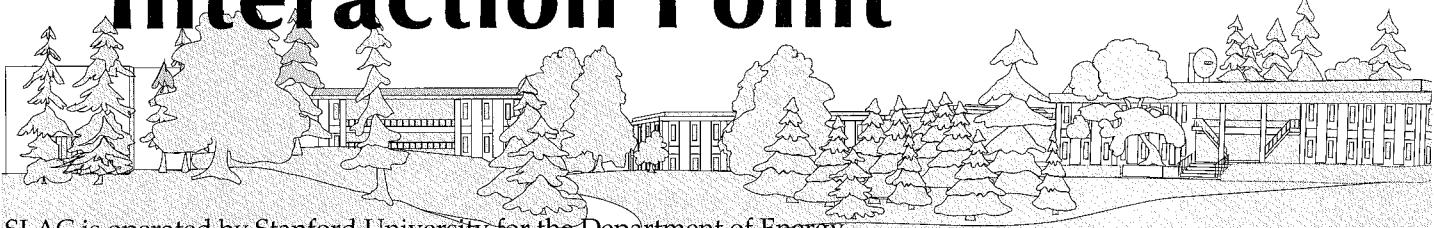


# The Interaction Point

Events and Happenings  
in the SLAC Community  
July 2000, Vol. 11 No. 6



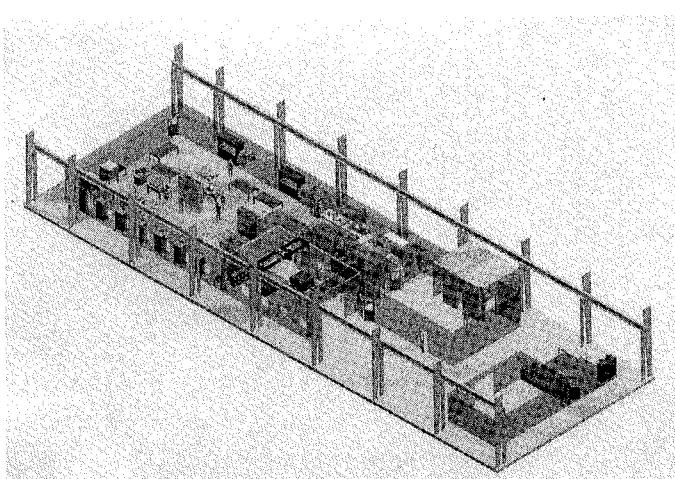
SLAC is operated by Stanford University for the Department of Energy



## GLAST Cleanroom Construction

"WE'VE HAD CLEANROOMS HERE at SLAC before, but this cleanroom has a few interesting features which make it different," said Ossie Millican, 15-year SLAC veteran. He's referring to a cleanroom (see below) that is being built for SLAC's venture into space-based experiments, the GLAST project. The acronym stands for Gamma-ray Large Area Space Telescope, and it's a partnership among DOE, NASA and collaborators in France, Germany, Italy, Japan, and Sweden. We expect that GLAST will make cutting edge discoveries in particle astrophysics after it is launched in late 2005.

A cleanroom is a controlled environment in which loose particles are kept out by using air pressure to pump in filtered air. (And in the scientific world, "cleanroom" is one word). Workers in cleanrooms generally wear outfits affectionately called "bunny suits" since they are white plasticized body covers with hoods. Bunny suits prevent particles from clothing and shoes from entering the system. "Think of your typical office building," says Millican. "That type of building would have maybe 2 to 3 changes of air per hour. This cleanroom will have 60-65 changes per hour requiring an air handling system that will pump 50,000 cubic feet of air per minute."



The HEPA filter system will screen out particles down to .3 microns. The tradeoff, however, is noise, but nowhere near what Shoreline can produce during a rock concert, which is about 110 decibels. The GLAST clean room is designed to run at about 65 decibels, lower than the approximately 80 decibels a driver would hear in a 1985 Toyota on the freeway in rush hour traffic with the windows open.

Previous SLAC cleanrooms were usually constructed for a project and when that project was completed, the rooms were sometimes gutted and used for other work. This is the first time that SLAC is building a recyclable cleanroom. It's being built of modular units that are put together much like a Lego kit, using 4' by 8' panels.

Another difference from previous cleanrooms is that in the past we didn't need certification or inspection by outside agencies. Working with NASA, however, requires that independent auditors inspect this cleanroom in order to maintain a passing grade. Testing conditions include things like monitoring the room with people going in and out, with a variety in the number of people, and with other conditions in order to get a good range of readings.

"The GLAST telescope needs a cleanroom because of the wire bonding of the silicon wafers that are used in the space telescope and to prevent stray particles from being released in weightless conditions," says Millican. There are over 4.5 million of those wires, which means a very cleanroom indeed.

"This room will meet the specification of what is called, by Federal Standard 209, a Class 10,000 room, which includes requirements for the percentage of the ceiling that is covered with air filters, roughly 10-15 percent," says Millican. Put in more common terms, this room will be about the same degree of cleanliness as a hospital surgery. Rigorous observance of protocols will be needed to maintain this level of cleanliness.

(Continued on Page 3)

## Director's Corner

by Jonathan Dorfan



The Laboratory is a busy place and there are many things going on. This month's article will be a brief update on some projects. The column does not include all the ongoing Laboratory efforts—I may well have excluded the project that is most dear to you. With time, I will cover all aspects of the Laboratory.

**Pep II/BaBar:** The machine is running very well, achieving more than 70% of the design peak luminosity. The detector continues to perform excellently—it routinely logs 95% of the delivered luminosity. The goal, to deliver 12 inverse femtobarns by the end of August 2000, has already been achieved. We have extended the run through to the end of October 2000.

**SSRL and SPEAR Upgrade:** SSRL continues to do remarkable science and SPEAR delivers beam with a high percentage of reliability. The SPEAR3 upgrade project just completed a very successful DOE Technical, Cost, Schedule and Management (Lehman) Review. Congratulations to Tom Elioff and the whole SPEAR3 team for a glowing scorecard.

**GLAST** is establishing itself strongly as a project. Contractual agreements between NASA and DOE are being set in place, as are Memoranda of Understanding between the collaborating nations: France, Germany, Italy, Japan, and Sweden and the project. NASA's independent Assessment Committee just completed a three-day review of the instrument—the GLAST team was complimented for being in excellent shape so early in the project.

**Research Office Building:** Our plans for a building for more office and meeting space was approved by the Stanford Trustees recently. The two-story building will have about 150 offices and several large meeting rooms. It will be located on the main quad, close to the A&E building. We will see construction begin late this summer and our goal is to have the building ready for occupancy by next summer.

**DOE Badging Issues:** We finally have some resolution from the DOE about how badges will be handled. It was decided that all Science Laboratories will have a common badge designed by the Office of Science. However, we at the local level can decide on the protocol regarding its use. This new procedure must be implemented by December 2001.

**Online Photos:** Many of you have asked that we bring back the old picture books. Our model digital photo system makes a hard copy of a picture book impractical, but we are planning an online picture book that will be associated with the directory.

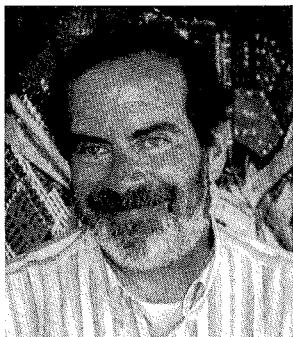
**Communications Task Force:** The group is nearly finished with its fact finding and I will have a report from them in early August. I hope that we are able to implement many of their suggestions in short order.

I would like to thank the many people who have expressed their appreciation of this column. If you have suggestions of how I might improve this communication channel, please don't hesitate to tell me.



A dove built a nest in the walkway between the Central Lab and the Annex.

## GLAST Cleanroom (*continued*)



The GLAST cleanroom will take up 4800 square feet in Building 33, currently the Light Assembly building. Components of the satellite will be installed in the GLAST Tracker structure using a special five-ton crane. The crane must be

designed for high reliability according to NASA requirements for "Critical Lift."

Building 33 is presently in the process of seismic retrofit. Then the crane will be installed in July. Cleanroom construction is estimated to be completed in late November and after that the room will be tested and commissioned.

Millican's experience at SLAC includes machine tools, model making, Engineering Technology and quality control. "Working on a cleanroom for GLAST that will be used for future space-based experiments is a tremendous challenge," Millican says. "SLAC is a great place for providing opportunities to build things, and this cleanroom is no exception."

-P.A. Moore

## Klaisner's Fantasy Ride

A FEW YEARS BACK I was on a 50+ bike ride and Vinnie Biberdorf described her bicycle ride across the country. Her story started me on the path that leads to my trip this year. Also, I read "We Passed This Way," a story about three men from Palo Alto who also rode across the country. I was riding with a friend, Wim Verhoef, and we took up the challenge to ride across the country in 2000. At that time it seemed like a long way off! Each summer we have taken a long ride to try out different modes. We rode around Florida, Chicago to Dayton, and, last summer, from Eugene to Crater Lake and back.

We left Bar Harbor, Maine on June 3. Our route takes us through upstate New York, across into Ontario at Niagra Falls, across Lake Michigan on the Ludington to Manitowok ferry, up the Mississippi past St. Paul, through Minot, North Dakota, through northern Montana, briefly into Alberta, Glacier National Park (where we cross the continental divide), across the North Cascades Highway in Washington and then on to La Push, Washington and the Pacific Ocean. We arrive August 17. I am looking forward to a great adventure.

-Lowell Klaisner

## SLAC Attorney Elected MOCAA President

SLAC ATTORNEY RACHEL CLAUS was elected president of the M&O Contractor Attorneys Association at its inaugural meeting in Denver in April. "I'm really pleased to be the first president of this group. The lawyers involved occupy a small niche compared to the large number of attorneys in government work, but they are involved in issues that are nontrivial due to the importance of the Management and Operating contractors (such as Stanford) to various national concerns." Claus will serve a term of three years. While the initial membership is rather small, "I expect we will experience exponential growth by the end of the year. There is a clear need to share experience and knowledge about the many arcane details that fall to the M&O contractor, and the M&O contractor only."



Recently the following list crossed Claus' desk, and it provides some insight into the complexity of government contract law in general:

Pythagorean theorem: 24 words.

The Lord's prayer: 66 words.

Archimedes' Principle: 67 words.

The 10 Commandments: 179 words.

The Gettysburg Address: 286 words.

The Declaration of Independence: 1,300 words.

US Government regulations on the sale of cabbage: 26,911 words.

Claus is thankful that she is not involved in the sale of cabbage; however, she is involved in legal concerns having impact beyond the M&O and government contracts communities. One example is a recent change in export laws that affects all universities which perform space-based research. Two of Stanford's projects, GLAST and Gravity Probe B, involve placing scientific measuring devices on orbiting satellites. Because all satellite-related items are now subject to the International Traffic in Arms Regulation (ITAR), and ITAR severely restricts contacts with foreigners, international collaborations on these experiments may be imperiled. Claus is working closely with the American Association of Universities to find a long-term solution and simultaneously working with SLAC physicists to maintain the openness of fundamental research.

"I love the wide variety of topics I get to deal with," Claus says. "Every day is different and every day I deal with interesting people. I can't imagine a better job." Now that MOCAA is up and running, Claus and her colleagues will be able to share their expertise.



## Did you Know...?

From the SLAC Library  
Molly M. Moss, mmoss@slac

IN RESPONSE TO THE research needs of SLAC personnel and visiting scientists, the SLAC Library provides access to the collections of institutions worldwide. The volume of publication is exploding and the need for access to the broadest range of information increases. Even the largest libraries are no longer able to provide everything their users need onsite, so libraries have developed cooperative agreements to provide interlibrary loans.

When the SLAC Library cannot supply an article or book from its own collections, the Interlibrary Loan Department will check Stanford University Libraries first. If they do not have the document, then we will search for another lending institution. Books, journal articles, dissertations, microforms, government documents, technical reports, and standards are just some of the types of materials we can obtain. Photocopies are usually supplied for specific journal articles.

## InterLibrary Loans Borrowing Material from Other Libraries

If you cannot find what you want in the SLAC Library, fill out a Book or Photocopy Request form at the Information Desk, or email the information to Georgia Row, SLAC's Interlibrary Loan Specialist, ligmr@slac.stanford.edu. Row goes to campus at least once a week to pick up books or photocopy journal articles. If the item you want is not available at Stanford, there are several other places we can try.

Are you looking for something more obscure? Perhaps you don't know if it is a book or a journal article, or if you are looking for a technical report or a standard? The Library staff members are experts in tracking down obscure citations, reports or standards. Remember, just because it can't be found immediately on the library shelves or in a database, doesn't mean that we can't get it for you! If you have any questions, please call the Library Information Desk at x2411.

## Volunteer Triage Training

IF SOMEONE IS HURT during an emergency, who would help? Here at SLAC, responsible volunteers have made it their mission to help. The Medical Response Team, a division of the Volunteer Emergency Disaster Team, had a training session in April taught by the SLAC Emergency Management Coordinator, Steve Mahaley. The session focused on SLAC-specific information such as where people should go during an emergency, plus first-aid issues such as recognizing signs of shock. The Medical Response Team then conducted a drill with emergency kits, performing first aid on putative victims and putting splints on hypothetical broken bones. Future plans include semi-annual meetings of the triage team as well as periodic site-wide SLAC exercises with the rest of the Emergency Team. Group members will also take CPR and first aid courses offered at SLAC. The courses are free to SLAC employees and are open to everyone who is interested. (See Courses 138 and 138R on the training page.)

<http://www.slac.stanford.edu/esh/training/training.html>

If you have any questions about the Medical Response Team, please contact SLAC Nurse Gloria Labrador at x4383.

-Larissa Williams



Victim: Dale Miller on flat board being attended by (l-r) Von Taylor, Nick Arias, Steve Mahaley, Karen Kruger, Nadine Wright, Nimfa Santos, Larissa Williams.

# **ESH Establishes Environmental Achievement Awards**

*Author's Note: This is the first phase of these awards; most of the activities and projects actually occurred several years ago (in fact, a few of the honorees are no longer at SLAC). However, to keep things in perspective, remember that it took the Catholic Church over 350 years to vindicate the physicist Galileo Galilei on charges of heresy for espousing a heliocentric solar system.*

AS ANNOUNCED ON EARTH Day 2000, the Environment, Safety, and Health Division is acknowledging SLAC staff for their proactive efforts to improve operational efficiency, keep us safe and save money, while protecting the environment, too. Most of these folks don't advertise their accomplishments, but they certainly deserve to be recognized. EPR has produced a handsome certificate for each honoree, to be distributed soon.

Some of the activities described below may now seem routine. Remember that these awards recognize the people who initiated them, before they were fashionable (or mandatory). In addition, cost savings vary widely between projects. However, every activity listed here shares the same goals: to increase efficiency, safety, and environmental protection.

SLAC employees are listed alphabetically, followed by two groups of honorees, and the contributions of each honoree are discussed. The categories are taken from the DOE Waste Minimization and Pollution Prevention Awards Program.

## **James Alexander**

## **SEM**

Hazardous Waste Reduction

Cost-effective recycling of empty propane cylinders

SEM uses small (16-ounce) propane cylinders when working in tight spaces. The cost for off-site disposal was \$375 per cylinder, since they were designated hazardous waste. However, completely emptying the cylinders enabled SLAC to dispose of them as scrap metal, rather than as hazardous waste. As such, PED and ESH developed procedures for handling and disposal of empty cylinders. In particular, SLAC spent \$1,000 on a special device to puncture empty cylinders; the device paid for itself after processing only three cylinders. At an estimated use of ten cylinders processed each month, annual savings of disposal costs are approximately \$45,000.

## **Ron Anderson**

## **Motor Pool**

Source Reduction

Substitution of Hazardous Solvent (Mineral Spirits)

Flammable petroleum-distillate solvents are typically used in parts-washing systems and can expose workers to toxic substances. Ron and his supervisor, Araceli Campo, worked together with a vendor to identify a suitable alternative cleaner. ESH reviewed the MSDS for the substitute solvent (Tekusolv), and reviewed the chemical properties to ensure acceptability for recycling and compliance with applicable regulations. An air permit was not required due to the lowered volatility of the substitute solvent. The Motor Pool reduced SLAC's air permit fees and procured a less hazardous solvent, while still achieving comparable cleaning performance.

## **Forrest Brown**

## **SEM**

Source Reduction

Preventing Pollution due to Polychlorinated Biphenyls (PCBs)

In the past, leaks and spills from electrical transformers containing PCBs have contaminated soil nearby, requiring extensive and expensive cleanup efforts. Beginning in 1989 and under Forrest's direction, PED has processed 21 PCB transformers and reduced the amount of PCBs in active equipment through both source reduction and material substitution. In source reduction, oil-filled transformers have been replaced by air-cooled units, although some transformers were actually eliminated and the on-site power distribution modified to improve efficiency. Material substitution involves draining PCB-contaminated oil and retrofilling with non-PCB oil. Forrest provided technical evaluations of transformer retrofilling techniques to minimize future problems. Finally, he has worked closely with EPWM (now EPR and WM) to allow transformers sent off-site for disposal to be salvaged for their scrap metal content.

*(Continued on Page 6)*

# **ESH Environmental Achievement Awards**

*(continued)*

## **Trish Garriz**

### **Source Reduction**

#### **Reduced Paper Usage through Two-Sided Copying**

## **ESH**

Trish was a "pioneer" in practicing two-sided copying whenever possible and she actively encourages others to do the same. In addition, she creatively arranges originals to minimize the total number of pages required. For example, Trish saves pages routinely by folding a document so as to show the distribution list, which is especially useful for documents with long distribution lists. (Trish is also named below for her efforts in recycling laser-printer toner cartridges.)

## **Balbir Gosai**

## **MFD**

### **Hazardous Materials Use/Re-Use**

#### **Hazardous Waste Exchange with Lawrence Berkeley National Laboratory (LBNL)**

Balbir coordinates environmental aspects of operations at the Plating Shop and the Rinse Water Treatment Plant, among his other duties. Working with SLAC's Waste Minimization Coordinator, Balbir proactively arranged to obtain for re-use approximately 1,500 pounds of excess metal-finishing chemicals from LBNL. Through this win-win arrangement, LBNL paid to have the chemicals shipped to SLAC but saved the cost of disposal, while SLAC received useful chemicals at no cost. Because the chemicals involved were not expensive, SLAC's actual savings were small. Overall, however, the arrangement eliminated 3 to 4 drums of waste and LBNL saved a total of \$1,000 (disposal cost minus cost of transporting chemicals to SLAC).

## **Pat Grygutis**

## **SEM**

### **Source Reduction**

#### **Reduction of Empty Containers from Cooling Tower Chemicals**

Various chemicals are used in SLAC's cooling towers to optimize performance, mainly by reducing blowdown and maximizing heat-exchange efficiency. SLAC once received these treatment chemicals in 55-gallon drums. The drums were transported to the various cooling towers and connected to the chemical feed equipment. Pat worked with plant engineers to retrofit each cooling tower with covered bulk chemical storage, secondary containment and automated feed equipment. This upgrade reduces: (1) the system maintenance required; (2) the frequency of handling chemicals and so the amount of worker exposure; (3) the frequency of transporting chemicals around SLAC, and so the risk of a possible spill or accident; and (4)

the number of empty drums generated. In the first year after implementation, 7700 gallons of bulk chemicals were used to treat the system water. This translates to an annual \$11,000 reduction in disposal costs by eliminating the equivalent number (140) of 55-gallon drums.

## **Ardie Jacob**

## **ESH/WM**

### **Hazardous Waste Reduction**

#### **Replacement of Disposable Batteries with Rechargeable Batteries**

AA-size batteries are typically used in pagers and similar equipment. Ardie took the initiative to replace conventional alkaline batteries with rechargeable nickel-cadmium batteries and obtain a compatible battery charger for the former Environmental Protection and Waste Management Department (since divided into two separate departments: EPR and WM). Ardie then developed procedures for exchanging and recharging batteries. Actual savings vary considerably—a rechargeable battery costs roughly five times as much as a conventional alkaline battery but lasts much longer when handled properly. (Ardie is also named below for her efforts in recycling laser-printer toner cartridges.)

## **Bill Myers**

## **SEM**

### **Integrated Planning and Design/Source Reduction**

#### **Flushing of Cooling-System Pipelines**

Bill was responsible for flushing and rinsing SLAC's beamline cooling systems in order to maintain good heat-removal efficiency and temperature control. Cooling system piping is periodically flushed with a corrosive cleaning solution, and the resulting effluent is typically disposed of as a hazardous waste. To reduce the volume of hazardous waste generated, Bill grouped flushing jobs, so that flushing solutions could be used up to three times. At 50 gallons of chemical per flushing volume, re-use reduces the amount of chemical used, and so the hazardous waste volume generated, by 100 gallons or 67% of the single-pass volume. In addition, the flushing solution is segregated from the rinsewater. The flushing effluent is collected and shipped off-site for disposal as a hazardous waste, but the rinse water is non-hazardous and can be discharged to the sanitary sewer. In practice, three times as much rinse water is used as flushing solution, so waste segregation reduces the volume of hazardous waste by 75%.

*(Continued on Page 7)*

# **ESH Environmental Achievement Awards**

*(continued)*

## **Jim Ogg (retired) [PED] 1 of 2**

Integrated Planning and Design Resulting in Hazardous

Waste Reduction

Characterization and Segregation of Demolition Debris

PED was required to replace an old wooden cooling tower containing asbestos with a more efficient fiberglass tower. Jim was responsible for the project and performed most of the planning and design work. Working with ESH, Jim had the structure's wood analyzed and determined that it was non-hazardous. Jim then planned the demolition to segregate the wood from the asbestos waste. This waste segregation reduced the volume of hazardous waste generated by the demolition by 25 tons, thereby saving approximately \$10,000 in disposal costs.

## **Jim Ogg (retired) [PED] 2 of 2**

Commitment/Participation

Environmentally Conscientious Engineering

During his tenure at SLAC, Jim Ogg investigated numerous measures to reduce hazardous waste generation during the design phase of various projects. Two especially noteworthy projects form the basis for this award. First, Jim worked to improve cooling-tower operating efficiency by: (1) helping to investigate the feasibility of using an ozone generator to control the growth of biological fouling organisms in cooling towers; and (2) helping to better characterize and reduce chemical usage in cooling towers. Second, Jim developed improved on-site water treatment facilities, such as the Batch Treatment Plant (BTP) in Building 460, to treat wastewater generated by periodic flushing of LCW cooling systems. At the same time he worked to reduce the volume of wastewater generated by such cleaning operations. The system design incorporated such pollution prevention measures as secondary containment and isolation from rainwater and stormwater intrusion. The BTP allows SLAC to discharge substantial volumes of rinse water in an environmentally acceptable manner.

## **Mary Regan KLY 1 of 2**

Integrated Planning and Design

Development of Questionnaire for Processes and Projects

On several occasions, Mary has creatively integrated waste minimization and pollution prevention

principles into Klystron Department operations. One example is her development of an approach to characterize each new or modified project and evaluate its environmental and safety aspects. Mary developed a Project/Process Safety Review Questionnaire to identify the project scope and actual or potential impacts. The project manager fills out the questionnaire and provides specific information. For example, types and quantities of chemicals or potentially hazardous substances to be used; types and quantities of wastes to be generated; projected or potential releases to the air or the ground; and, characterizing the discharge of process water or chemicals to the sanitary sewer by any pathway.

## **Mary Regan KLY 2 of 2**

Hazardous Waste Reduction

Recycling of Empty Oil Drums

The Klystron Department routinely procures 55-gallon drums of dielectric oil for use in klystron maintenance activities. Originally, the spent drums were disposed of as hazardous waste. However, the drums are not considered hazardous waste by the State of California when they are emptied and shipped out for re-use. As such, Mary set up a program whereby the vendor takes back the empty drums for re-conditioning and re-use, at no cost to SLAC. Mary worked with Facilities to set up an accumulation area in the salvage yard for empty oil drums until they are picked up by the vendor. Typically, the oil is shipped in drums rather than in bulk, so returning the drums to the vendor avoids the cost of shipping them to an approved recycling facility. At a recycling cost of \$80 per drum, projected annual cost savings exceed \$2,000.

## **Nicholas Vassallo MFD**

Source Reduction

Elimination of Inactive Cleaning Baths and Associated Solvents

Nick encouraged the elimination of 3 to 4 cold-cleaning baths, which typically contained volatile or combustible solvents used to clean machined metal parts. He was aware that the baths were not in active use and operational needs could be met without them. As a result, 40 to 60 gallons of solvent were eliminated along with the need to continue obtaining air permits for these baths. In addition, this reduction in volume correspondingly lowered the risk of a solvent spill.

*(Continued on Page 8)*

## **ESH Environmental Achievement Awards**

*(continued)*

### **Plating Shop Management and Staff      MFD**

#### **Source Reduction**

#### **Reduction of Plating Shop Rinse Water and Chemical Use**

The operators in MFD's Plating Shop and the Rinse Water Treatment Plant (RWTP) have long been coordinating and integrating their operations in order to reduce usage of both water and treatment chemicals. Their cumulative efforts have contributed to efficient and environmentally sound operations. Various good-housekeeping measures already implemented include: reduction of rinse water use; reduction of treatment chemicals; maintaining plating bath integrity; and segregation of rinse water from cleaning or flushing water. Pollution prevention measures at the RWTP include secondary containment of treatment chemical lines, monitoring of metal concentrations in the effluent, treatment of non-hazardous rinse waters, and diligent maintenance of the treatment system components.

### **SLAC Administrative Staff      BSD, ESH, TD**

#### **Affirmative Procurement**

#### **Recycling of Toner Cartridges from Laser Printers**

Through the sustained efforts of SLAC employees from several divisions, laser-printer toner cartridges are now affirmatively procured at SLAC. Larry Fisher of the Purchasing Department recognized the potential for reducing both waste volume and costs by using recycled toner cartridges in place of new ones. Recycled cartridges are offered as an alternative by SLAC's office supply vendor, who picks them up, refurbishes them off-site, and returns them to SLAC for re-use. This process allows cartridges to be recycled several times and at reduced costs. The cost of a recycled toner cartridge is approximately two-thirds that of a new cartridge.

Ardie Jacob, Maureen McNear, and Jennifer Russell tested the use of recycled toner cartridges. Based on the success of these tests, the Purchasing Department implemented a site-wide program to use recycled cartridges and track their use. Since then, Elsa Gulko of Purchasing has encouraged users to purchase recycled cartridges and has helped them resolve any concerns about the change. Approximately 75% of the toner cartridges SLAC now buys are recycled. Recycled toner cartridges cost \$23 to \$28 less than new units, producing an initial cost savings of \$6,000 to \$8,000 over six months.

*-Kirk Stoddard*

## **SLACSpeak: The Website, The Book!**

NEED TO KNOW THE difference between ARDA and ARDB? Wondering what exactly that B-Factory is that everyone keeps talking about? Don't know an MeV from a GeV? If you're new, or if SLAC-talk just isn't your native tongue, help is always just a mouse-click away at the continuously updated SLACSpeak web site (<http://www.slac.stanford.edu/find/slacspeak>).

SLACSpeak is an online database dictionary of terms and acronyms used in all areas of work at SLAC. This database, maintained by SLAC's Archives and History Office, attempts to comprehensively cover all areas of SLAC work which generate their own terms and acronyms. Suggested additions are always welcome, and can be proposed online at [http://www.slac.stanford.edu/spires/slacspeak/add\\_term.html](http://www.slac.stanford.edu/spires/slacspeak/add_term.html) or via e-mail to [jmdeken@slac.stanford.edu](mailto:jmdeken@slac.stanford.edu).

The SLACSpeak database is also a book, which is now available (in limited quantities) in its third edition. The paper edition has been produced for use by those on the SLAC site who do not have ready access to a computer at those moments when their need for a definition strikes. Copies of the paper edition can be obtained from the SLAC Library Circulation Desk.



*Maiko Women Drummers performed at SLAC last month. The program included poetry and song, and was sponsored by WIS and BASE.*

## New Employee Orientation

NEW TO SLAC? YOU'RE welcome to join any of the newly revised and updated orientations geared to providing you with the information you need to do your job and take advantage of SLAC's many activities. The employee orientation program provides an overview of the organization, history, and current research. It tells new employees about SLAC and Stanford University services and resources, such as the Medical Department, HR, Benefits, Payroll, Training, STAP/STRP, the HELP Center, Affirmative Action, and the Ombudsperson's Office. "We even explain all these acronyms and abbreviations," says Susan Hoerger from the Human Resources Department.

There is a description of some of the activities available for SLAC employees, such as the SLAC Garden Club, WIS, the SLAC Fitness Center, and the annual SLAC Run. Employees learn some of the advantages of Stanford/SLAC employment, such as discounts for some Stanford athletic and cultural events. There is also an introduction to SLAC's publications, for example, *The Interaction Point*, *Beam Line*, SLAC Bulletin Board, Web pages, SLAC home page, SLAC Speak and announcements. In addition to providing information about SLAC, orientation gives new employees the opportunity to meet other recent hires and discuss issues of common interest. The orientation program is followed by an optional site tour.

Orientation is held every other month, provided there is sufficient interest. The next orientation will be held on July 19. Individual invitations will go out shortly to employees hired since the last orientation. Longer service employees are also welcome, and can request an invitation by calling (x2358) or sending an e-mail to Susan Hoerger ([shoerger@slac.stanford.edu](mailto:shoerger@slac.stanford.edu)). Orientation is authorized time away from an employee's normal functions; however, employees planning to attend should check with their supervisors to make sure that it doesn't impact operations.

## Volunteers Needed - SLAC Family Day 2000

VOLUNTEERS ARE NEEDED TO help plan SLAC Family Day 2000. This is an event that SLAC sponsors every two years to acknowledge the laboratory community. Family and friends are invited to join in outdoor activities on the Green, games for kids, and lunch. This year we hope to include a reunion of retirees and a special science update to keep them up to date on Lab projects. If you are interested in helping, especially retirees, please call or e-mail Barbara Johnson (x2354, [barbara@slac.stanford.edu](mailto:barbara@slac.stanford.edu)), Lynn Thanash (x2265, [lthana@slac.stanford.edu](mailto:lthana@slac.stanford.edu)), or Brenda Warren (x2355, [bwarren@slac.stanford.edu](mailto:bwarren@slac.stanford.edu)).

## Moss and Massoletti Master the Miles



Molly Moss (left) and friends on Day 6, just north of Santa Barbara.

ARNIE MASSOLETTI, SENIOR S&E Tech in the Klystron Department, and Molly Moss, Access Services Librarian, joined 2800 other cyclists to spend a week riding 570 miles from San Francisco to Los Angeles over 7 days for the 7th annual California AIDS Ride (CAR7), June 4-10, 2000.

The average distance covered in a day was 80 miles, with the longest day at 105 miles and the shortest day 55 miles. "We encountered every kind of weather: cold mornings, a really hot day between King's City and Paso Robles with a high of 110°, cross winds, and rain overnight and during one morning," said Moss. "But we didn't mind the tail winds," added Massoletti.

Each rider in California AIDS Ride 7 agreed to raise a minimum of \$2500 in pledges. The money raised from this event benefits the San Francisco AIDS Foundation and the Los Angeles Gay & Lesbian Center. These organizations provide education, outreach, prevention campaigns, and medical services. Together, Arnie and Molly raised over \$8000. The latest total for CAR7 was \$11.25 million raised. "CAR7 was a very memorable event," both riders agreed, "challenging, exciting and inspiring."

More information about the ride and the organizations that it benefits can be found at: <http://www.aidsride.org>

## Work Safe, Work Smart

There have been no new injuries involving days away from work reported since 1/24/00. The number of calendar days between then and this update of 6/21/00 is 149 days. SLAC's record number of days between claims remains at 150 days.

# A Fond Farewell to Tineke Graafland



Tineke Graafland here is the center of attention with Peggy Tank (l) and Don Gill (r).



Former SLACers who dropped by to see Graafland included (l-r) Al Ashley (formerly in Personnel); Marie Arnold (former Benefits Manager); and Bernie Lighthouse (formerly in Personnel).

(l-r) Dick Bechtel, Carol Bechtel (HR), Fran Balkovich, Connie Courtney (AA/EEO) in front of the birthday chair for Graafland, decorated according to Dutch customs.



Lee Lyon (far right) speaking about Graafland while a group of SLAC staff, friends and retirees listen.

FRIENDS GATHERED AROUND THEA&E Courtyard on May 11 to wish a happy retirement to Tineke Graafland, a SLAC employee for 28 years. Master of Ceremonies Doug Dupen reminded us that he was the first to hire Graafland, not just once, but twice. (She left in 1969 to work in Washington, DC and returned to SLAC again in 1974.) Lee Lyon noted that while most people have one name, Graafland had three: Tineke, Jantine and Tina. "But regardless of the name, she was a fount of information as the Records Manager," said Lyon. SLAC Director Jonathan Dorfan presented Graafland with an aerial photo of SLAC, and commented on the fact that they both had relatives

back in South Africa.

"Tineke's memory for detail and her interest in people are two qualities she is admired for. We'll miss having her around the office, but we hope that she'll attend other retiree parties and drop in to visit us as well," says Carol Bechtel, one of the organizers of the retirement party. Coincidentally, the party was held the day before Graafland's birthday, so she had two parties in one.

## Having a (work-related) Party?

HOW DO WE LET people know about SLAC-related social events in a lab where people work over 400 acres, in 100 buildings, and 24 hours a day? There's a new option on the SLAC Web site in the FleaMarket.

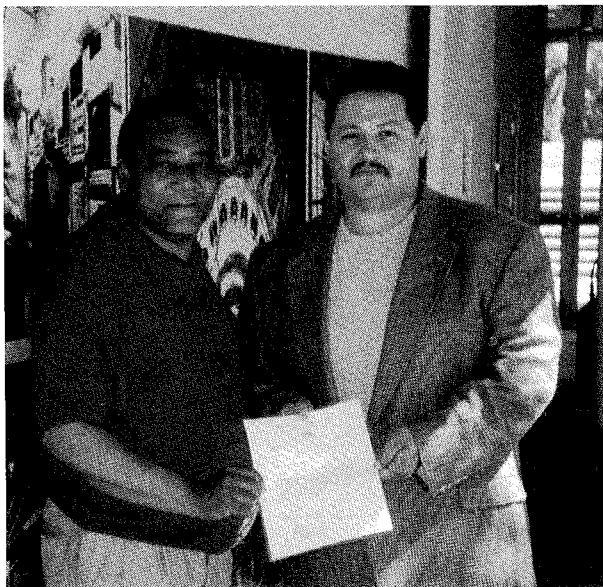
For those of you who are not familiar with the SLAC Home Page, there's a section on the right in a box called Announcements, where news items are posted. Just below that we tell you how many items are posted on the electronic classified ad system, called the

FleaMarket.

Now in addition to buying, selling, and want ads, there is a category called "socials." So if your group is planning a retirement party for John Doe, then you can post the details of what and where on line. And retirees who know John Doe can view the FleaMarket from their home browsers. (But off site people cannot post an announcement or a classified ad.)

Save a tree, post your social event on line.

## Nicholas C. "Nixx" Arias Wins Ashley Fellowship



NICHOLAS ARIAS WAS SELECTED as the first recipient of the Al Ashley Career Development Fellowship for his commitment to personal learning, laboratory service and community involvement. "I'm pleased to receive this honor. I plan to use the year to attend school full time to acquire my BS degree in computer science," says Arias. He will continue to work with the Next Linear Collider Program part-time depending on his class schedule. "I've always wanted get my degree. My experiences and work at the Lab has convinced me of the importance of education in today's professional world. It's the opportunity of a lifetime. And I know that I can make a greater contribution to the lab by learning more."

Community service is also part of Arias' life. Currently he is president of La Comision Honorifica Mexicana in Union City. He has also participated in the "Cinco de Mayo" and "16 de Septiembre" events and parades in Union City and Oakland. He has been a volunteer musician for fairs, parades and special events. He instructs young people who have no means to develop their musical interests on the piano.

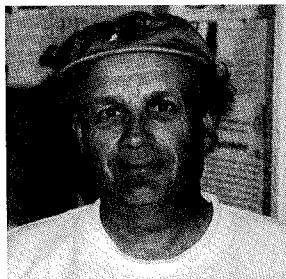
Arias' volunteer activities at the lab include a diverse range of activities, from being a member of the Emergency Disaster Team to serving beverages on Family Day and being a greeter at the Celebration Honoring Burton Richter. During the Lepton Photon Symposium, he assisted the transportation chairman with all aspects of transporting over 700 participants. He has been active with the Black Association of SLAC Employees for special projects and he is currently a volunteer for the XX International Linac Conference this year.

"It will be a busy but positive year being a full time student, working part time, and continuing my volunteer work in the community. I am grateful to Al Ashley and this fellowship. I feel very fortunate," says Arias.

The establishment of the Alonzo W. Ashley Career Development Fellowship occurred in 1999, when Ashley retired. The Director at that time, Burton Richter, announced the creation of the Fellowship to honor Ashley. During Ashley's 30-year tenure at the Laboratory, he pioneered programs that promoted diversity and encouraged career development for employees and career exploration for talented students. This is the first award of the Ashley Fellowship and it is meant to continue to honor the spirit of Ashley's work.

-P.A. Moore

## 25 in a Row



"THIS WAS THE HOTTEST year ever, and the most difficult conditions, but I did it," says Tom Knight. He's referring to his 25th consecutive Bay to Breakers run. "I started back in 1976 and it's always been a goal of mine to do 25," says Knight. "Maybe now I have to revise my goals," he added jokingly.

Unlike many others in the crowd who are there to participate in a happening, Knight is there to run. His time has varied, depending on conditions. "My best was about a 6-minute mile pace. My slowest pace was a couple of years ago when I ran with my ten-year old

son, but hey, we had a good time," says Knight. Let's cheer him on for the next twenty-five!

Knight had run cross country in high school. His best friend, Dr. Robert J. Moore, a medical physicist who passed away six years ago, got him back into running in 1974. Moore encouraged Knight on his first Bay to Breakers in 1976.

"After that, I just kept on running and completed 20 marathons between 1977 and 1987," said Knight. He has helped measure countless road running courses since 1980, including the 1984 Olympic Marathon Course in Los Angeles with Bob Letson of San Diego. Here at SLAC, Knight works as a Computing Info Systems Analyst with the ARDA and ARDB Departments.



## News from the Web Information Manager

Ruth McDunn, [mcdunn@slac](mailto:mcdunn@slac)

## Feedback Needed on SLAC Home Page Redesign

I'm getting ready to start on the redesign of the main SLAC home pages. Yes, I know, it is long past due. Since these pages belong to you, I would like your input as to content and features. To facilitate this process, a web form is available at [www2.slac.stanford.edu/techpubs/WIM/newhomepage.html](http://www2.slac.stanford.edu/techpubs/WIM/newhomepage.html) to collect your input. Answer following six questions:

1. Which page do you use as your "default" page, that is, the page that appears in your browser when you open it up?
2. In the next iteration of the home pages, the Welcome page will be directed even more toward the public and the Detailed/Highlighted pages will be intended for SLAC staff and user use. Which features would you like to see on these pages?
3. What other features/links would you like on these pages? Please be specific.
4. In the design process, there are two possible and very different approaches we could take - from just revising and refining the current pages to starting entirely from scratch. Where on the continuum do you think we should direct our efforts?
5. Are there any web sites for facilities similar to SLAC that you particularly like? Are there specific features you like on these web sites? Please provide full URLs with a brief description of what you like or dislike about these sites.
6. Are you interested in participating in focus groups during the early stages of the design process?

Please, take some time to send me your ideas for the next version of the Laboratory home pages!

## Every Month is Safety Month



EVEN THOUGH JUNE IS over, and it's the end of National Safety Month, there's no rest from safety issues. Summer is here, so it's important to develop sensitivity to hazards while on vacation, at home and in the workplace. After all, if you pull a muscle while rappelling off a mountain or break a leg water skiing, it limits your activities at home or work and may even make you more susceptible to further injuries. Perhaps your idea of a vacation is catching the rays by the pool and people watching. Be aware: slip, trip and fall possibilities are lurking, not to mention eyestrain and sunburn.

Inattention leads to injury. Inattention might be from that carefree spirit during summer activities or the opposite, the stress of production pressure at work. The result is the same: higher risk of an accident. The Operating Safety Committee members (<http://www.slac.stanford.edu/esh/slaconly/oscmem.html>) meet monthly (even in summer) in an ongoing effort to propose programs or relay information which attempts to alleviate such risks at SLAC.

What are some reminders you've developed to help you remember to wear your personal protective equipment (PPE)? What do you say before you lift a box with your body in the right position? Send me an e-mail ([dabney@slac.stanford.edu](mailto:dabney@slac.stanford.edu)) or call me (x3603) with any suggestions. Whether it's a pre-work checklist or simply storing your gloves in your hardhat, your idea may help someone else keep out of danger's way.

-Janice Dabney

## SLAC Milestones

### RETIRED

Burgess, William, EFD, 6/1/00  
Catania, Fred (Felice), EFD, 6/1/00  
Ewing, Patricia, Petty Cash, 6/15/00  
Shoemaker, Carol, Travel, 4/1/00  
Taylor, Thomas, AD, 7/1/00

### DEATHS

Field, Winston, 6/19/00, age 91. SLAC's General Counsel during negotiations of the original contract between DOE and Stanford.

### AWARDS

Arias, Nicholas, NLC, Al Ashley Career Development Fellowship (see article on page 11)

### HONORS

Claus, Rachel, Legal Counsel, elected President of the M&O Contractors Attorneys Association (MOCAA) (see article on page 3)

### "ATTA-BOY"

Knight, Tom, for 25 consecutive Bay to Breakers Runs (see Article on Page 11)

Do you have a milestone you would like published in TIP? Email [tip@slac.stanford.edu](mailto:tip@slac.stanford.edu) to have it included.