

# NEWSLINE

Published weekly for employees of Lawrence Livermore National Laboratory

Friday, June 20, 2003

Vol. 28, No. 24

## RadScout ever prepared in terrorism fight



JACQUELINE MCBRIDE/NEWSLINE

Reporter Rich Ibarra of KCRA-Ch. 3 of Sacramento interviews physicist Mike Dunning of the Defense and Nuclear Technologies Directorate during a press briefing about RadScout, a portable radiation detector and measurement tool.

**By Lynda Seaver**  
NEWSLINE STAFF WRITER

As a premier example of homeland security technology moving to the marketplace, the Laboratory this week signed a

licensing agreement with ORTEC Products, a business unit of AMETEK Inc., to commercialize the Lab's RadScout radiation detector and analyzer.

See **RADSCOUT**, page 8

## Anastasio appoints Leary to oversee Laboratory's reorganized security activities

Director Michael Anastasio announced last Friday a major reorganization of the Laboratory's Safeguards and Security activities and selected David Leary as the director of the new organization.

"Overall, the lab has been functioning well under the nation's heightened security levels for the past year and a half. But in the last few months, we've had some mistakes that include management and communication issues in our security department," said Anastasio. "I feel very strongly that we must focus our full attention on these issues. Beginning immediately, the organization will report directly to me and I've asked Dave Leary to assume leadership."



David Leary

Leary, a Lab employee since 1973, is currently deputy associate director for operations in the National Ignition Facility (NIF) Programs Directorate. He has extensive experience in physical and personnel security as well as in criminal investigations.

As the director, Leary will assume line and

See **LEARY**, page 8

## Historian Greg Herken says Lawrence was unsung hero of atomic weapon effort

**By Lynda Seaver**  
NEWSLINE STAFF WRITER

History records such scientists as J. Robert Oppenheimer and Edward Teller as synonymous with the Manhattan Project.

But ask World War II historian Gregg Herken to name the unsung hero in the effort to build the first atomic weapon, and he will quickly reply Ernest O. Lawrence.

"He is a much underrated figure in history," Herken said. "He deserves credit, but he has not received it. Everyone talks about the letter written (to Franklin Roosevelt) by Leo Szilard and Albert Einstein in 1939 as the beginning of the Manhattan Project. But the project was stalled in 1941. It was Lawrence who got things going."

Herken, curator of the military space at the

See **HERKEN**, page 7

## Russian ambassador visits the Laboratory

**By Bob Hirschfeld**  
NEWSLINE STAFF WRITER

It was a visit that would have been unimaginable just a dozen years ago. The Russian ambassador to the United States spent Tuesday at the Lab, discussing scientific cooperation, nuclear non-proliferation and touring the ASCI White supercomputer center and the National Ignition Facility.

Ambassador Yuri Ushakov was accompanied by Natalya Klishina of the Ministry of Atomic Energy, as well as his U.S. embassy's senior counselor Sergey Krutikov, and Victor Lizun, the Russian consul general in San Francisco.

The all-day event was hosted by Lab Director Michael Anastasio and

See **VISITORS**, page 7



JACQUELINE MCBRIDE/NEWSLINE

From left: NNSA Administrator Linton Brooks, Russian Ambassador Yuri Ushakov and Laboratory Director Michael Anastasio.



**Road work ahead**

— Page 2



**Secrets of science revealed**

— Page 3



**The power of presentation**

— Page 5



## LAB COMMUNITY NEWS

### Weekly Calendar

Technical Meeting Calendar, page 4

Saturday  
**21**

The 2nd Annual **Relay For Life** will be held today beginning at 10 a.m. and running through 10 a.m. Sunday at the Livermore

High School track. The event, sponsored by the American Cancer Society, is the organization's largest fundraiser and seeks to raise awareness in the community about cancer prevention and early detection. This year more than 40 teams of family, friends and area residents will participate in running or walking around the track. Livermore High School is at 600 Maple St.

Monday  
**23**

The Lab's quarterly **blood drive** will be held in trailer 4181 today through Thursday. Donors are encouraged to schedule an appointment in advance at

<http://lesal.llnl.gov/>, and clicking on the words "Blood Drive," located to the left side of the window. Individuals without Internet access can schedule an appointment by calling the LLESA Office at 2-9402. If your schedule does not allow you to make an appointment, the staff will work you into the schedule, as time permits, after the first hour of each drive day.

Tuesday  
**24**

**Cathy McClain**, a sign language interpreter and the Disabilities Services Program manager at the Laboratory, will discuss her recent experience

with breast cancer and treatments at noon today in the Bldg. 543 auditorium as part of the 2003 LLNL/SNL Cancer Awareness Campaign. Her experience with breast cancer heightened her awareness of the need for balance in life.

The LLESA **Apple Computer Networking Group** will meet today at 7 p.m. in the LLNL Discovery Center Press Room. Everyone with an interest in Apple-brand and compatible computers is welcome to attend. For more information, contact Jim Branum at 422-6766.



Starting July 14, employees need to use their **Official User Name (OUN) and Personal Access Code (PAC)** instead of

their "P" account (P+employee number) to log in to many business systems (including LITE and LTRAIN). For more information contact [p2oun@llnl.gov](mailto:p2oun@llnl.gov).



LAB TV

BROADCAST  
SCHEDULE

To get the latest news from Apple Computer, presented by Apple CEO Steve Jobs, tune in to the Apple Worldwide Developers Conference Keynote Address, which will be broadcast on Monday, June 23 on Lab TV Channel 4 at 10 a.m. For more information, contact Candace Gittins at [gittins1@llnl.gov](mailto:gittins1@llnl.gov).

### Grand entrance



JACQUELINE MCBRIDE/NEWSLINE

Though East Avenue is still open to all traffic, construction crews are nearly done building the new Public Safety kiosks that will sit in the center of the street near the southwest corner of the Laboratory. See the June 27 issue of *Newsline* for more information on the East Avenue upgrade project.

### Jobs Web page redesigned for quicker, easier access

Incorporating user input and usability design concepts, a redesigned Jobs Home Page has been released at <http://jobs.llnl.gov>. The changes will enable quicker and easier access to job opportunities.

Additional enhancements will be released in the future that will benefit both applicants and other personnel involved in the hiring process.

Other significant milestones met to date for the second phase of the project include:

- Process developed to enable LLNL Web masters to build custom search pages linking to LHire posted jobs.

- Standardized posting templates developed for 400 series jobs; a pilot with one Directorate has started to test templates.

- Testing started on the Offer to Start component, which will ultimately result in the elimination of the 6440 form; next steps include piloting new processes with one directorate prior to Laboratory-wide release in the September time frame.

- Requirements documentation phase kicked-off to enable PeopleSoft's electronic routing and approval capability. Testing is scheduled for September/October.

Standard reports have been written to track recruiting data and are now being tested within HR.

The LHire Project team welcomes your feedback and questions at [LHire4help@llnl.gov](mailto:LHire4help@llnl.gov). This link is also available at the bottom of the Jobs Home Page.

### IN MEMORIAM

#### Harry Conrad

Harry Conrad of Eugene, Ore. died June 7. He was 81.

Conrad was born Aug. 9, 1921, in Lakewood, Wis. to Joseph and Josephine Collins Netzer. He married Bette Southern on April 5, 1947.

He grew up in Wisconsin and Michigan. He served in the Navy from 1940 until 1960 and was a medic in the South Pacific Theater during World War II.

He worked as a mechanical engineer in the plastic shop at the Lab. After retiring, he lived in Tahoe City and Fullerton before moving to Eugene in 2001.

His interests included computers and he enjoyed teaching computer skills. He was a member of the Dayspring Fellowship Church of Christ in Eugene.

Survivors include his wife, Bette; two sons, Harry Jr. of Eugene and Kelly of Gardnerville, Nev.; and eight grandchildren. His son Roger died in 1981.

Services have been held. Memorial contributions may be made to the Dayspring Fellowship Church of Christ in Eugene.

swing sets and clubhouses for his grandchildren. He also enjoyed playing chess and golf and family get-togethers.

He moved to Philomath, Ore., after his retirement in 1998 and recently relocated to his hometown of Downing.

Survivors include sons, Jim of Worchester, Mass. and John of Stevenson, Wash.; daughters, Brenda Harmsen of Vancouver, Wash. and Lisa Elfering of Monroe, Ore.; sisters, Valeria Dupy of Macomb, Ill. and Susan Arnold of Downing, Mo.; brothers Bill Mobley of Downing, Mo. and Joe Mobley of Hull, Ga; and five grandchildren.

Services have been held.

*Editor's note: Obituary information should be sent to [newsline@llnl.gov](mailto:newsline@llnl.gov) or faxed to 2-9291.*

### Newsline

*Newsline* is published weekly by the Internal Communications Department, Public Affairs Office, Lawrence Livermore National Laboratory (LLNL), for Laboratory employees and retirees.

#### Contacts:

Media & Communications manager: Lynda Seaver, 3-3103

Newsline editor: Don Johnston, 3-4902

Contributing writers: Bob Hirschfeld, 2-2379; David Schwoegler, 2-6900; Anne M. Stark, 2-9799; Stephen Wampler, 3-3107; Gordon Yano, 3-3117. For an extended list of Lab beats and contacts, see <http://www.llnl.gov/llnl/06news/NewsMedia/contact.html>

Photographer: Jacqueline McBride

Designer: Julie Korhummel, 2-9709

Distribution: Mail Services at LLNL

Public Affairs Office: L-797 (Trailer 6527), LLNL, P.O. Box 808, Livermore, CA 94551-0808

Telephone: (925) 422-4599; Fax: (925) 422-9291

e-mail: [newsline@llnl.gov](mailto:newsline@llnl.gov) or [newsonline@llnl.gov](mailto:newsonline@llnl.gov)

Web site: <http://www.llnl.gov/PAO/>

#### Robert Mobley

Robert Mobley, a nine-year resident of Livermore, died May 13 in Downing, Mo. He was 67.

Mobley was born Jan. 7, 1936, in Downing where he also was raised.

With an academic background in mathematics, he focused his career on atmospheric science. He worked on meteorological projects at the Laboratory.

Mobley was a novice woodworker and made

## AROUND THE LAB



## Author to discuss WW II era scientific secret society

Lab founder Ernest Lawrence had a great friend and benefactor in Alfred Lee Loomis, Wall Street tycoon and self-taught physicist whom Luis Alvarez called "the last of the great amateurs." Jennet Conant will be retelling their story, which is part of her bestseller, "Tuxedo Park," on Tuesday at 3:30 p.m. in the Bldg. 543 auditorium.

"I will retrace the early days of physics when it was still 'pure science,' and recount how Loomis became Lawrence's great friend and benefactor, first helping to finance his early cyclotron research, and then spearheading the fundraising for the giant 184-inch cyclotron that would later produce most of the uranium for the bomb dropped on Hiroshima," Conant says.

Conant is a writer for *Newsweek* and *Vanity Fair*; among other national publications and grand-



Jennet Conant

daughter of former Harvard President James Conant. The senior Conant was a member of the General Advisory Committee for the Atomic Energy Commission during World War II, and his granddaughter had access to his personal papers.

In her talk entitled, "Tuxedo Park, The Secret Palace of Science That Changed the Course of World War II," Conant will also discuss how Loomis became expert in the new field of microwave radar, and how he and Lawrence teamed up in 1940 to create the top secret war-time "Rad Lab" at MIT. This east coast Rad Lab, given the same name as Lawrence's lab in California to confuse the enemy, recruited some of the best physicists in the world to develop the new experimen-

tal microwave radar devices that would defeat the German Air Force and the deadly U-boats, and help bring WWII to a speedy end.

A pivotal behind-the-scenes figure in science, industry and government, according to Conant, Loomis was able to push the military to adopt new methods and technology, and to persuade President Roosevelt to spend millions in scientific research both on advanced radar, and on uranium fission research that would ultimately lead to the development of the first atomic bomb.

All employees are invited to attend the talk and informal reception following in the Bldg. 543 lobby. Hardback copies of the book are on sale at the Lab Store, "Time Zone." This talk is sponsored by the Laboratory History Project in the Director's Office. Contact is Carol Gerich, 2-6742.

## Researcher to speak at Lab about countering international terrorism

Yoram Schweitzer of Israel's International Policy Institute for Countering Terrorism will discuss "Modus Operandi in International Terrorism" at 10 a.m. Monday in Bldg. 170, room 1092 and "Recommendations for an American Strategy of Counter-Terrorism" at 9:30 a.m. Tuesday in the Bldg. 155 auditorium.

Schweitzer will visit LLNL to deliver some lectures on international terrorism in a seminar sponsored by the Center for Global Security Research (CGSR).

He has been researching and working on security-related topics with emphasis on international terrorism for the Israel Security Community, the Israeli Army, and academia. For the

past four years, he has been a researcher at the International Policy Institute for Countering Terrorism (ICT) and at the Inter-Disciplinary Center (IDC) in Hertzeliya, Israel.

He was director of the ICT educational program. He has been lecturing on international terrorism. He has lectured to a number of Israeli governmental agencies. He has also lectured to law enforcement and security personnel and consulted to the Olympic Committee in Sydney and Athens in preparation for the Olympic games.

He has specialized in various topics related to terrorism such as suicide terrorism, state sponsored terrorism and Islamic fundamental-

ism (Shiite and Sunnite).

He also has an intimate knowledge and understanding of local terror groups like Hamas, Palestinian Islamic Jihad and Hizballah as well as Al-Qaida and its related terror groups and cells.

He joined the ICT Institute following more than ten years of service in the Israeli Security Community, where he headed a section that dealt with international terrorism. He also spent four years as a member of a team that looked into Israeli MIAs.

For more information, call Tami Alberto, 2-5969.

## Women's Technical Symposium looks at UC colleagues and connections

A symposium to strengthen the role of LLNL professional women as members of the UC community will be held Aug. 12-13 at the San Ramon Valley Conference Center.

The symposium is intended to augment professional networks to include women drawn from across the UC system — senior faculty, young faculty, research scientists, senior administrators, and sister laboratory scientists and engineers, all of whom could work more collaboratively with LLNL in the future. An additional but secondary goal is to introduce invitees from the broader UC community to

learn about the contributions of LLNL women who are managers and PIs across a spectrum of research, programmatic, and managerial activities at the Laboratory. This symposium is being organized by, and will be run by, LLNL women.

The symposium will be open to LLNL 200 series and 196/197 administrative series staff, regardless of gender. All attendees must pre-register. A limited number of spaces will be reserved for attendees from other LLNL classifications, upon self-nomination or AD nomination, with the potential for personal or insti-

tutional benefit being the principal criterion for approval. All LLNL attendees are encouraged to submit abstracts for presentations and for posters. Session chairwomen will organize each session, drawing from external invited presentations and abstracts submitted by LLNL staff. Session chairwomen will select presentations and posters based upon their assessment of the fit of the abstract with the goals of the symposium and of their session.

For more information, contact Edie Rock, rock6@llnl.gov or 4-4035.

## Russian editor to discuss his country's military policy

Alexander Golts, the deputy editor-in-chief of Russia's *Ezhnedelny zhumal* (Weekly journal), will discuss "Russian Military Policy and Military Reform" at the next Center for Global Security Research seminar. Golts' talk takes place at 10 a.m. Thursday in Bldg. 170, room 1091.

Golts, Russia's leading military and political analyst, will speak



about the new plan of military reform recently adopted in Russia. This reform is an attempt to answer the structural crisis in the Russian Armed Forces, as well as new security challenges.

For more information call Tami Alberto, 2-5969.

### SSEP Diversity Speaker Series

Sponsored by the Safety, Security and Environmental Protection Diversity Committee

#### How to Make Powerful and Persuasive Presentations

**Vanna Novak**

Keynote Speaker and Seminar Leader

Thursday, June 26, 2003

12:00–1:00 p.m.

Bldg. 543 Auditorium





## NEWS YOU CAN USE

### Laboratory's business applications to change log-in process in July

Starting July 14, you will log in to most institutional applications (such as LITE, LTRAIN, Data Warehouse, and TOPS) using your Official User Name (OUN), which is assigned uniquely to every employee, and Personal Access Code (PAC), which you assign at the Open LabNet PAC Website (<https://www-oln.llnl.gov/pac/cgi-bin/new-PAC.cgi>). Currently, to log in to these applications, you use your P account (P followed by employee number) and associated password. The change to OUN and PAC does not

occur until July 14, so continue to log in to applications using your P account until then.

The change to using OUN and PAC is based on DOE cyber security requirements and LLNL audit findings. The project is a collaborative effort between the Administrative Information Systems Department (AIS) and Computer Security Technology Integration (CSTI). The P2OUN-PAC Application Login Changes Website (<http://www-llnl.gov/P2OUN>) provides useful information on the applications affected, whom to

call for help with PACs and application access and answers to frequently asked questions. Special announcements will also be posted on My LLNL.

For questions about setting your PAC, send e-mail to [auth-help@llnl.gov](mailto:auth-help@llnl.gov) or call 4Help at extension 4-4357 (4-HELP). For general information about the P2OUN project, see the P2OUN-PAC web site or contact the AIS P2OUN Project Team at [p2oun@llnl.gov](mailto:p2oun@llnl.gov).

## Technical Meeting Calendar

**MONDAY**  
**23**

### COMPUTATION

Apple Worldwide Developers Conference  
Keynote Address. Tune to Lab TV Channel 4 at 10

a.m. to get the latest news from Apple Computer, presented by Apple CEO Steve Jobs. Contact: Candace Gittins, [gittins1@llnl.gov](mailto:gittins1@llnl.gov).

### CENTER FOR GLOBAL SECURITY RESEARCH

"Modus Operandi in International Terrorism," by Yoram Schweitzer, International Policy Institute for Countering Terrorism (ICT) and Inter-Disciplinary Center (IDC), Hertzeliya, Israel. 10 a.m., Bldg. 170, room 1092 (uncleared area). Contact: Tami Alberto, 2-5969.

**Tuesday**  
**24**

### CENTER FOR GLOBAL SECURITY RESEARCH

"Recommendations for an American Strategy of Counter-Terrorism," by

Yoram Schweitzer, International Policy Institute for Countering Terrorism (ICT) and Inter-Disciplinary Center (IDC), Hertzeliya, Israel. 9:30 a.m., Bldg. 155 auditorium (uncleared area). Contact: Tami Alberto, 2-5969.

**Wednesday**  
**25**

### CENTER FOR NONDESTRUCTIVE CHARACTERIZATION

"Iterative Inverse Scattering Algorithms: Methods of Computing Fréchet Derivatives," by

Steve Norton. 10 a.m., Bldg. 235, Gold Room (uncleared area). Contact: Ann Tyler, [tyler8@llnl.gov](mailto:tyler8@llnl.gov).

**Thursday**  
**26**

### BIOLOGY & BIOTECHNOLOGY RESEARCH PROGRAM

"Adventures in Geomicrobiology: A Young Investigator's Story," by

Tim Magnuson, Idaho State University. 10:30 a.m., Bldg. 361, room 1155 (uncleared area). Contact: Harry Beller, [beller2@llnl.gov](mailto:beller2@llnl.gov).

### DEFENSE & NUCLEAR TECHNOLOGIES

"A Perspective on the Role of Theory in RANS Modeling," by Paul Durbin, Stanford University. 9:30 a.m., Bldg. 132N, Summit Room. Contacts: Rose McCallen, 3-0958, or Helen Magann, 2-5229.

**Tuesday**  
**1**

### CHEMISTRY & MATERIALS SCIENCE

"Using Small Molecular and Peptidic Ligands to Control Cell Expression," by Jeffrey Tok, City

University of New York. 1:30 p.m., Bldg. 155 auditorium (uncleared area). Refreshments will be served. Contact: Dave Eaglesham, 2-0486.

### NEW TECHNOLOGIES ENGINEERING DIVISION

"Workplace Aerosol Measurement Research," by Paul Baron, National Institute for Occupational Safety and Health. 10 a.m., Bldg. 132S, room 1784 (uncleared area). Werner Bergman, 2-5227.

**Thursday**  
**3**

### CHEMISTRY & MATERIALS SCIENCES

"Organic and Polymeric Materials for Plastic Electronics," by Zhenan Bao,

Bell Laboratories, Lucent Technologies. 1:30 p.m., Bldg. 155 auditorium (uncleared area). Refreshments will be served. Foreign Nationals may attend if approved security plan is on file that includes Bldg. 155. Contacts: Dave Eaglesham, 2-0486, [eaglesham2@llnl.gov](mailto:eaglesham2@llnl.gov), or Julie Sedillo, 3-3506, [sedillo3@llnl.gov](mailto:sedillo3@llnl.gov).

The deadline for the next Technical Meeting Calendar is noon, Wednesday.

Send your input to [tmc-submit@llnl.gov](mailto:tmc-submit@llnl.gov). For information on electronic mail or the newsgroup [llnl.meeting](mailto:llnl.meeting), contact the registrar at [registrar@llnl.gov](mailto:registrar@llnl.gov).

# the time zone

Open 7:30 a.m. - 3 p.m.,  
Monday — Friday

UPS Shipping Service  
Package Receiving Service (FedEx, UPS, USPS, etc.)  
Software  
Logo Items & Apparel  
Photo Processing

Monthly Jewelry Sale  
Postage Stamps  
Seasonal See's Candy  
Greeting Cards  
Bart & Wheels Tickets

Building 4128  
(925) 422-9035  
FAX (925) 423-9065

*"Saving you time & money"*

*The Time Zone at LLNL is operated by the Employee Services Association.*

## NEWS OF NOTE



## BRIEFLY

**WHEELS spares fare to spare air**

All passengers using the WHEELS buses in the Tri-Valley during Spare the Air days will ride free of charge. This pilot program is being conducted in Livermore, Pleasanton and Dublin because the Tri-Valley, due to wind, temperature and geographical conditions, continues to exceed federal and state air quality standards a few days each year.

A Spare the Air Day is declared shortly after noon the day before by the Bay Area Air Quality Management District when poor air quality is predicted by meteorologists and then publicized on the Website [www.sparetheair.org](http://www.sparetheair.org) as well as on radio and TV.

WHEELS encourages drivers to modify their habits on Spare the Air days and take the bus to reduce air pollution from personal vehicles. The free ride offer runs from June through mid-October. It not only includes buses running to the Lab but anywhere in the Tri-Valley.

**The power of presentation**

Vanna Novak will present "How to Make

Powerful and Persuasive Presentations" at noon Thursday, June 26 in the Bldg. 543 auditorium. Novak's presentation is part of the SSEP Diversity Speaker Series.

Novak is a nationally recognized keynote speaker and seminar leader on persuasive presentation skills and skills to build quality work relationships. Based in Seattle, she is president and owner of M.C. Communications, Inc., and has been in the business of speaking and training for the past 18 years.



Vanna Novak

The READ Project is a service of the Livermore and Pleasanton public libraries. To register for training or for more information, call 373-5507.

**Apple conference on Lab TV**

To hear Apple Worldwide Developers Conference Keynote Address, tune in to Lab TV Channel 4 at 10 a.m. Monday, June 23 to get the latest news from Apple Computer, presented by Apple CEO Steve Jobs. For more information, contact Candace Gittins at [gittins1@llnl.gov](mailto:gittins1@llnl.gov).

**EYH volunteers, presenters needed**

Twelve computer technician volunteers are needed to help support a computer-building workshop. Please contact Mike Barnett, at [barnett5@llnl.gov](mailto:barnett5@llnl.gov) or call 422-9513.

Other volunteer opportunities are available for workshop presenters and workshop monitors and for help with registration, finance and facilities.

For more information about the conference or other volunteer opportunities, see <http://education.llnl.gov/eyh/>

For questions, contact Cary Gellner, ([gellner1@llnl.gov](mailto:gellner1@llnl.gov)) 422-0643

**READ Project needs volunteers**

The Livermore/Pleasanton READ Project is seeking volunteer tutors to help motivated adults improve their reading and writing skills. Free tutor training workshops will be held at the Livermore Library from 7 to 9 p.m. Wednesday, July 23 and 9 a.m. to 4 p.m. Saturday, July 26.

## Buyer beware. Best to toss away fraudulent e-mail

Several people at LLNL have received the following e-mail message. Computer Security recommends that if you receive an e-mail like it, claiming to be from Best Buy, throw it in the trash.

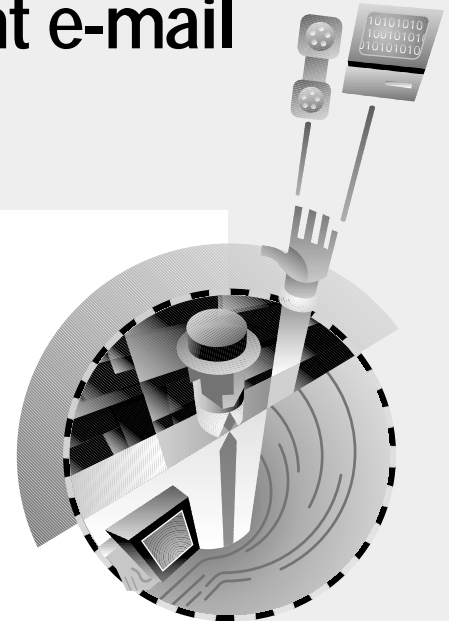
Dear customer,

Recently we have received an order made by using your personal credit card information. This order was made online at our official BestBuy website on 06/19/2003. Our Fraud Department has some suspicions regarding this order and we need you to visit a special Fraud Department page at our web store where you can confirm or decline this transaction by providing us with the correct information. This e-mail address has been taken from National Credit Bureau.

Click the link below to visit a special Fraud Department page to resolve the cause of the problem.  
<<http://www.your-instant-credit-reporter.org/fraud.html>>BestBuy.com/fraud\_department.html.

ORDER# 1095619 - STATUS: SUSPENDED

ITEMS PURCHASED: Item No: 73890: CDA-9815 In-Dash CD Player/Ai-Changer Controller Price: \$387.65  
Qty: 2 Total: \$775.3 Your prompt response is needed to avoid any unauthorized charges to your credit card.



## Buckle Up



Educating the Lab population on the importance of using a safety belt — whether it's driving a personal car or a government vehicle.

## Corvino makes a return visit to the Lab

John Corvino, a philosophy teacher at Wayne State University in Detroit, Michigan, made a return visit earlier this month to the Laboratory to deliver a Diversity Programs Office lecture honoring Gay Pride month entitled "Maintaining the Gay Moral High Ground." Corvino discussed appropriate response to criticism of gays and lesbians. He also responded to the recent comments by Pennsylvania Sen. Rick Santorum on homosexuality.

JACQUELINE MCBRIDE/NEWSLINE





## VISITORS

Continued from page 1

Ambassador Linton Brooks, NNSA administrator.

In his welcoming remarks, Anastasio described the cooperative work done by researchers in the two countries, including the joint verification experiments, the initial visit of the directors of the All-Russian Scientific Research Institute of Technical Physics (VNIITF) to LLNL and the reciprocal visits by the directors of the Livermore and Los Alamos labs.

"The cooperation between researchers of our two countries represents the finest aspects of the universality of science," Anastasio said. "By working together, we improve our understanding of the nature of physics and additionally, further the prospects of improving global security."

The group was briefed on the Russian transition initiative program, which assists displaced and under-employed Russian nuclear scientists to find alternate employment, as well as helping to facilitate civilian business development in the Ministry of Atomic Energy's (Minatom) closed nuclear cities such as Snezhinsk, formerly known as Chelyabinsk-70.

There was a discussion of cooperation on seismic research. The two countries have



MARCIA JOHNSON/IBIS

From left: Director Michael Anastasio, NNSA Administrator Linton Brooks, Ed Moses, NIF Project manager, and Ambassador Yuri Ushakov during a tour of the the laser facility Tuesday.

worked more than a decade on earthquake hazard mitigation, as well as seismic monitoring to ensure the absence of underground nuclear testing.

The group was shown an online "Virtual Consulate" that has been developed by the U.S. Consulate in Ekaterinburg. In English, it offers

official information for Americans who are traveling for business or pleasure in the Ural region. A section written in Russian provides visa and travel details for people interested in visiting the United States, and even permits them to apply for official documents on the Web.

The visitors got a look at the Lab's most powerful computers when they visited ASCI-White, and a power-wall presentation demonstrating the calculation of turbulence phenomena.

The Lab tour ended at the NIF, where technicians were inserting a target into the target chamber for a diagnostic experiment. There was interest among the Russian contingent in the NIF optics, which include slabs from giant crystals grown by a revolutionary fast-growth technique developed in Moscow.

The final stop of the day was Livermore City Hall, where the ambassador was presented with a proclamation reaffirming the sister city affiliation with Snezhinsk.

William Dunlop, program leader for Proliferation Prevention and Arms Control, summed up the day,

saying: "Overall the visit went extremely well. I am confident that the Russian delegation will report very favorably on the hospitality of the Lab and on the level of cooperation between LLNL and the scientists in Russia. They seemed to be very impressed with everything they saw here."

## HERKEN

Continued from page 1

National Air and Space Museum of the Smithsonian Institution, discussed the life of Lawrence, Oppenheimer and Teller last week as part of the Director's Distinguished Lecturer Series. His talk borrowed heavily from his recent book, "Brotherhood of the Bomb: The Tangled Lives and Loyalties of Robert Oppenheimer, Ernest Lawrence and Edward Teller." The book was released last fall and has received favorable reviews, including those by *Physics Today* and *The New York Times*.

As Herken explained in his lecture, *Brotherhood of the Bomb* originally began as a biography of Teller, the Lab's director emeritus. Herken interviewed Teller back in 1981 and again in 1983, but playfully recalled a period "when he and I were not talking." It was 1993, at the 50th anniversary of Los Alamos National Laboratory, when Teller and other historians, including Herken, would reconnect, but by then Herken decided that Teller was "too difficult a subject to write about."

"He is more a force of nature than a human being," said Herken, emphasizing his respect for Teller. "He is the most politically influential scientist of the 20th century and a true phenomenon."

Herken then turned attention toward Lawrence, but quickly realized if he wrote about Lawrence, he would have to include Oppenheimer. Herken then decided to concentrate on all three, what he calls an "atomic Gilgamesh," and *Brotherhood of the Bomb* was born.

Herken's book was decades in the making, in part because of the vast amount of information he was able to uncover. The book further benefits from reams of formerly classified material and hundreds of fresh interviews. The result is a deeply researched yet fast-paced look at the founding fathers of nuclear weapons research, with emphasis on the twisted path by which the Livermore Lab was founded.

While Herken delves into the lives of all three men, it is the relationship between Lawrence and Oppenheimer that makes up a large part of the narrative. He describes Lawrence as an "empire builder" full of "buoyancy and bounce." Oppenheimer was often considered "flighty, temperamental and brilliant." Together they were a "perfect marriage in physics" that would



JACQUELINE MCBRIDE/NEWSLINE

come together at the University of California.

"Lawrence saw the University of California as a paradise of physics, while Oppenheimer saw it as a desert with opportunities yet to come."

Herken characterizes Lawrence as an affable workaholic, one who loved to sit at the controls of his cyclotron, much to the nervousness of his colleagues. Lawrence would constantly push the envelope, often leading to power outages at his facility, the rest of the UC Berkeley campus and the outer-lying neighborhoods.

In his book Herken recalls how Lawrence fell asleep to the sound of the cyclotron, whose frequency he could dial in on a transistor radio he kept at his bedside. When the radio went silent, Lawrence would call in frantically to find out what was wrong with the cyclotron, when often it was merely shut down for the night.

Herken's book is chocked full of anecdotes regarding the trio, providing a wealth of insight. Yet it is the falling-out between Oppenheimer and Lawrence, what he called "the greatest feud in the history of physics," where Herken spends much of his efforts.

Herken also explores Oppenheimer's communist sympathies and details the events that would eventually lead to the revocation of his security clearance.

In his talk, Herken recounted the testimony in Washington, D.C., to decide the fate of Oppenheimer, and he described Lawrence as a man trapped by the decision he had to make. To testify against Oppen-

“

*He (Edward Teller) is the most politically influential scientist of the 20th century and a true phenomenon.*

– Greg Herken ”

heimer would lead to the derision of the science community. To testify on his behalf would jeopardize support for his own work and possibly the Rad Lab. In the end the stress caused Lawrence to become acutely ill with colonitis and he could not or would not testify, leaving the burden to Teller. Herken also believes the stress of this incident contributed greatly to the ongoing health problems that would eventually lead to Lawrence's death in 1958.

In the end he wonders why Oppenheimer was not more outspoken following the revocation of his clearance. He can only surmise that Oppenheimer "did have something to hide."

Herken closed his talk with a short description of Lawrence's wife, Molly, who died last year. He recounted her efforts to remove Lawrence's name from the Livermore Lab because she felt her husband would not want his name associated with the weapons research conducted. He then recalled one of his last conversations with her, in which she said she wanted to live to see "the real millennium" and hoped there would not be "the push" to build more bombs in the 21st century, "but if so, not by Lawrence Livermore Lab." He also quipped that Molly remarked life with Ernest was "always tiring but always interesting."

More information on *Brotherhood of the Bomb*, including complete footnotes, can be accessed at <http://www.brotherhoodofthebomb.com/> Copies of the book at a discounted price are available at the Lab Store, "Time Zone."

## RADSCOUT

Continued from page 1

The signing of the licensing agreement took place Wednesday during a special ceremony in the Bldg. 132 lobby that included National Nuclear Security Administrator Linton Brooks.

ORTEC, based in Oak Ridge, Tenn., will incorporate the RadScout technology in its next generation of advanced portable nuclear detection systems. The company plans to market the detector within a year as the Detective and Detective-EX.

"RadScout is an excellent example of NNSA laboratories providing solutions to help our nation improve homeland security and assist in the war on terrorism," said Brooks.

"I'm very proud to be a part of this. The Lab can be very proud and the American people can be very proud."

"This is a good example of working with partners to make homeland security stronger," said Director Michael Anastasio, who hosted the ceremony. "RadScout represents a breakthrough in radiation detection and identification technology. RadScout reduces existing bulky equipment to a compact, lightweight, battery-powered device that can be permanently mounted or fully portable — and can be operated by workers or first-responders with minimal additional training."

RadScout was developed within the Lab's B Division of the Defense and Nuclear Technologies Directorate. The technology was developed for emergency first responders and inspection personnel who need rapid detection and identification of material to determine the nature and scope of a threat.

Weighing about 20 pounds, RadScout features a miniaturized refrigeration system cooling to -280°F that eliminates liquid nitrogen cooling for the device's germanium crystal. RadScout measures neutrons and gamma rays emitted by radioactive materials, then analyzes them to identify the sources.

These high-performance, high-resolution portable systems can be used at border crossings, cargo ship docks and transportation terminals to differentiate between potentially dangerous radioactive materials and otherwise harmless radiation sources.

"RadScout puts the ability to detect radiation in the hands of the people who need it most, our emergency responders," said Bruce Goodwin, associate director of DNT.

During Wednesday's ceremony, a number of



JACQUELINE MCBRIDE/NEWSLINE

**Director Michael Anastasio addresses a group of first responders, Lab employees and the media Wednesday during the introduction of RadScout, a new radiation detector developed by physicists and engineers in the Defense and Nuclear Technologies Directorate.**

emergency responders were on hand to see RadScout in action and determine whether the technology would be useful in their own inspection and security efforts. Agencies attending included the Federal Aviation Administration, Transportation Security Agency, the US Postal Inspector's office and California Highway Patrol.

"This is exactly in line with what we are doing to keep our highways and California safe," said Chief Stan Perez, who heads up CHP's Enforcement Services Division, which oversees cargo inspection, commercial enforcement and border security. Though the CHP already has equipment for detection of radioactive material, Perez said "it is nothing to the extent and capabilities" of RadScout.

CHP has been working with the Lab over the past two years in the development of truck stopping technology and other security concerns.

"We get approached by hundreds of vendors each year. But we come to this Lab and the people here always sort things for us and help us with our needs."

Prototypes of radiation technology are expected to be available in the next few months, with full-scale production under way in less than a year, said Daniel Upp, vice president of ORTEC.

"The detectors will provide first responders,

HAZMAT teams, fire departments, government authorities and others with the ability to screen objects for potentially dangerous nuclear material and determine quickly whether or not they pose a threat. Those include the more than six million cargo containers that enter the United States each year," notes Jon Kidder, vice president and general manager of AMETEK Advanced Measurement Technology.

ORTEC has more than 40 years of experience in the design and manufacture of highly sensitive radiation detectors. These sensors are used by government and industrial laboratories, nuclear facilities and medical research and in nuclear safeguards. ORTEC Products Group is a unit of AMETEK Advanced Measurement Technology, a division of AMETEK Inc., a leading global manufacturer of electronic instruments and electric motors with annual sales of more than \$1 billion.

RadScout was developed by a team of physicists and engineers working with B Division. Team members include: Mark Rowland, James Wong, Doug Howard, Jimmie Jessup, Greg Bianchini, Wayne O. Miller, John Baker, and Mike Dunning. Ray Pierce, DNT's representative to the Industrial Partnerships and Commercialization office, assisted with patenting, licensing and publicizing RadScout.



**The highly portable RadScout measures and detects energy released by radioactive material. It uses off-the-shelf components and may be available for commercial use soon.**

## LEARY

Continued from page 1

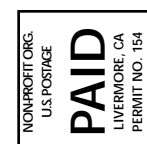
programmatic management of LLNL's Safeguards and Security activities. He will focus on continuing to ensure the Laboratory's security. One of his first actions will be the implementation of necessary corrective measures following two recent security incidents involving missing keys and a lost TESA access badge. He will also work closely with external review teams on their investigations, evaluate the security management structure and recommend appropriate continuing changes to Anastasio.

"I have a great deal of respect for the security organization at this Laboratory," said David Leary. "This is an opportunity to gauge where we are and what areas can be improved, on both formal and informal levels."

In the mid 1980s Leary served as the department head of the Safeguards and Security organization. He was responsible for the implementation of the Lab's first special response team and K9 dog patrols. He has a master's in police science and administration from Washington State University and a bachelor's degree in sociology from Illinois State University.

In his 30-year career at the Laboratory, he has also served as the department head for Business Services and the Technical Information Department, Property Management division leader, interim manager of Public Affairs and senior staff member to the Associate Director of Lasers.

In making the announcement to employees last Friday, Anastasio also thanked Dennis Fisher for his commitment to the organization over the past few years. Dennis Fisher will continue as Associate Director for Safety and Environmental Protection.



Newsline  
UC-LLNL  
PO Box 808, L-797  
Livermore, CA 94551-0808