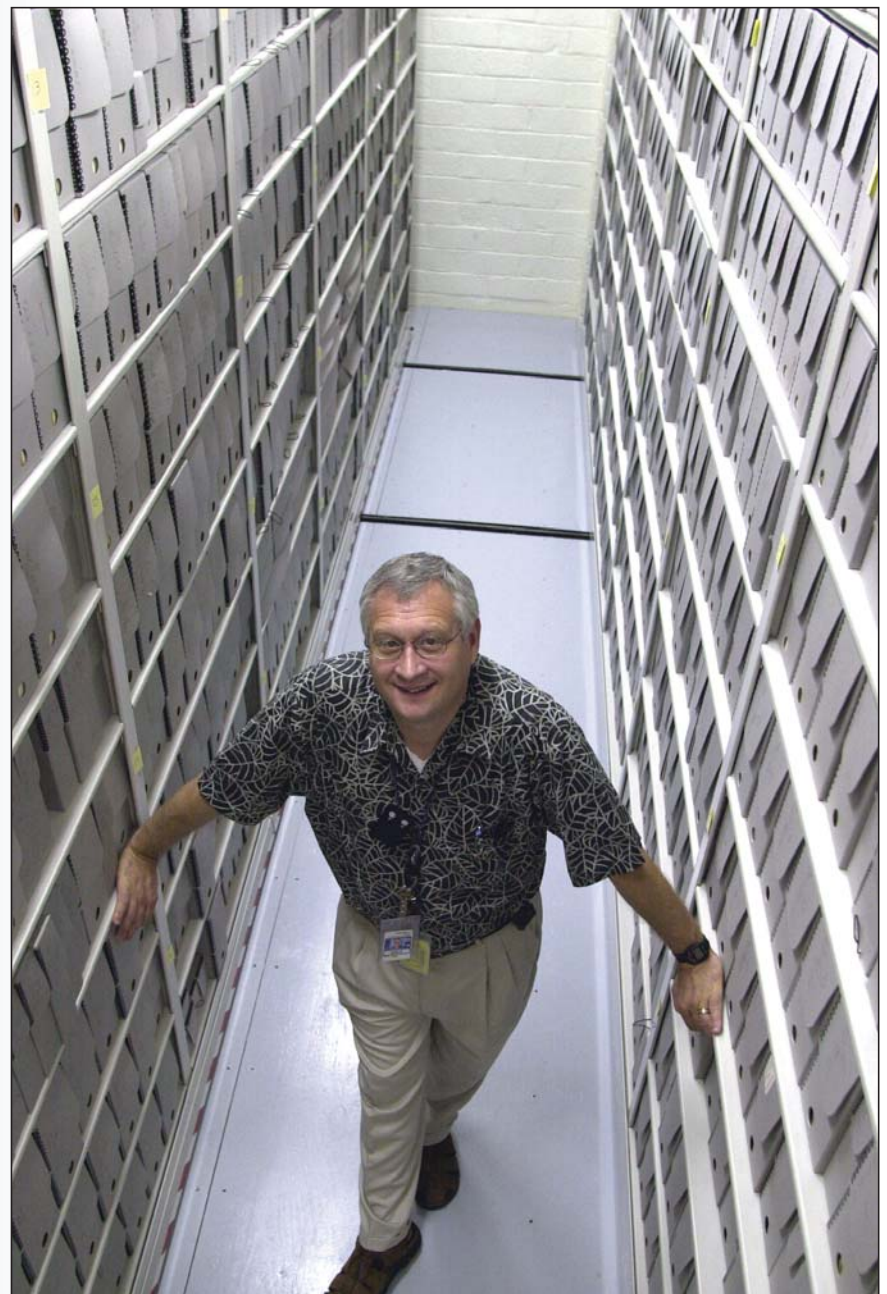
Each request is vetted against the two criteria of classification and the need to know. The public can see unclassified documents only. "Though we must not compromise the safety of the information," Meade said, "the Constitution applies here. We do not discriminate because requesters are anti-Lab or anti-nuke. They are exercising their First Amendment rights to unclassified information access."

Classified information makes up a large fraction of the records, but sometimes a researcher, acting under the rules of the Freedom of Information Act, can submit a request to declassify and release some records. Meade and the staff work with these people to refine a request and release what Meade said is "releasable."

He explains that filling some requests goes on for years. "Certain topics have long lives, and we develop relationships with some requesters over time." Meade has worked with the History Channel by providing unclassified information for two segments of the "Modern Marvel" series. One program is on firing ranges and the other on test sites.

Richard Rhodes contacted the archives for information for his two books, "The Making of the Atomic Bomb" and "Dark Sun: The Making of the Hydrogen Bomb." Teller sought a fair amount of support while he was writing his memoirs, and local novelist Lynette Baughman was given some information for her book, "The Spy Within."

Meade said that the Wen Ho Lee case, the missing hard drives and the Sept. 11 tragedy have made it even more important not to compromise security. "Of course, we have to protect these physical assets and at the same time accommodate what we can," he said. "We are always balancing our job to protect the historical legacy of the Lab while making the information available to the appropriate requesters."



Roger Meade, leader of Information and Records Management's (IM-5) Records Management team, stands among the voluminous treasures of time. It takes 5,000 cubic feet of shelf and drawer space to store the historical Lab records collected from the earliest days of the Manhattan Project to the present. Photo by LeRoy N. Sanchez

Los Alamos
NewsLetter

Mail Stop C177
Los Alamos, NM 87545

Nonprofit Organization
U.S. Postage Paid
Albuquerque, NM
Permit No. 532

LALP-02-3