

NewsLetter

Week of Jan. 16, 2006

Vol. 7, No. 2

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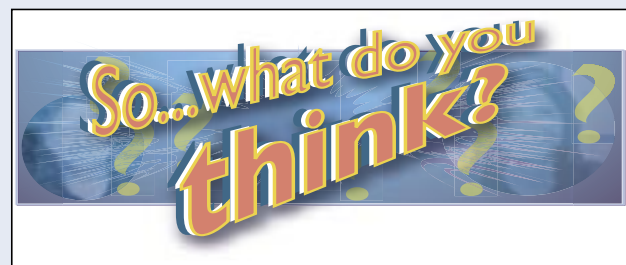
High-energy gamma rays may emanate in the Milky Way

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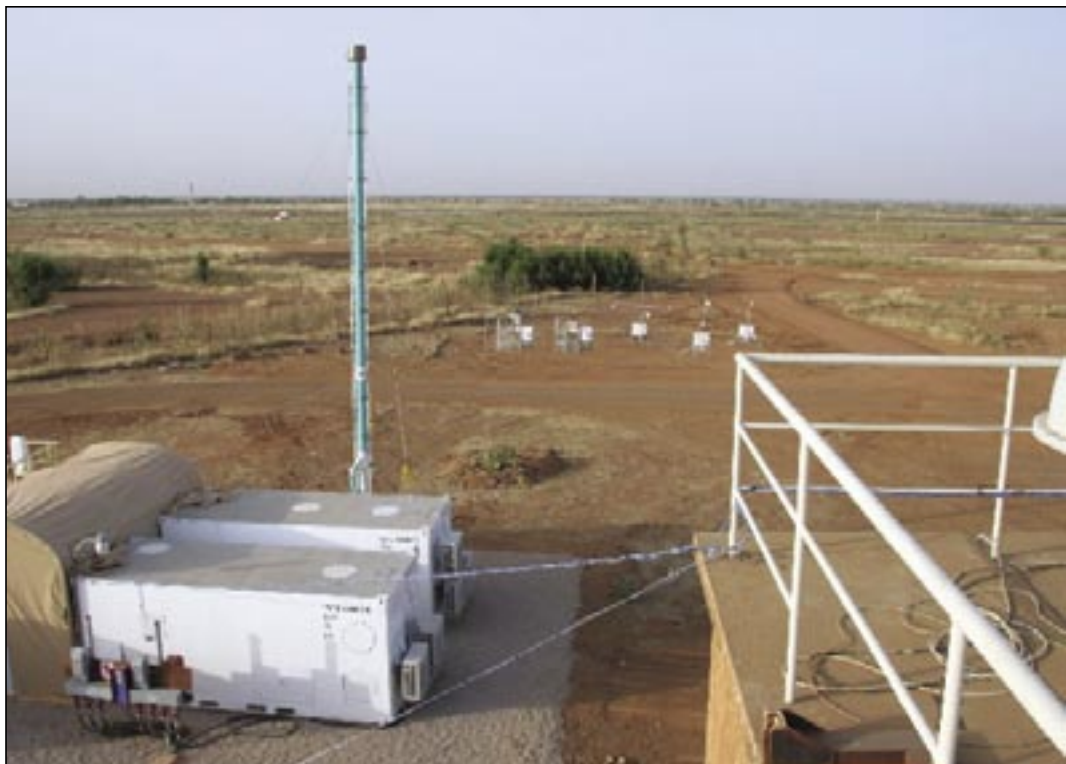
trillion electron volts) gamma rays, the most energetic form of electromagnetic radiation known, can originate in the plane of the Milky Way galaxy.Page 5

Laboratory employee's photos capture nature's beauty, raise funds for learning center

John Harvey of the Emergency Operations Office (EOO) has worn many hats over the years. Among his endeavors, he has owned a popular nightclub in Pojoaque, and an accounting firm and art gallery in Santa Fe. He also was part-owner of a Santa Fe company that builds V-8 powered motorcycles.Page 8



The beginning of a new year is typically when people make resolutions regarding everything from their health to work and family obligations. What is your resolution for 2006 and what will you do to fulfill it? Learn what your co-workers had to say on Page 6.



The aerosol stack for the ARM Mobile Facility (AMF) stands ready to collect measurements during the second deployment of the AMF in Niamey, the capital of Niger, West Africa. A collection of instruments, in the background, form the AMF instrument field. Photo courtesy of Kim Nitschke of Atmospheric, Climate and Environmental Dynamics (EES-2)

Going mobile with global climate research

by Todd Hanson

Chances are, Larry Jones will be a lot warmer than most of us this month. Jones of Atmospheric, Climate and Environmental Dynamics (EES-2) will be warmer because he's part of a Laboratory team deployed to the West African country of Niger at the Niamey International Airport. With daily temperatures so hot that the rain often evaporates before it hits the ground, Niger is one of the hottest countries in the world.

Jones is in Niamey to help settle the Laboratory's ARM Mobile Facility into its new home for the coming year. Kim Nitschke, also from EES-2, organized the logistics of moving the Laboratory's ARM Mobile Facility to Niamey in October from Point Reyes, on the California coast north of San Francisco, where it had been a part of the Marine Stratus, Radiation, Aerosol and Drizzle field campaign in collaboration with the U.S. Office of Naval Research and Department of Energy's Aerosol Science Program. At Point Reyes, the AMF collected data on cloud/aerosol interactions for six months in order to improve our understanding of cloud organizations associated with patches of drizzle.

In Niamey the AMF will be used to record data on clouds, aerosol and water vapor in the atmosphere in a one-year deployment that will allow scientist to collect data during both the dry and wet (monsoon) seasons. Niamey is a river port and trade center located on the Niger River in the southwestern region of the country. Daytime temperatures in Niamey hover around 100 degrees Fahrenheit.

Created in 1989 as part of the interagency Global Change Research Program to help resolve scientific uncertainties related to global climate change, DOE's Atmospheric Radiation Measurement Program focuses specifically on the role of clouds in the atmosphere. ARM is DOE's largest global climate change research program.

In addition to the new temporary Niamey research site, ARM also has three permanent atmospheric research sites around the world, including the Tropical Western Pacific locale, which consists of sites at Darwin, Australia, Manus Island, Papua New Guinea and Nauru Island; the Southern Great Plains site on the Oklahoma/Kansas border; and sites at Barrow and Atqasuk on Alaska's North Slope. The three Tropical Western Pacific sites also are managed by the Laboratory team.

The primary purpose of the AMF Niamey deployment is to gather data that will be combined with that from the Geostationary Earth Radiation Budget instrument onboard the European Space Agency's Meteosat Second Generation satellite. The

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Appendix F

An outstanding year for the Lab

by Laboratory Director Bob Kuckuck



Bob Kuckuck

This was an outstanding year for Laboratory performance under Appendix F. Despite the rolling restart of resumption activities, the uncertainty of the contract and budget constraints, Appendix F performance has shown remarkable improvement in all areas. The commitment and resilience of our work force, as well as teamwork, communication and planning with our customers, have allowed us to restore the nation's confidence in Los Alamos. I have never seen any organization go through what we have and make such a remarkable recovery while under the public microscope.

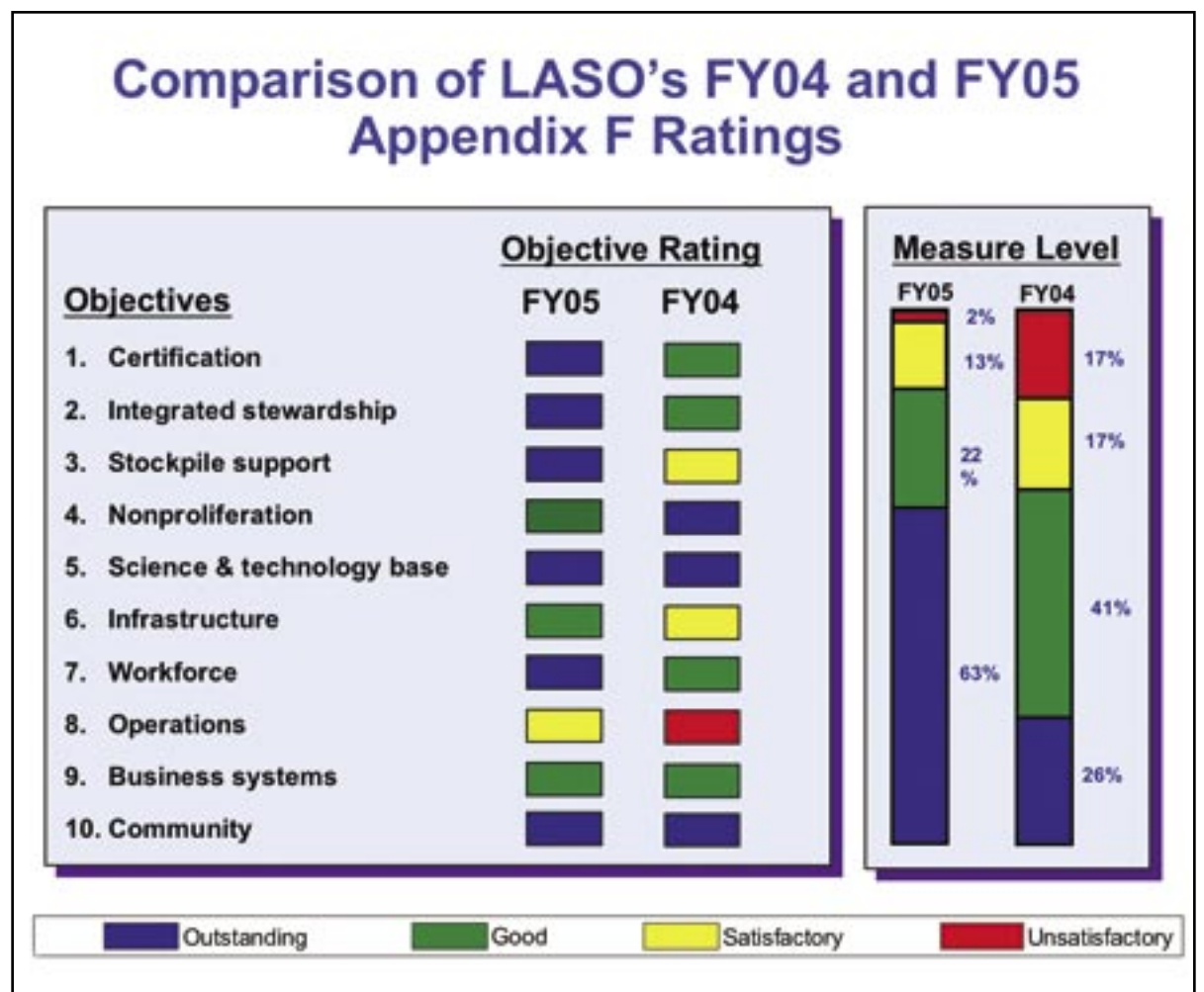
We received an overall rating of "outstanding" on our mission achievements (threat reduction, weapon certification, science and engineering, facilities and infrastructure, long and near-term stockpile stewardship) from the National Nuclear Security Administration, as well as the University of California. Four mission Appendix F objectives received "outstanding" ratings and two were "good." At the measure level for mission, we received 24 "outstanding," six "good," and two "satisfactory," which equates to a resounding A in my book! This is an extraordinary accomplishment during a period of unprecedented change.

There are 46 Appendix F measures that make up the 10 Appendix F objectives (see chart below).

Our improvement in fiscal year 2005 is equally as impressive in our operations and administration objectives. NNSA rated the Laboratory as overall "satisfactory"; the university rated us as overall "good." In comparison, in fiscal year 2004, NNSA gave us an overall operations and business grade of "unsatisfactory."

For Appendix F objective numbers 7 through 10 (workforce, operations, business systems, community), the Laboratory received two "outstanding," one "good," and one "satisfactory" from NNSA, evidence that we have made significant progress in strengthening our systems for managing operations, business and infrastructure. Our management of national user facilities; project, property, financial and environmental management; and security have shown dramatic improvement over the past year. At the measure level for objectives 7 through 10, we received five outstanding, four good, four satisfactory and one unsatisfactory. Improvement has been slower than desired in a few areas, and two Type B incidents demonstrate the need to continue our efforts to improve behavior-based safety systems at the Laboratory. Nevertheless, these scores in operations and administration show a marked improvement from last year. We're on the right track.

It has been an incredible year of success at the Laboratory, but we face a number of significant challenges ahead, including transition to a new contractor. Transition will affect every employee; I will continue to serve as your advocate throughout the transition. Building on the strong performance base of this past year, I am confident that we will meet and overcome these challenges. Delivering on our mission in a safe, secure and environmentally sound manner remains our top priority.



Extremely cold air from the Arctic, strong winds and heavy snowfall — these weather conditions combine to produce blizzards.

Each year these storms take a number of lives through exposure to cold, vehicle wrecks due to poor driving conditions and other hazards. Nearly three-quarters of the deaths related to winter conditions occur in automobiles.

If a blizzard is forecast in the area, check the emergency provisions in your home and vehicle — food, water, alternative heat sources, warm clothing and blankets, and a battery powered radio — and fill up vehicle fuel tanks.

If trapped in a vehicle in a winter storm, stay calm and concentrate on survival.

- Stay in the vehicle for shelter. One risks getting lost and overcome by the cold if striking out on foot.

- Avoid over-exertion. Shoveling snow, pushing a car or walking in deep snow in extremely cold weather can cause a heart attack. Sweating can lead to chills and hypothermia.

- Run the vehicle motor about 10 minutes an hour, just enough to stay warm, or light a candle in a metal coffee can for warmth. Wrap up in an emergency blanket or extra clothing. Cover your head to reduce heat loss.

- Keep fresh air in the vehicle by cracking a window. Do not allow exhaust to build up in the vehicle. Make sure the tailpipe is not blocked with snow.

- Remain visible to rescuers. Put out flares or turn on the dome light. Using the headlights will run the battery down faster. Tie a red cloth to the antenna or door. After the snow stops falling, raise the vehicle hood as a distress signal.

- Stay awake and keep moving, especially the hands and feet.

- Eat high energy snacks from the vehicle's emergency kit. Drink water, but do not eat snow.

About a quarter of deaths related to ice and snow are people who are caught outside. If caught outdoors in a blizzard, try to stay dry. Cover all exposed parts of the body, including the face. Find shelter or make one in the form of a windbreak or a snow cave. Build a fire to keep warm and to alert rescuers.

Los Alamos NewsLetter

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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.



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Editor's note: Tom Bowles, chief science officer, has requested that members of the Science Council use this forum to discuss current issues that affect science at the Laboratory. Below, Bill Junor of Space and Remote Sensing Sciences (ISR-2) discusses one of the council's plans for the management transition.

Transition issues affecting science

by Bill Junor

The imminent management change at the Laboratory has created uncertainty for all employees. In particular, Lab scientists are concerned about possible changes in the Lab's mission and the future roles of scientists. The Laboratory is a unique institution by virtue of its distinguished history. However, the constellation of scientific talent and its application to "grand challenge" problems also contributes to our uniqueness. The Chief Science Office and the [Science] Council want to preserve and grow these qualities under the new management.



Toward this end, [the council is] developing science-related questions that we will present to the new management. Our goal is to use this dialogue between Lab scientists and the new management to define the framework for future discussions about our science. Our list of questions will be a reflection of our professionalism, our emotional and intellectual investment in the Lab and our commitment to the Lab's mission. As advocates for Lab science, we will ask the hard questions and expect honest, realistic answers in return.

These questions should address science, rather than principally business-related issues. Of course, the Lab's "business" is science, and so all areas impact the quality of our science. But, we thought it was most important to focus first on the science issues.

Send suggestions for this list of questions to bjunor@lanl.gov by e-mail. The council feels the following [questions] are priorities to resolve with the new contractor:

- Given the Lab's need for "the brightest and best," what will be the role of foreign nationals under the new management?
- Will there be an aggressive and realistic plan to address inadequate historical investments in science infrastructure?
- What opportunities will exist for "bottom-up" science in the new organization?
- How will the scientific integrity and independence of Laboratory-directed research and development be protected?
- Will the new management view post-docs as vital parts of this institution and its future?



Presentation recognizes director's support of nearby pueblo

Santa Clara Pueblo Lt. Governor Joseph Michael Chavarria, right, recently presented a unique Native American pot to Laboratory Director Bob Kuckuck as a gesture of thanks for the outstanding work relations between the Laboratory and Santa Clara Pueblo. A relative of former Santa Clara Pueblo Governor Joseph Bruce Tafoya crafted the "Etch" pottery, which displayed a great amount of detail and careful design. Chavarria recently was elected governor for 2006. The Laboratory and Department of Energy have accord agreements with Santa Clara, Cochiti, Jemez and San Ildefonso pueblos. The accords deal with areas of mutual concern to the pueblos and Laboratory. Photo by LeRoy N. Sanchez

Going mobile ...

continued from Page 1

combined data should provide the first well-sampled, direct estimates of the divergence of solar and thermal radiation across the West African atmosphere.

The AMF also is part of the African Monsoon Multidisciplinary Analysis research program being conducted in Africa for the next seven years. AMMA is an international atmospheric research project and field campaign to improve the current state of knowledge and understanding of the West African monsoon and its variability.

The AMF will be in Niamey for a year to support the Department of Energy-funded Radiative Atmospheric Divergence experiment, of which Anthony Slingo from the University of Reading is the principal investigator. While the AMF is in Niamey, Jones and Nitschke will oversee daily operations of the facility and manage the local personnel who have been hired to launch weather balloons and monitor the scientific instruments.

For more information about the AMF and to find out about future deployments, go to the ARM Web site at www.arm.gov. To see current conditions at the Niamey AMF site, go to the facility's webcam at <http://198.129.83.48/view/view.shtml> online.



Niamey, the capital of Niger, Africa, where the ARM Mobile Facility has been deployed, is located in the center of the Sahara Desert. Among other things, this field campaign will study the impact airborne Saharan dust has on incoming solar radiation. Photo courtesy of Kim Nitschke of Atmospheric, Climate and Environmental Dynamics (EES-2)



For Laboratory closures, delays or early dismissal information, call UPDATE at 667-6622 or 1-877-723-4101 (toll free).

Bright Ideas disclosure contest emphasizes technology innovation

by Steve Sandoval

A method and apparatus for producing radiographs was the first patent issued to the Laboratory in 1947. Over the years, about 1,600 patents have since been issued to Laboratory staff members for Lab technologies.

The Technology Transfer (TT) Division, through its IDEAS, or Invention Disclosure Electronic Application System, is sponsoring a disclosure contest, whereby a Laboratory group has the potential to receive a \$25,000 award in research and development funds. In addition, a \$25,000 individual award for research and development will be awarded for the disclosure deemed most outstanding. In order to be eligible for the prize, invention disclosures must be submitted through the IDEAS online system, said Duncan McBranch, TT Division leader.

The invention disclosure electronic application system can be found on the IDEAS Web page at http://www.lanl.gov/my_idea online.

The contest began Jan. 1 and continues through March 31. All submitted disclosures satisfactorily completed that provide a sound basis for rendering a patent application filing decision will be submitted to Los Alamos' Patent Review committee for review and process.

"The importance of Los Alamos' innovative ideas has never been more recognized and more appreciated than in today's highly competitive world of technology innovation," said McBranch.

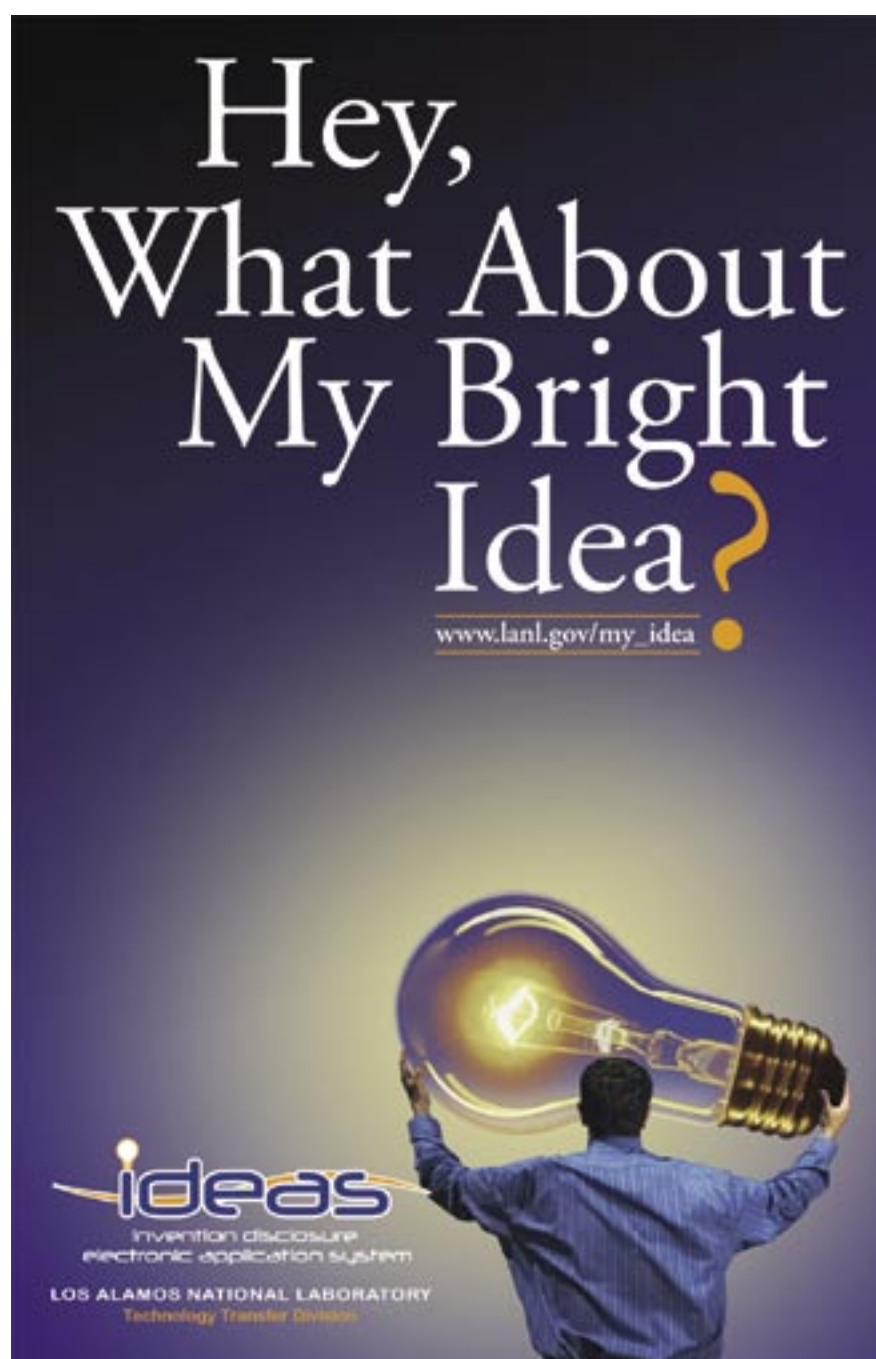
In accordance with University of California policy, when Los Alamos technologies are licensed, 100 percent of the negotiated license income is returned to the Laboratory. Innovators annually receive 35 percent of these royalties and fees, while the innovator's technical division receives 50 percent with TT Division retaining 15 percent. TT reinvests its portion in technology maturation grants, along with various intellectual property protection activities.

IDEAS can assist inventors with creating, modifying, reviewing and submitting invention disclosures electronically. IDEAS is a series of "wizards" and Web forms that takes inventors step-by-step through all the information required to disclose inventions to TT Division and Laboratory Counsel (LC).

The disclosure process meets established legal requirements to secure intellectual property rights, while also giving TT Division the information it needs for successful, commercial, non-commercial and academic licensing and transfer of an invention to the public/private sector.

The IDEAS Web page also has information on training available for Lab personnel who want to submit an invention disclosure.

For more information, write to ideas@lanl.gov by e-mail. For information about the disclosure process, write to ipm@lanl.gov by e-mail.



SPACE.com staffer interview Lab's Beason

Associate Director for Threat Reduction Doug Beason, right, lunches with Leonard David, senior writer for the SPACE.com news Web site, and his wife Barbara Sprungman, a space science education specialist. While here, the visitors heard about opportunities in directed energy related to battlefield and space applications, as well as ongoing Laboratory projects, such as water on Mars, muon radiography and the Rapid Telescopes for Optical Response program. Photo by Nancy Ambrosiano

Employees needed for diversity working groups, board

Laboratory employees are needed to serve on Los Alamos' Diversity Affirmative Action Board and the seven standing diversity working groups.

The board and the working groups operate under the auspices of the Office of Equal Opportunity and Diversity (HR-OEOD).

Employees who serve on the DAAB or the working groups are asked to commit 10 percent of their time and must obtain their supervisor's written agreement to this time commitment, according to an all-employee memo from Laboratory Director Bob Kuckuck. Terms on the DAAB and the working groups are generally for one year with the option of serving a second year.

Nomination deadlines have been extended to Jan. 31 and should be submitted to Danny Valdez in HR-OEOD at Mail Stop M894.

For information on how to submit a nomination, see an all-employee memo at http://int.lanl.gov/memos/2005/11/LANL_ALL974.PDF online.

PATENT AWARDS

Editor's note: Some of the individuals listed below are no longer employed at the Laboratory but were at the time they applied for the patent.



Recently issued patent awards

System level analysis and control of manufacturing process variation

Patent No. 6,901,308, issued May 31
Michael Hamada and Harry Martz Jr. of Statistical Sciences (D-1), and Jay Eleswarpu and Michael Preissler of Proctor and Gamble

Fast pulse nonthermal plasma reactor

Patent No. 6,906,280, issued June 14
Louis Rosocha of Plasma Physics (P-24)

Production of stable, nonthermal atmospheric pressure RF capacitive plasmas using gases other than helium or neon

Patent No. 6,909,237, issued June 21
Jaeyoung Park and Ivars Henins of Plasma Physics (P-24)

Canister sealing method and composition for sealing a borehole

Patent No. 6,910,537, issued June 28
Donald Brown of (EES-11) and Arun Wagh

Method for brazing and thermal processing

Patent No. 6,917,010, issued July 12
John Milewski, Dane Christensen and Robert Carpenter II of Metallurgy (MST-6); and Vivek Dave of Manufacturing and Science Technology (NMT-10)

Substrate structure for growth of highly oriented and/or epitaxial layers thereon

Patent No. 6,921,741, issued July 16
Paul Arendt, Stephen Foltyn, James Groves and Quanxi Jia of the Superconductivity Technology Center (MST-STC)

Borehole sounding device with sealed depth and water level

Patent No. 6,923,252, issued Aug. 2
J.C. Kalski Jr. and Michael Henke

Likelihood-based modification of experimental crystal structure electron density maps

Patent No. 6,931,329, issued Aug. 16
Thomas Terwilliger of Cell Biology, Structural Biology and Flow Cytometry (B-2)

High-temperature superconducting thick films

Patent No. 6,933,065, issued Aug. 23
Paul Arendt, Stephen Foltyn, James Groves, Terry Holesinger and Quanxi Jia of the Superconductivity Technology Center (MST-STC)

Method for contour extraction for object representation

Patent No. 6,937,765, issued Aug. 30
Alexei Skourikhine and Lakshman Prasad of Space and Remote Sensing Sciences (ISR-2)

Diamond-silicon carbide composite and method for preparation thereof

Patent No. 6,939,506, issued Sept. 6
Jiang Qian and Yusheng Zhao of the Manuel Lujan Jr. Neutron Scattering Center (LANSCE-12)

Particle sizer and DNA sequencer

Patent No. 6,942,773, issued Sept. 13
Jose Olivares of the Bioscience (B) Division and Peter Stark of Chemical Sciences and Engineering (C-CSE)

High-energy gamma rays may emanate in the Milky Way

by Todd Hanson

Los Alamos scientists, in collaboration with researchers from nine institutions across the United States, have evidence from the Laboratory's Milagro telescope that TeV (one trillion electron volts) gamma rays, the most energetic form of electromagnetic radiation known, can originate in the plane of the Milky Way galaxy. The discovery is the first evidence of such high-energy gamma rays arising from interactions of cosmic rays with matter in our galaxy.

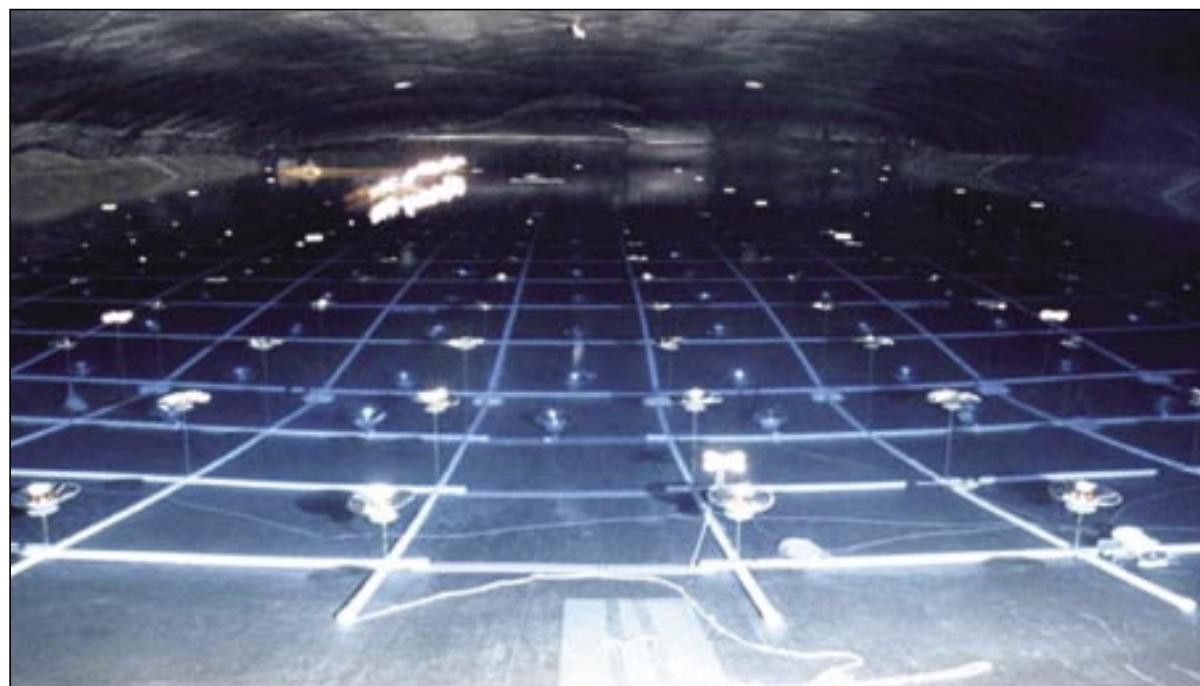
In a paper published in Physical Review Letters, the team of scientists explain how they have been able to determine an approximate location of the gamma rays place of origin within the Milky Way based on observations of the secondary, or air shower, particles that are generated when gamma rays hit Earth's atmosphere. These air shower particles are detected as they pass through the water in the 6-million-gallon pond that comprises the Milagro telescope and create a phenomenon called Cerenkov radiation. This Cerenkov radiation produces visible and ultraviolet photons that are detected by the telescope's 737 floating photon detectors. The gamma rays that enter the atmosphere are the same as the photons that make up visible light, but are roughly one trillion times more energetic than visible light.

According to Gus Sinnis of Neutron Science and Technology (P-23), the Los Alamos astrophysicist in charge of the Milagro telescope, "The gamma rays we observed at Milagro might very well be particle fragments that were scattered across the galaxy when even higher energy cosmic rays struck the matter distributed throughout the Milky Way. These cosmic rays may, in turn, have come from a collapsing star or a supermassive black hole."

With the ability to continuously monitor the entire Northern Hemisphere sky in the 1 TeV energy range, Milagro is the largest gamma-ray detector of its kind in the United States. The latest discovery is the result of an analysis that isolated roughly 70,000 TeV gamma-ray events emanating from within a region of the Milky Way plane out of roughly 150 billion TeV-level events recorded by Milagro for the three years beginning in July 2000.

In addition to researchers from Los Alamos, the Milagro Milky Way gamma-ray team includes researchers from George Mason University; New York University; Michigan State University; University of California, Irvine; University of California, Santa Cruz; University of Maryland-College Park; University of New Hampshire; and the University of Wisconsin.

The Milagro telescope has been in operation at the Laboratory's Fenton Hill research site since 1998. The continuing operation of Milagro is made possible by support from the National Science Foundation, the Department of Energy's Office of Science, the Laboratory and the University of California's Institute of Geophysics and Planetary Physics.



Milagro is a large pool of water (about the size of a football field), covered with a light-tight barrier, instrumented with 723 light-sensitive detectors known as photo-multiplier tubes (PMTs). Above is a picture of Milagro taken when the cover was inflated. The cover is inflated when the detector needs to be worked on. Photo by Rick Dingus, professor of photography, Texas Tech University



Feedback sought on new EMS Web page

Input is needed from Laboratory personnel on the new Environmental Management System Web page. The Web page contains information on the Lab's new Environmental Management System, including information on Department of Energy requirements, how EMS integrates with integrated safety management, objectives of the EMS as well as how to submit feedback.

Laboratory organizations earlier this year developed division environmental action plans.

To go to the Environmental Management System Web page, go to <http://ems.lanl.gov/> online.

So... what do you think?

Q: The beginning of a new year is typically when people make resolutions regarding everything from their health to work and family obligations. What is your resolution for 2006, and what will you do to fulfill it?



Carol Salazar of Internal Controls and Compliance (CFO-4)

I want to maintain my current exercise and weight program and spend at least one to four hours of additional time reading technical publications to maintain my level of expertise.



Sharad Kelkar of Hydrology, Geochemistry and Geology (EES-6)

I don't do them. I don't believe in Jan. 1 as [the beginning of the] new year. It's just an arbitrary day. Some astronomically significant day would be more meaningful. And I also do not believe in overnight changes.



Ellen Fox of HR Service Center (HR-SC)

I haven't made any resolutions for 2006. I make the most of everyday and try to do my best for myself and my family.



Melissa Sargent and Amanda Randow of Institutional Budgeting (CFO-2)

We decided not to make resolutions because we never keep them.



Jennifer Martinez of Institute of Geophysics and Planetary Physics (IGPP/EES)

Out with the old, in with the new! I have a wonderful two-year-old who I adore. And for my New Year's resolution, I just want to make things so much better for her. I also want to finish up my degree and exercise more.



Judy Hobart and Martha Estrada of HR Service Center (HR-SC)

I want to get out of the office more to walk and drink more water. Martha will make sure I do this!



Natasha Cantu of Staff Relations (HR-SR)

My New Year's resolution is to be less stressed and to do well in school.

PEOPLE



David Clark



Robert Ecke



Siegfried Hecker



Richard Keller



Sallie Keller-McNulty



Antonio Redondo

Six from Los Alamos named 2005 AAAS Fellows

Six current and former Laboratory employees recently were named Fellows for 2005 by the American Association for the Advancement of Science. The AAAS is the world's largest general scientific society, and publisher of the journal, "Science."

The AAAS Fellows for 2005 are

- **David Clark**, director of the Seaborg Institute for Actinide Science in the Nuclear Materials Technology (NMT) Division, for distinguished contributions to the field of actinide science.

- **Robert Ecke** of the Center for Nonlinear Studies (I-CNLS) for distinguished contributions to nonlinear science, particularly the physics of mode-locking, chaos, pattern formation, turbulence and granular dynamics, and for service to the nonlinear science community.

- **Siegfried Hecker**, director emeritus of the Laboratory, and currently visiting professor at Stanford University, for outstanding and extensive research in material sciences and for leadership in assuring U.S. national security and worldwide threat reduction.

- **Richard Keller** of Cell Biology, Structural Biology and Flow Cytometry (B-2) for pioneering achievements in ultra sensitive detection of molecules, including seminal contributions to optogalvanic spectroscopy, intracavity spectroscopy, single molecule spectroscopy and DNA sequencing.

- **Sallie Keller-McNulty**, who recently left Statistical Science (D-1) to become the dean of engineering at Rice University, for distinguished research in the area of confidentiality, for imaginative leadership of the statistics

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In Memoriam

Robert "Robbie" Trujillo

Robert "Robbie" Trujillo passed away Oct. 23, 2005. He was 52.

In May 1976, Trujillo began working for the Laboratory for the Medium Energy Physics (MP-12) as a junior draftsman. Before his retirement, Trujillo was working in the former Site Engineering (ENG) Division.

Trujillo is survived by his wife, Jean of the Engineering Sciences and Applications (ESA) Division, daughter Katrina of the Chemistry (C) Division and son Armando. He also is survived by his mother Ernestine Trujillo, sister Pita, and brothers Paul of Facility Maintenance (FM-TA-55), Marcos of Weapons Manufacturing Technologies (MSM-6) and Jerry.

Lars Soholt

Laboratory retiree Lars Soholt, 60, passed away in November 2005.

Soholt came to the Laboratory in 1985 as a staff member in former Health, Safety and Environment (HSE) Division. While at the Laboratory he worked in the former Environmental Management Program Office, and the former Environmental, Safety and Health (ESH) and Risk Reduction and Environmental Stewardship (RRES) divisions. He retired in 2004.

Soholt received a bachelor's degree in biological science in 1966 and a doctorate in biology in 1971 from the University of Southern California.

Soholt is survived by his mother, Marion; son Tim; brothers James and Martin; sister Kristi; and numerous other relatives.

Brosi Hasslacher

Laboratory retiree Brosi Hasslacher died Nov. 11, 2005. He was 64.

Hasslacher was born in New York City in 1941. He received his bachelor's in physics from Harvard University in 1962 and went on to earn his doctorate in physics from the Institute for Theoretical Physics at the State University of New York at Stony Brook in 1971.

He held fellowship and research positions at the University of Illinois, California Institute of Technology, the Institute for Advanced Study at Princeton and several institutes in France and Switzerland before moving to Los Alamos in 1981 as a visiting scientist at the Center for Nonlinear Studies.

In October 1982, Hasslacher became a staff member in Theoretical (T) Division and went on to found the Institute for Physical Sciences at Los Alamos in 1994. He took a leave of absence in 1999 to help found the Molecular Electronics Corporation. Hasslacher retired from the Lab in 2003.

His diverse research touched upon a variety of topics, including field theory, quantum gravity and black holes. He also published papers on lattice-gas hydrodynamics, robotics and biochemistry. Most recently, Hasslacher had been working on theories of surface plasmonics and Hawking radiation from black holes.

He is survived by his daughter Elisabeth and his two sons Davi and Manuel.



Six from Los Alamos ...

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group at the Laboratory and for energetic service to the statistical community.

• **Antonio Redondo** of Theoretical Biology and Biophysics (T-10) for innovative theoretical models for understanding catalysis of aluminosilicates and for promoting scientific interactions among national laboratories, academia and industry.

"Once again, the scientific excellence and technical prowess of Los Alamos is demonstrated on a national level in this year's selection of six AAAS Fellows from our Laboratory," said Laboratory Director Bob Kuckuck. "We can now add yet another benchmark to our remarkable history of producing great science in the interest of national security."

The tradition of AAAS Fellows began in 1874. This year, AAAS named a total of 376 Fellows, who will be recognized for their contributions to science on Feb. 18 during the AAAS Annual Meeting in St. Louis.

Johnson selected as region's financial executive of the year



Jay Johnson

Jay Johnson, the Laboratory's chief financial officer, recently was selected as the Institute of Management Accountants' 2005 Financial Executive of the Year for IMA's Rocky Mountain Region.

The Financial Executive of the Year Award, established in

1997, recognizes exceptional accomplishments of financial executives throughout the country and honors those who bring leadership, pride and credibility to the accounting and finance professions, according to IMA literature. Johnson was one of 200 nominees across the United States.

At Los Alamos, Johnson has responsibility over Laboratory finance and accounting functions. The Laboratory's annual budget exceeds \$2 billion. As director of the Laboratory's Chief Financial Officer Division (CFO), Johnson oversees six individual business units — ranging from payroll and travel to accounting and internal controls and compliance — and more than 300 employees.

"Jay Johnson has done a tremendous job during the past two years in improving the Laboratory's business practices and restoring credibility to the Laboratory's financial operations," said Rich Marquez, associate Laboratory director for administration. "Jay's innovative and inspirational leadership was a key factor in the transformation of our business practices and our CFO organizations. His selection as an IMA Financial Executive of the Year is richly deserved."

IMA includes a network of nearly 70,000 professionals, and provides a dynamic forum for management accounting and financial professionals to develop and advance their careers through its Certified Management Accountant (CMA) and Certified Financial Manager (CFM) programs, cutting-edge professional research and practice development education, networking, and the advocacy of the highest ethical and professional practices.

Service anniversaries

Editor's note: Because of a problem accessing the employee service anniversaries, the NewsLetter was unable to publish the November and December 2005 anniversaries in those months. This issue contains those two months. The January service anniversaries will be published in a future issue of the NewsLetter.

November

35 years

Elmer Garcia, HSR-5
Diane Quintana, NMT-11
Richard Vigil, HSR-4

30 years

Gerald Coriz, NMT-12
Floyd Gallegos, LANSCE-DO
Richard Lujan, ESA-WDS
Mary Martinez, CFO-2
Ronald Scripsick, HSR-5
Kenneth Thomas, N-4

25 years

Grace Archuleta, ISEC
Naomi Becker, EES-6
Sangkoo Hahn, ISR-4
Scott Larkin, CFO-DO
Rudy Maez, NMT-4
Peggy Maez, ADTR-TRO
Florence Medina, SUP-SYS
Donald Mikkelson, HSR-1
James Ogle, DX-5
Tamara Powers, B-3

20 years

James Anderson, ESA-EPM
Leona Baca, DX-1
Hong Bach, ESA-TSE
Thomas Boorman, CCN-9
John Bounds, N-2
Steven Conradson, MST-8
David Dorsey, HSR-1
Richard Dyer, C-PCS
Cameron Ethridge, PS-13
Richard Hughes, P-21
David Jones, NMT-3
Eva Marie Medina, ADWEM-QAO
Katherine Norskog, IM-1
James Ostic, NMT-DO
Pamela Padilla, HR-OEOD
Beatrice Romero, P-DO
Patricia Salazar, DX-1
Lorraine Segura, PS-4
Stephen Sheffield, DX-2
Brian Thompson, PM-DO
R. Scott Willms, C-CSE
Anna Zurek, MST-8

15 years

Christopher Brislawn, CCS-3

Edward Coennen, MSM-6
Herbert Funsten Jr., ISR-CSSE
Lynne Goodwin, B-5
Jeffrey Griego, MST-7
William Hargraves, HSR-7
Deborah Hayes, S-9
Bette Korber, T-10
Rodman Linn, EES-2
Guy Mcnamara, X-3-SEC6
Timothy Nelson, CMRR
John Pearson, T-10
Mary Stroud, NMT-2

10 years

David Hite, D-4
Drew Kornreich, D-2
Tina Skinner Mckee, X-4
Jose Ortega, NMT-5
Jim Rubin, NMT-DO
Tong Shen, MST-8
Ardyth Simmons, ENV-ECR
Susan Terp, ENV-MAQ
Angela Trujillo, NMT-14

5 years

Audrey Barela, HR-SC
Rex Crook, ENG-DECS
Raymond Guilmette, HSR-12
Christian Hassell, C-DO
Matthew Hecht, CCS-2
Gordon Keating, EES-9
Dennis Montoya, DX-2
David Palmer, ISR-1
Chad Schmidt, ESA-GTS
Keith Thomas, DX-1
Ray Wallace, FM-DO
Julia Wood, FIRE

December

35 years

David Carroll, MST-7
Robert Sander, C-PCS

30 years

Thomas Gunderson, LC-ESH
Leeroy Herrera, CER-1
Kien-Yin Lee, DX-2
Amos Lovato, CCN-7
Teresa Lucero, B-DO
Benjamin Martinez, CCN-3
Michael Mcnaughton, ENV-MAQ
Christopher Quihuis, DX-1
Jerry Romero, C-PCS
Arnold Sierk, T-16
R. Clayton Smith, P-21

25 years

Timothy Benjamin, X-4
David Bish, EES-6
Albert Cordova, CER-30
Jean Dewart, ENV-ERS
Brent Espinoza, MST-7

Larry Gibbons, NMT-3
Joann Herrera, MST-6
Charles Knapp, X-3-SEC2
Linda Kolar, N-3
Carla Lowe, C-INC
Carlos Lujan, CCN-2
Michael Padilla, MSM-4
John Pedicini, X-4
Carolyn Romero, CFO-DO

20 years

Carey Bare, SSMO-SMFP
Julie Canepa, N-NST
Jeanette Esparza, ISEC
Jerry Foropoulos Jr., NMT-1
William Gibbs, ADO
James Hammerberg, X-7
Matthew Hardy, PS-7
Bobbie Harlow, ESA-TSE
Richard Hemphill, ESA-TSE
Lori Kelley, CCN-7
Kevin Kinter, DX-DO
Michael Kluk, IM-3
Mary Labadie, ISR-3
Mary Lucero, S-2
Gilbert Merriman, PS-1
Bryan O'malley, C-AAC
Sammi Owens, N-4
William Powers, X-1
Evelyn Roybal, CCN-5
Alan Shapiro, LANSCE-LC
Clara Trujillo, CCN-2
George Vaughn, CCN-1
Barbara Williams, N-DO

15 years

Mark Domzalski, PADNWP
Doris Ford, NMT-11
Steven Mckee, NMT-15
Constantine Sinnis, P-23
Tracy Wenz, N-1

10 years

John Elliott, HSR-12
Margaret Garduno, CFO-EP
Robert Nemzek, ISR-2

5 years

Frank Cherne, DX-2
Ariane Eberhardt, N-3
Donald Gautier, P-24
John Harris, EP
Charles Helma, B-1
Richard Keyser, ESA-MEE
Orlinda Martinez, CFO-1
Rodney McCabe, MST-6
Mark Nelson, N-2
Heidi Reichert, NMT-2
Randal Rheinheimer, CCN-DO
Nicholas Salazar, NMT-4
April Singleton, N-3
Christopher Tomkins, P-23
Carlos Valdez, NMT-5
Ahmet Zeytun, B-1

This month in history ...

January

1782 — The first American commercial bank opens (Bank of North America).

1822 — New Mexico signs an oath of allegiance to newly independent Mexico.

1902 — The first Rose Bowl game is played in Pasadena, Calif.

1920 — League of Nations holds its first meeting and ratifies the Treaty of Versailles ending World War I.

1929 — The Seeing Eye is established in Nashville, Tenn., with the mission to train dogs to assist the blind.

1943 — The Manhattan Project acquires the Hanford Engineer Works, 780 square miles in eastern Washington, for plutonium production reactors and separator plants.

1945 — Uranium-235 is separated at Oak Ridge for the first time.

1951 — Nuclear testing at the Nevada Test Site begins with a one-kiloton bomb dropped on Frenchman Flats.

1967 — More than 60 nations sign the Outer Space Treaty banning nuclear weapons in space.

1972 — NASA announces its plans for a new space vehicle, the shuttle.

And this from the Jan. 30, 1987, Newsbulletin: One storm brings winter's worth — A mountain of snow buried us Jan. 15-18. Officially, 48 inches of snow fell during the three-day siege, closing down Lab operations Jan. 16. The storm set a record for the townsite, with as much snow falling in 72 hours as residents would normally expect over an entire winter.





Laboratory employee's photos capture nature's beauty, raise funds for learning center

by Steve Sandoval



John Harvey of the Emergency Operations Office (EOO) has worn many hats over the years.

He owned the popular Line Camp nightclub in Pojoaque, which showcased familiar music groups such as Los Lobos, The Judds, Charlie Musslewhite, Asleep at the Wheel, Etta James and Jerry Jeff Walker. "I always had been interested in entertainment, the arts," said Harvey. "I had a lot of enjoyment entertaining the people of Northern New Mexico."

Among other endeavors, Harvey owned an accounting firm in Santa Fe and an art gallery on the City Different's fashionable eastside Canyon Road. He also was part-owner of a Santa Fe company that builds V-8 powered motorcycles.

Harvey organized an exhibit of paintings at the Smithsonian Institution; the paintings later traveled overseas through the United States Information Service.

He was a board member of the Draft and Military Information Service and testified before the House Armed Services Committee about the draft. He is a Vietnam-era veteran.

In the mid 1970s, Harvey, who is the acting EOO chief of staff, successfully led a petition drive in Santa Fe that garnered more than 15,000 signatures from people asking that state government convert the former St. Vincent Hospital in downtown Santa Fe into a nursing home. Harvey was appointed by then Gov. Bruce King to a commission that developed recommendations for uses of "the old pink building" as it is known to longtime Santa Fe residents.

The local newspaper, he said, took photos of Harvey standing on the roof of the hospital holding the petition with the signatures billowing in the wind over the side of the hospital. The effort made national news headlines, Harvey recalled.

More recently, Harvey's photos of wildlife were the subject of a gallery opening in Los Alamos. Gallery openings are common occurrences in art conscious Santa Fe, but this opening was special for Harvey, not so much because the public could see and purchase his photographs but rather, because of how the proceeds will be used.

Photos of wildlife, which were taken in the backyard of his Los Alamos home — his backyard is certified as a wildlife habitat by the National Wildlife Federation — were available for purchase at the gallery opening. "I have found the vistas of the canyon and the Sangre de Cristo Mountains beyond and to the east inspirational," Harvey said in an artist's statement at the gallery opening. The exhibition "Friends in My Backyard," continues through Jan. 28 at HeidiAnna's Gallery.

The color wildlife photos include a gray fox, ravens, sparrows, coyotes, an evening dove and the Sangre de Cristos.

Harvey said 20 percent of the proceeds from sales of his photographs is donated to a planned learning center in La Colonia de Guayabo, a small village of about 1,200 in Costa Rica. One half of the learning center will be a library, with the other half offering computer work stations.

"The library and distance-learning center will offer young people and adults the tools to create a higher quality of life," said Harvey.

About \$1,000 has been raised to date. "But more important is that the gallery opening brought people together and raised awareness of the learning center," said Harvey. "People are volunteering their assistance," he emphasized, noting that volunteer labor, computer and engineering services have been offered as a result of the photo exhibit; construction of the learning center is scheduled to begin this year.

Harvey said he found out about the learning center's needs last spring while at a dinner. He said the Curtis Thomas Sheck Foundation, named after a Santa Fe youth killed in a car accident in 1984, has been raising funds for the learning center. Until last year, the foundation operated informally, gathering books, school supplies, sports equipment, maps and other resources wherever it could. At this dinner, the idea of an art exhibition was sprung, he recalled. Some people at the dinner expressed a fondness for Harvey's wildlife photos. "Well, if they like them so much, let's do a show," said Harvey.

"I believe we need to give back to the community," Harvey continued. "I hope that sharing my photographs will spread the joy, peacefulness and feeling of community that I have with the creatures of the Pajarito Plateau to the lives of others," said Harvey. "I believe that if everyone looks long and deeply in their own backyards, they will find similar treasures."

HeidiAnna's gallery is located at 800 Trinity Drive in Los Alamos.



John Harvey