

Operated by Stanford University for the Department of Energy

Damping Rings in the 21st Century

THE SOUTH DAMPING RING was built and commissioned in 1982, and the North Damping Ring was built in 1984 and commissioned in 1985. Over the years, their purpose has been to make small emittance beams for the SLC. Since the damping rings are now expected to be around for another 10 years (serving as injectors for PEP-II)—far exceeding their expected life cycle—it was decided to get together the people at SLAC who could focus on making the Damping Rings run smoothly and efficiently into the next century.

A workshop, organized by Patrick Krejcik and Jym Clendenin, was held in April to assess the status and needs of the Damping Rings for the era of PEP-II (DR2000). The Workshop was subdivided into five sessions: Reliability and Engineering Issues; Operational Aspects; Accelerator Physics and Beam Dynamics Issues; RF Systems; and Diagnostics. During the workshop, future performance requirements were discussed, including maintaining SLC capability for future collider runs and for some fixed target experiments; interlaced operation of End Station and PEP-II injection; and exploring ways of using the rings for NLC studies and prototyping.

The PEP-II era will not require intensities as high as SLC, and this will cause less strain on



(Photos courtesy of R. Pennacchi)

(l-r) Roslind Pennacchi, Bobby McKee, Jym Clendenin, Patrick Krejcik, and Franz-Josef Decker at the Damping Ring 2000 Conference.

the Damping Rings. The operations staff will be able to take on more of the routine operations of the Damping Rings than in the past, with additional help from the new area managers. The goal is to have the rings perform to produce the specified beam parameters with an insignificant amount of downtime. This status will be achieved by improving the rings where necessary, not by increasing the maintenance effort. The items that can be acted upon in the immediate future are largely engineering issues to improve the integrated availability of the damping rings.

The workshop encouraged attendees to discuss ways of improving the beam quality, the machine tunability, and beam diagnostics and instrumentation. Some of these issues might be motivated by studies into future linear collider issues, or they may be pre-emptive for PEP-II future requirements for a higher brightness injector. The proceedings from DR2000 will make a useful reference and a guide for future operation. They will be available on the Accelerator Department Home Page at <http://www.slac.stanford.edu/grp/ad/ad.html>.

(See accompanying article "New Area Managers" on Page 7.)



(l-r) Theo Kotseroglou, Paul Corredoura, Howard Smith, and Rich Tighe.

Sunshine and Celebrations



Director Burton Richter speaks during the spring celebration.



(l-r) Carol Bechtel and Barbara Johnson (Personnel) enjoy the beautiful day in a relaxing way.



Staff show rapt attention to what is being said while still enjoying the sun and food.

Let's Talk

WANT TO DO A good deed that only requires talking? Here's your chance. An organization called the Community Committee for International Students sponsors the English-in-Action Program. English-speaking volunteers are matched with international students, scholars and spouses who want to practice their conversational skill. The time commitment is one hour a week, at mutually agreed upon time and location. No experience is required, simply an interest in helping others. Contact Dee Gustavson at (650) 961-3539 or (650) 326-5252 for more information.

Viva Italo-Americano Panta Raimondi

FOR SEVERAL YEARS, THE Museo Italo-Americano, located at Fort Mason in San Francisco, has been enriching the cultural life of the Bay Area, with an integration of Italian and Californian Arts and Sciences. This year the Museo Italo-Americano will be celebrating its 20th anniversary with three new exhibitions. One of them, "Recent Arrivals: Images and Profiles of Success" celebrates immigrants who, in the Post-World War II era, have made significant contributions in the Arts and Sciences professions. Pantaleo Raimondi, a physicist in the Accelerator Department, has been elected to be featured as an Italian scientist working in the Bay Area.

Vanda Sanzogni (SLD) was asked by a curator of the Museo Italo-Americano if she could provide them with the name of a physicist of Italian descent, and she did not hesitate to recommend Raimondi. She states, "I met Pantaleo Raimondi in January 1997, a young physicist full of passion and enthusiasm. He has been working on the SLC at SLAC since 1991. He loves 'his' machine but humbly stated to the Museo Italo-Americano's interviewer when asked to define his job: 'I'm merely a mechanic.' The reality is that his creative ideas and determination have been the driving force for achieving the recent outstanding performance of the SLC." Pantaleo's colleagues believe the recognition for his contributions to SLAC is well-deserved. Congratulations, Panta!

If you are interested in seeing the exhibitions, they will be on display from June 19 through September 6 at the Museo Italo-Americano at Fort Mason.

—Vanda Sanzogni

Recycling Update



16 TONS AND WHAT do you get...Jean Hubbard (Purchasing) announced that SLAC has received \$587.83 for its first quarter, recycling almost 16 tons of materials with our new system. SLAC started a pilot project in two build-ings,

A&E and the Central Lab, to recycle paper, cardboard and beverage containers. A reminder: cardboard and ledger (white) paper give the highest rate of return. Please do not throw newspapers or colored paper in the white-paper only containers.

Annual Service Awards Presentation

THE ANNUAL SERVICE AWARDS dinner was held on Thursday, April 2, to honor the twenty-nine 20-Year and twenty-one 30-Year SLAC employees. That evening, well-dressed SLAC folks and their guests arrived at the Stanford Faculty Club for this event, organized by Al Ashley and Karen McClenahan (Personnel). After gathering in the Gold Lounge for a reception, the celebrants and their guests enjoyed a fine dinner in the main dining hall. McClenahan gave an excellent retrospective of the years 1967 (noting to a bemused audience that they were at SLAC before she was even born!) and 1977.

Director Burton Richter gave highlights of some long-timer careers. For instance, he noted that Fran Balkovich had seen the most technical changes in her role as telephone operator. Some staff members came to SLAC at a very young age, such as Carolyn Burton who came to the lab fresh out of high school, and Sandy Bruner, a CETA recruit who was trained by Norm Dean as a vacuum technician. Glen Kerr was the first SSRL beam line duty operator and became the first SPEAR operator for the synchrotron program. "I appreciate all you have done at the lab to make it work," stated Burton Richter. "None of it would have happened without the people doing the work. This evening is the lab's opportunity to tell you how wonderful you are and how much we appreciate you!"

OSC Explained

JANICE DABNEY, CHAIR OF Operating Safety Committee (OSC), reminds everyone that OSC is "the people's safety committee." Each division has one or more representatives who can make your safety concerns heard throughout the year. Current projects being discussed by the OSC include moped and bicycle safety, electrical cart proposal implementation, and the beginnings of a Strains/Sprains Working Group, headed by Barbara Barrera of BABAR. Call Dabney at x3603 for the name of your division rep(s) or for more information.

Work Safe, Work Smart

According to Sharon Haynes, Worker's Compensation Coordinator, incidents occurred on 3/11/98 and 3/30/98 that involved days away from work. The number of calendar days between claims was 23 days and 19 days, respectively. Previously, the last claim involving days away from work occurred on 2/16/98. SLAC's record number of days between claims is 150 days.

Deputy Director Sidney Drell gave the after-dinner speech. He highlighted the evolution of scientific thought over the past five decades. He gave examples from Lord Rutherford's gold foil experiments to current efforts at CERN, DESY and Fermilab. "Many of you participated in helping Burton build SPEAR," he reminded the audience. He explained how the scientific achievements at research facilities throughout the world created a periodic table of particles and description of the unification of the forces called the Standard Model. SLAC played a significant part in this accomplishment. Looking around the room, he asked "What brought us together here? Luck, serendipity..." Highlighting lab history and efforts through the decades, Drell closed with mention of the next generation of linear colliders. SLAC will be a major intellectual and technical contributor to this effort.

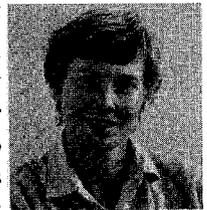
One by one, the Twenty Year recipients came to the front and shook the Director's hand as he gave them a memento of the occasion. After posing for their class photo, they returned to their seats to cheer on the Thirty Year lab pioneers as they received a beam tree and a 30-year pin. As the evening drew to a close, many learned more about their colleagues and left with a few more friends at the lab.

—Nina Stolar

(See Pages 4 and 5 for photos of this event.)

Kudos to Quinn

SLAC THEORIST HELEN QUINN has been elected a Fellow of the American Academy of Arts and Sciences for her "distinguished contributions to the profession." Quinn is currently working with BABAR coordinating a major study of the expected physics output of the experiment and related theoretical work. Her paper on CP Violation (co-authored with Peccei) is widely recognized as a seminal work in the field.



The Academy was founded in 1780 for the purpose of "advancing the interest, honor, dignity, and happiness of a free, independent, and virtuous people." Quinn and other new members will be formally welcomed at an Induction Ceremony in Cambridge in October. Inductees from SLAC/Stanford last year were Martin Perl and Condoleeza Rice.

SLAC Honors Twenty and Thirty-Year

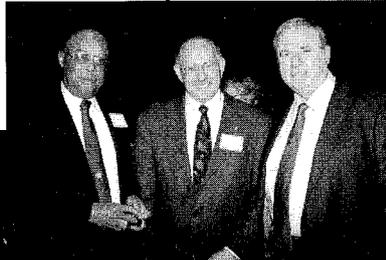
20 Year Award Recipients



(l-r) Co-organizer Al Ashley and 20-year Recipient Carl Rago



(l-r) Robbie Robinson and James Alexander



(l-r) Ben Smith, Jonathan Dorfan, and John Beach



Jose and Josefina Espino



SueVon Gee and Lawrence Hee



Diana Gregory and her mother, Sylvia Gregory



Mistress of Ceremonies, Karen McClenahan



Fran and Peter Balkovich



Mike and Ululani Smith



Heinz and Siglinde Schwarz

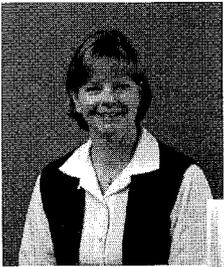


(Back row, l-r) Joseph Yu, Heinz Schwarz, James McDonald, Gary Howell, Dan Wright, Ben Smith, James Weaver, Robbie Robinson, Carl Rago, John Beach. (Front row, l-r) Brigitte Wilkinson, Nancy Spencer, Diana Gregory, SueVon Gee, Michael Smith, Sal Orlando, Jose Espino, Richard Boyce, James Alexander, Fran Balkovich.

Photos not available for: Eveline Bruner, MFD; Joan Hennes, Accounting; R. Keith Jobe, Experimental Group C; Glen Kerr, SSRL; Tom Knight, ARD-A; Paul Phizackerley, SSRL; Ralph Robertson, Power Conversion; John Yang, SSRL.

Employees at Gala Affair

30 Year Award Recipients



*Kathy Asher,
Technical
Division Office*



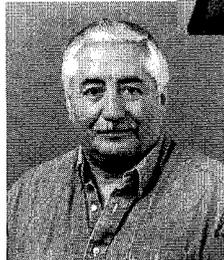
*Arthur I. Bienenstock,
SSRL*



*Elliott Bloom,
Experimental
Group K*



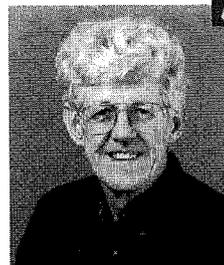
*Carolyn Burton,
Controls*



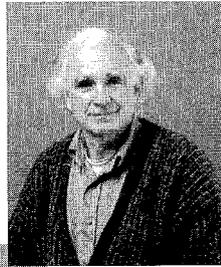
*Arthur A. Candia,
EFD/Cryogenics*



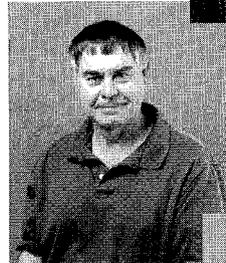
*Patrick J. Conroy,
Plant Engineering*



*R. Les Cottrell,
Computing Services*



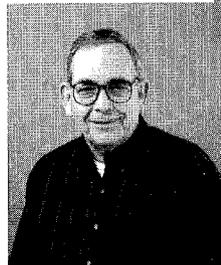
*David Fryberger,
Experimental
Facilities*



*Ralph G. Johnson,
Controls*



*Bernard F. Lighthouse,
Personnel*



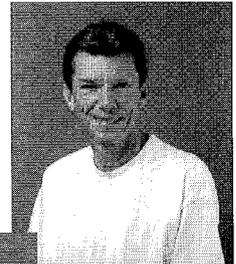
*Wayne A. Linebarger,
Accelerator*



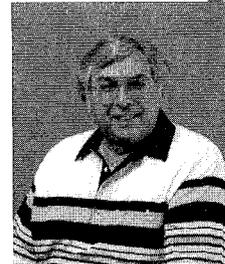
*Ruth Thor Nelson,
Personnel*



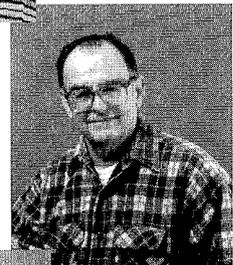
*Gerard Oxoby,
Experimental Group B*



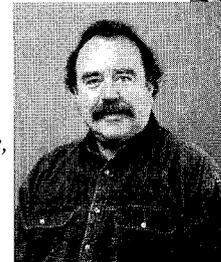
*Frank Rothacker,
Computation
Group*



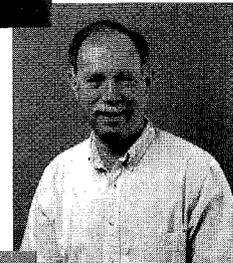
*Domingo Sanchez,
EFD/Cryogenics*



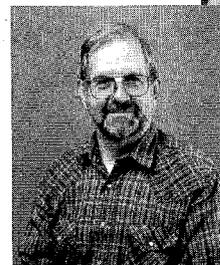
*William Smith,
Power
Conversion*



*Joseph Sodja,
Accelerator*



*Thomas B. Weber,
EFD/Cryogenics*



*Bobbie J. Young,
Controls*

Photos not available for: Vern I. Hamilton, SLAC Large Detector and and Dmitri Talaska, EFD/Cryogenics.

Jim Scott Passes Away



JIM SCOTT, SLAC'S FIRE Marshall, died Saturday, April 18, 1998. Jim was 49 years old. He is survived by his wife Barbara and his two sons, Greg, 17, and Jeff, 11.

Jim joined SLAC and the SHA Department in 1991. He was involved in the fire protection work for the laboratory's major projects, including BABAR and PEP-II. Jim also served part-time as the SLD Safety Officer. Over the years, he developed a reputation for his outstanding knowledge in his chosen field, and his willingness to help others.

Jim was a loving family man. He and Barbara were married for twenty-five years. They met at the University of Maryland. Jim was active with his sons' extracurricular activities. He was President of the Little League and also involved with their soccer activities. The entire family frequently enjoyed bowling together. SLAC was fortunate when Jim decided to relocate from Maryland, motivated by the opportunity that the position offered and to spend more time with his family.

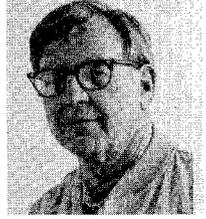
A Jersey City native, Jim never wavered from his allegiance to the Baltimore Orioles, and his dislike of the New York Yankees. He also enjoyed Stanford football and basketball. He amazed his friends with his depth of knowledge of sports. Jim displayed his sense of humor when teasing friends who supported rival teams.

Jim graduated with honors from the University of Maryland where he earned a BS in Fire Protection Engineering. He also earned a Master's Degree in Engineering Administration from George Washington University. Jim's notable career included engineering work at the GSA, the National Bureau of Standards, and at Verlan Insurance. Before coming to SLAC, Jim was a Fire Marshall for the state of Maryland, owned a consulting business, and worked at DOE headquarters in Germantown, Maryland.

The family will hold a memorial service in Jim's honor at the SLAC Cafeteria, scheduled for May 16, 1998 at 3pm.

-Jack Hahn

R. Gordon Gilbert



FRIENDS AND COLLEAGUES OF R. Gordon Gilbert were saddened to hear of his passing at age 75 on April 4, 1998. Gilbert was a pioneer in accelerator physics, having worked with the 45-inch cyclotron that was part of the Manhattan project. During World War II, he was employed by Washington University, Oak Ridge, and Los Alamos. An interesting note is that Gilbert became disenchanted with physics in 1947 and switched to Political Science, passing his PhD orals in 1949.

He was once again drawn to physics in 1953 when he was put in charge of operations and maintenance of the MARK III accelerator at Stanford. Gilbert had a long and distinguished career at Stanford's High Energy Physics Laboratory and SLAC's Accelerator Operations Group until his retirement after 33 years of service in 1986. Gilbert, in conjunction with John Jasberg, established the standards for implementing radiation safety for the operation of the SLAC accelerator complex.

After his retirement, Gilbert became a trustee of the Palo Alto Co-Op. In addition to serving on the board of directors, he also helped with the market's delivery service to shut-ins. He was also a docent for the Long Marine Lab in Santa Cruz and played the bassoon in local orchestras.

Gilbert is survived by his wife of 56 years, Genevieve, their children Elizabeth, Stewart and Tracy, David and Pat, Allan and Diane, as well as a granddaughter, Sara.-

The ETA has Arrived

RECENTLY THE ES&H EMPLOYEE Training Assessment (ETA-), formerly the Task/Hazard Survey, was distributed to SLAC managers. The ETA identifies Environment, Safety, and Health (ES&H) training required by regulations, DOE orders, or SLAC policies. With the recent changes in the ES&H training program, it is important that SLAC supervisors and managers review and complete the ETA for their employees and themselves.

More information can be found at: <http://www.slac.stanford.edu/esh/training/training.html>.

Under New Management



THE NEW AREA MANAGERS of the Damping Rings are Roslind Pennacchi (left), along with her capable assistant, Kathy Burrows. After years of experience as both Linac and Positron Area Managers, they look forward to the many challenges of learning this new and complicated system.

Their goals are to improve the uptime and reliability of the Damping Rings, which are complete accelerator systems in miniature, containing all the complex subsystems such as magnets, septa, kickers, rf, and more. Pennacchi and Burrows expect to enhance the general perception of the rings and show that they can be a rewarding and satisfying system on which to work. By improving communication with experienced technicians and responsible engineers, they hope to receive advice on overall improvements in hardware and procedures. These suggestions will be implemented whenever possible.

With continued support and downtime improvements, the new managers are confident that their goals can be accomplished.

Keeping in Touch through the Years



Dorothea and Lynn Boyer

LYNN BOYER, RETIRED FROM SLAC in the 80's, enjoys receiving TIP each month. He wrote to say hello to all his friends and to share word of his 60th wedding anniversary. It's nice to keep in touch with our retirees!

Safety Stand Down Summary

THE ANNUAL SAFETY & ENVIRONMENTAL Discussions were held on February 27, 1998. SLAC employees and users formed 88 discussion groups around the site for the two-hour sessions. A total of 172 issues were identified. Of these, 43 will be addressed on a site-wide level and 129 will be addressed by the group or division which identified the safety concern. The problems most often identified were Slips, Trips and Falls; Electrical Safety; and Repetitive Strain/Computer Work. The most frequent causes were Maintenance, Policy or Procedure Implementation, Improper Tools or Equipment, and General Housing.

Questionnaire Results for 1997

Participants who attended the stand down in 1997 were given a questionnaire to gauge the effectiveness of the past year's discussions. While 27% of the respondents felt the discussions were very valuable, 67% felt they were of some value, and 6% thought they were of no value. In terms of management response, 38% felt SLAC managers were very responsive, 51% felt they were somewhat responsive, and 8% felt the response was inadequate. Finally, regarding communication of information back to staff, 49% felt that information was communicated well, 36% thought it was communicated partially, and 13% thought communication was poor.

Focus Group

After the 1998 discussions, a focus group of randomly-selected SLAC employees was formed in order to obtain feedback on the discussions. According to the focus group, people liked having the opportunity to express concerns and the chance to discuss issues as a group instead of individual polling. There was frustration about a perceived lack of progress to fix some items identified last year, and also concern expressed about lack of enforcement/power behind past suggestions.

The Next Step

Corrective action information is being formulated by each division, and site-wide corrective action will be suggested by SEDAC and approved by the ES&HCC. The issues and the related corrective actions will be available in a searchable format on the Web, at a URL linked to the ES&H home page, as soon as the information is collected and reviewed.

-E. Moore

Get QuickNews!

CATCH THE SCENE EVERY Friday using Web Announcements. QuickNews consists of short takes on what's happening at the lab, also available by subscription on email.

Brad Youngman Named Seismic Project Manager



BRAD YOUNGMAN HAS BEEN appointed by SLAC Director Burton Richter to be the Seismic Project Manager effective May 1, 1998. In addition, Brad will work for the Technical Division on engineering activities in support of the NLC effort. Brad's new duties will include prioritizing work, estimating cost, performing a "risk analysis," and figuring out what needs to be done. The SLAC Earthquake Safety Committee will review the proposals for work being done on buildings and

have ES&H conduct inspections.

Brad has worked for SLAC for the past 16 years, starting at SSRL and later moving to EFD. While his role in EFD has been that of an engineer, he has also been active with the Earthquake Committee. He is a member of the Earthquake Engineering Research Institute, and the International Congress of Building Officials. These affiliations help keep him up-to-date on seismic issues.

Several years ago, a Seismic Committee was formed at SLAC to start development of new design and seismic review standards that were required by law. David Coward is chairman of the committee, which consists of people from ES&H, SSRL, Plant Engineering, Business Services, and the Research Division. With the help of outside expert consultants, the Committee began reviewing all on-site buildings for both structure (including egress of buildings and offices) and contents to see if they would be deemed safe in the case of an earthquake. Each building has or will go through various phases to check on its seismic integrity. Phase 1 consists of screening building blueprints, conducting physical building inspections, and writing a report. Phase 2 consists of detailed examinations which might include computer models and recommendations on how to fix buildings. Over 100 buildings have been looked at thus far and there is a list of things to take care of, some of which can be handled by SLAC and some of which will be contracted out. As part of his new duties, Brad will review all Phase 1 and Phase 2 reports. Should the need occur, he may call for a Phase 3 on a building, which is detailed design work that will go out for contractor bid on the work to be done.

Work on seismic integrity has already been started on-site. It is anticipated that seismic work around SLAC will take several years. Building 280 and the Auditorium breezeway have been retrofitted to meet seismic codes, and work is scheduled this year on Buildings 34, 28 and the Fire Station.

FactinOs

Afternoon Delights

As of May 1st, the Cafeteria will remain open until 6pm, serving soups and salads, desserts and drinks. The longer hours are on a trial basis, so if you want to support this new service, bring money and an appetite.

Shampoos and Soaps

It's time for our summer travel season. That means we're asking you to collect those travel-size shampoos and soaps from hotels and bring them back to SLAC for donation to various charitable agencies in our area.

Drell Fest

To mark the retirement of Sidney Drell, SLAC will host a symposium and dinner on July 31. To register for one or both of the events, the on-line registration is open for one month only. To participate in this event, it is important that you register early at <http://www.slac.stanford.edu/conf/drell98>.

Changes, Changes

With the BaBarians at the gate, we have a space crunch. The need for offices and conference rooms is very real. A space committee has been conducting serious research into what we can do to improve our use of existing space, since we can't afford any new buildings. Look for space changes to start this summer and continue into next year.

Traffic Enforcement

Now that the rain has stopped, our local traffic enforcers will find it safe and dry to get out there and zap the speeders with the radar gun. Parking restrictions are also being enforced. We complained about traffic safety, and now we have traffic regulations. Smile when you get that ticket.