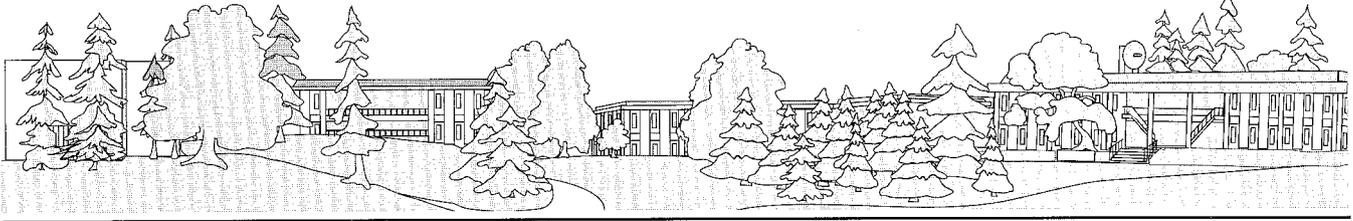


The Interaction Point

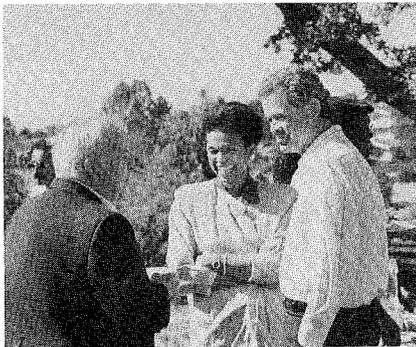
Events and Happenings
in the SLAC Community
July 1990, Vol. 1, No. 3



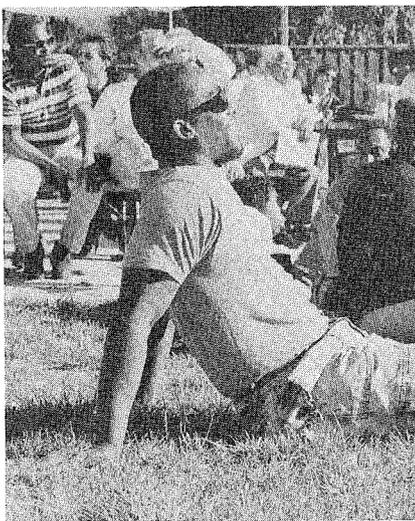
BASE Sponsors

FIRST SLAC JUNETEENTH CELEBRATION

WITH THE UNOFFICIAL THEME "LET THE GOOD TIMES ROLL," the First Annual Juneteenth Barbecue sponsored by the Black Association of SLAC Employees (BASE) was held June 15, 1990, and everybody seemed to do just that: Let the good times roll!



SLAC Director Burt Richter, left, enjoying Juneteenth afternoon and conversation with Joan Minor and Lee Lyon, both of Personnel. Behind Richter is head of Furman Pollins, Property Control.



Darryl Ragland, Property Control, "letting the good times roll."

In addition to "Big John" Taylor's special barbecue that everyone raved about, there were potato salads, baked beans, banana puddings, pound cakes, 7-Up cakes, sweet dough pies, peach cobblers, pecan pies, homemade ice cream, and homemade cakes prepared and served through a combined effort of BASE members.

Chairmen of the committees were as follows: Food, Pauline Wethington, Public Affairs, and Ben Smith, Final Focus Test Beam; Cooking, Big John, Facilities; Tickets, Flyer, & Collection, George Maclin, Computing Services; Clean-Up, Roosevelt Robinson, Plant Maintenance; Serving and Set-Up, Sandra Pickrom, Shipping and Receiving; Entertainment, Clarice White, Accounting; and Funds/Distribution, Jean Hubbard, Purchasing.

In addition to delicious food, there were displays, music, and performers. The rap performers were well rehearsed with the latest dances and timely messages on the "antidrug" theme. Dramatic performers portrayed aspects of black history. Some of the guests lingered around until 7 p.m. looking at the displays and commenting on how informative and enlightening

Juneteenth History

January 1, 1863, the date of President Lincoln's "Emancipation Proclamation," is commemorated in many American black communities. It is, however, only one of a number of "freedom day" celebrations held on various dates, for the end of slavery was a gradual process and often a local one that evoked local observances. Thus, June 19, 1865, was freedom day for slaves in East Texas and portions of surrounding states.

It was on this day that General Gordon Granger landed with Federal troops in Galveston, Texas, with the expressed mission of forcing slave owners to release their slaves. Many of these slaves had been brought to East Texas from other southern states, such as Tennessee, Georgia, Virginia, and "all over the south" by slave owners. Abolitionists had talked freedom for the Negroes, and the land owners were afraid that their slaves would be freed and all their investments lost.

Legends of three types soon arose explaining the date of the celebration: (i) The news was withheld to make one last crop; (ii) The news was delayed by mule travel; and (iii) The news was delayed by the murder of the messengers. The most frequently collected legend was the one that explains the date in light of the master's need to make one more crop. Versions of it were used to explain the observance in East Texas and southwestern Arkansas. Louisiana blacks

(cont'd. on pg. 4)

(cont'd. on pg. 4)

SUMMER SCIENCE PROGRAM TURNS 21



This year's Summer Science participants are (back row, left to right) Bill Van, Todd Williamson, Richard Rogers, Ann Cass, Kristine Attao, Brad Cooley, Scott Farrar; (front row, left to right) Linda Chu, Claudia Lopez, Maryann Del Rosario, Mercedes Sanders, Jennifer Brereton, Yolanda Rankin, and Kenny Quon. Kneeling is Al Green, SSP 1990 Director.

THIS YEAR MARKS THE 21ST anniversary of the SLAC Summer Science Program (SSP). As in years past, this program steps beyond formal classes and offers students the opportunity to have a first-hand experience by participating in the activities of a research laboratory. SSP was established with the goal of providing training opportunities for minority, female, and other students underrepresented in science and engineering. The summer program combines a technical work assignment, a lecture series offered by SLAC staff and other notable guests, and tours of local research and industrial laboratories. SLAC is sponsoring 14 students this year, selected from over

100 applications. Students represent 13 schools and universities from across the United States and are majoring in physics, engineering, computer science, or math.

The director this summer is Al Green, a physics graduate student at Stanford University and an SSP alum! Al participated in the SLAC Summer Science Program in 1986 while an undergraduate at the University of Chicago. He is currently working on his Ph.D. in physics.

This year's nine week program started June 25 and continues through August 24. The summer was kicked off with a BBQ lunch cooked by "Big John" Taylor (see page 4), giving the students a

chance to meet their supervisors and other key SLAC staff, including Director Burton Richter and faculty sponsor, Greg Loew.

Although the summer agenda is busy, it's not all work—Al Green hosted a get-together at his place and coordinated a fun-filled trip to the Fourth of July celebration at Crissy Field. Students also attended the annual "SLAC Day at the Stick," courtesy of Al Ashley, Labor Relations. Al Green and the 1990 lecture coordinator, Paul Rensing, Group B, are planning other informal gatherings for SSP participants to meet graduate and undergraduate students and faculty on campus.

(cont'd. on next page)

Putting More Pep Into PEP

THE RECOVERY OF THE PEP STORAGE RING from the effects of the Loma Prieta Earthquake, although occurring at a slower pace than the SLC, has finally ended, and physicists from the TPC/2 γ collaboration are once again logging data.

During the earthquake there had been substantial displacements of the magnets in the PEP ring near Interaction Region 12, at a position close to the north arc of the SLC where similar magnet movements occurred. There obviously had been a small shift along an unmapped fault (later dubbed "Walker's Fault") that ran under both machines. But because of the shortage of surveyors, realignment of PEP had to wait until after the SLC was working again. It finally took place during the February–April shutdown.

Electron beams were once again injected into PEP in early May, and stable circulating beams with lifetimes in hours were gradually established. But because of a bearing failure in the new high-power positron target, PEP had to wait until late May before it could get an injection of positrons and begin doing physics.

The highest luminosity thus far attained (by July 10, at least) is 4×10^{31} $\text{cm}^{-2}\text{s}^{-1}$, not quite up to the record value of 6×10^{31} , but getting close. According to Max Cornacchia, head of storage ring operations, the luminosity should gradually improve during the rest of the cycle (presently scheduled to last through the end of August).

So far the TPC detector has logged about 5 pb^{-1} of integrated luminosity, far short of the 100 pb^{-1} goal established for the current cycle. Reliability has been a major problem. Frequently PEP will receive a fill of electrons and positrons, only to lose it shortly thereafter due to a variety of technical difficulties, many having to do with the rf system that feeds microwave power to the ring to replace energy lost by the circulating particles due to synchrotron radiation. This reliability will have to improve if PEP is to deliver anything close to the projected luminosity.

—Michael Riordan

SSP. . .

Space does not allow room to thank each individual who makes the Summer Science Program possible, but special thanks must go to:

- the supervisors who take the time and effort to provide a meaningful work experience for their students;
- the lecturers who give their time and expertise to provide informative and thought-provoking seminars;
- the faculty, technical and research staff who help with annual preparations, selection, and placement for summer participants;
- the administrative staff who support the entire effort with the logistics of transportation, housing, and paychecks.

—Beth Raines

SLAC Welcomes Clark Atlanta Master Institute Students

SLAC recently welcomed Clark Atlanta University Master Institute students. Nineteen juniors and seniors from all over the country who intend to do graduate work in sciences toured SLAC and Stanford as part of their 8-week program. More next issue!

BENEFITS

Pre-Retirement Seminars Unfilled

There's room available at both of the next Pre-Retirement Seminars* to be held in the Orange Room from 9 a.m. to 3 p.m. on

- August 15 for participants in the Contributory Retirement Plan, and
- August 22 for participants in the Staff Retirement Annuity Plan.

Topics will include Social Security, Medicare, your retirement plan, and estate planning. Lunch will be served.

Seminars are by invitation because space is limited. You are eligible to attend if you are at least 55 years old, have a minimum of ten years of service with the University, and have not previously participated in a seminar. If you'd like to be added to the invitation list, call Marie Arnold on ext. 2357.

**This is a Stanford-sponsored event. Unless critical operational needs conflict, your supervisor is asked to arrange for you to be able to attend.*

Delta Dental Requires Proof of Dependency

Your children are eligible for dental coverage until age 23; however, after they turn 19, Delta Dental needs to verify each year that they continue to qualify as IRS dependents. Accordingly, when a dental claim is filed for your 19 year-old, Delta Dental will send you a letter asking you to verify dependency. Do not throw this letter away! Complete and return it to Delta, so they can finish processing your child's dental claim.

Light the Charcoal, It's BBQ Time

THOSE OF YOU who attended SLAC's 1st Annual Juneteenth Festival and were lucky enough to sink your teeth into one of Big John's ribs (BBQ that is), no doubt got the treat of your life.

With the long, hot summer days ahead, and since I have a habit of burning hamburgers, I asked John Taylor, SLAC Facilities Supervisor, for his tips on BBQ'ing ribs. "Marinate!" John says, "It's all in the sauce. You marinate the ribs overnight in a mixture of vinegar, mayonnaise, salt, pepper, and hickory smoke (a common off-the-shelf product). Next, make sure the char-



"Big John" preparing his famous ribs for the Juneteenth festivities.

coal is white and burning evenly, then grill the ribs for 1 hour and 10 minutes, turning them, and adding water occasionally to keep them tender." Water is also used to keep the flames down.

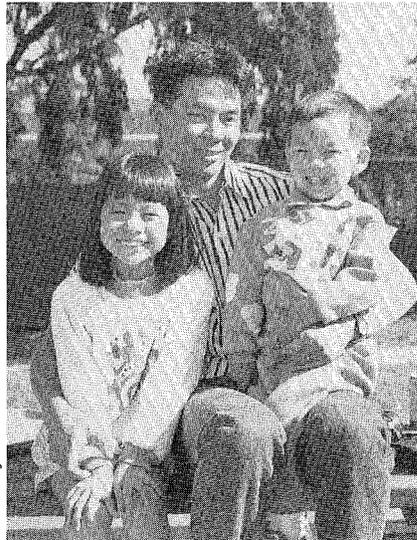
"So this is your secret for successful ribs," I say, as John flips several on my plate. "Well, so far I've had no complaints!" Right, Big John, I can see why, as I sink my teeth into one of his mouth watering ribs. UM-m-m-m, um-m-m-m, um-m-m-m, John, these are the best ribs I have ever tasted.

—Tom Nakashima

GOOD TIMES ROLL AT JUNETEENTH



BASE members and friends trying to remember the Negro National Anthem, "Let Freedom Ring."



Beverley Nakashima

The Interaction Point's photographer, Tom Nakashima, with daughter Miyuki, 8, and son Nathaniel, 3, after they washed their fingers and faces!

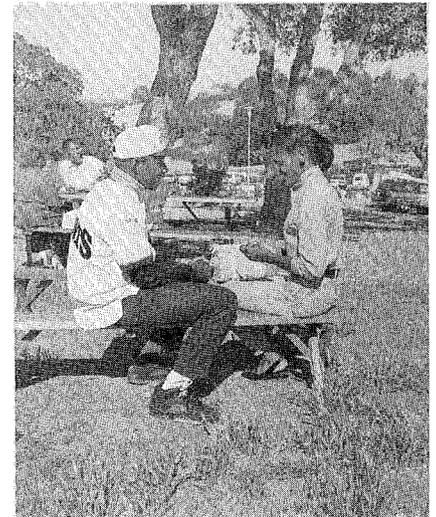
Juneteenth Festivities. . .

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they were, especially the Emancipation Proclamation document that gives an account of what the end of slavery was really like.

"Thanks again to everyone for your help and support that made our Juneteenth celebration such a success," said Jean Hubbard, Purchasing. "Join us again next year when we will have an even bigger and better celebration."

—Bette Reed



Raymond Lucas and Michele Rogan, both of Electronics, during a "quiet" moment.

Juneteenth History. . .

(cont'd. from pg. 1)

often said that "the people in Texas didn't know they was free until the people from Louisiana came over and told 'em."

The most common type of Juneteenth celebration was an all-day secular affair which began with a parade in the morning and then included many activities, the biggest being the baseball game, tie downs, calf roping, individual games, and eating.

—From *The Folklore of American Holidays*, Eds. H. Cohen and T. P. Coffin, 1st Edition (Gale, 1968).

SLAC RECEIVES DOE 1989 SMALL BUSINESS AWARD



Larry Womack, Purchasing, accepting award for SLAC. Pictured are members of the Business Services Division who helped make the award possible. Left to right, front row: Mimi Chang, Roxanne Carter, Dorothy Martinez (San Francisco Operations), Linda Malmstrom, James Hirahara (DOE), Larry Womack, Evelyn Stokes, Wendy Fraser, Jess Olivares, and Ron Lynch. Middle row: Gerry Molnar, Jean Hubbard, John Escudero, Hugh Steckol, and Alan Saltzberg. Back row: Ron Antrim, Dick Fuendeling, Ben Goodman, and Jerry Belk.

THE SECRETARY OF ENERGY awarded its Fiscal Year 1989 Small and Small Disadvantaged Business Award to SLAC at a ceremony on May 17, 1990. The award was presented for outstanding performance in Small and Small Disadvantaged business utilization. The presentation was made by James H. Hirahara, Assistant Manager, San Francisco Operations, on behalf of James Watkins, Secretary of Energy, and accepting the award on behalf of SLAC was Larry Womack, Purchasing Officer.

Working together, the Department of Energy and SLAC, as part of its contractual obligation, established difficult-to-attain goals for contract awards to Small, Small Disadvantaged, Woman-Owned, and Labor Surplus business firms. For Fiscal Year 1989, the Small Business goal was \$24,816,000; Small Disadvantaged Business Goal \$2,327,000; Woman-Owned

\$1,034,000; and Labor Surplus \$9,306,000. SLAC exceeded all of its goals by actually placing Small Business contracts of \$35,913,805; Small Disadvantaged at \$4,033,183; Woman-Owned at \$1,790,092; and Labor Surplus area contracts totaling \$12,805,660.

Eugene Rickansrud, Associate Director, Business Services, states that SLAC has, by proven results, provided a very aggressive, positive and outstanding Small and Small Disadvantaged Business Program through the various subcontracting offices in the Business Services Division. SLAC was the only M&O contractor in the San Francisco Operations Office to receive the FY 1989 Secretarial Award.

—Larry Womack

Suggestion System to Take Effect

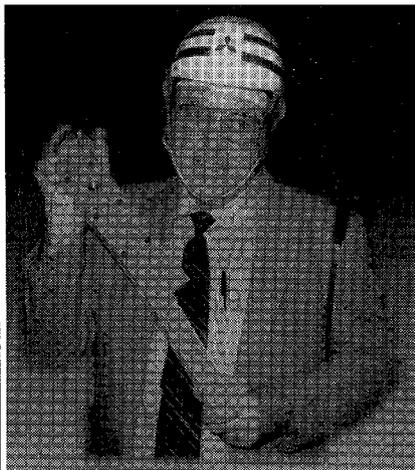
AS A RESULT of recommendations at the All Hands meetings in May, a new suggestion system has been implemented. Anyone in the SLAC community can make suggestions, and while names are encouraged on suggestions, they are not a requirement. If suggestions are signed, they will be answered either orally or in writing.

The Suggestions Committee, who will review all submissions, consists of Bill Kirk, Director's Office; Lee Lyon, Personnel; Alex Harvey, Mechanical Engineering; Hugh Steckol, Business Services; and Steve Williams, Research Division.

To make a suggestion, send written ideas to Bin 1000 or electronic mail to SUGGEST on SLACVM.

THREE LONG-TIME SLAC EMPLOYEES REMEMBERED

Dave Chambers



Dave Chambers, 52, died suddenly over Memorial Day weekend. He had joined the SLD group in 1986 to coordinate activities at the SLD test beam facility. He later moved to the Collider Experimental Hall where he was building manager of the entire complex as well as supervisor of the assembly of the SLD experiment.

Born in Canada, Dave grew up locally and graduated from Mountain View High School. He worked briefly as an instrument repairman for Pacific Telephone where he met and married his wife, Marquita.

Dave first came to Stanford via Bravo Manufacturing where he worked at the Hansen Lab on campus. In 1961 he moved up the hill to SLAC where he worked building and maintaining accelerator equipment in the Heavy Assembly Shop. In 1969, determined to "strike out on his own," Dave left SLAC to run his own door manufacturing and installation business. In 1978 he returned as a job shopper on the DELCO experiment at PEP. Two years later

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Dorothy Edminster

Dorothy Edminster, a long-time employee, died on June 13, 1990. She was very active in SLAC affairs throughout her 28 years and had many friends.



She was hired in April, 1962, to work for Dick Taylor who was trying to form a beam switchyard design group. When he had it whipped into shape, Herb Weidner was named to head it, and Dorothy was made group secretary. When the switchyard group was dissolved some of its members were absorbed into other groups, many of them into Research Area Operations, which later evolved into RAD and then into the Experimental Facilities Department (EFD). Dorothy was named group secretary and eventually became the department's administrative assistant. In this role she ran an efficient office group and provided stability and humor to an often excitable and overly serious staff.

Among Dorothy's many activities were the SLAC Garden Club, the SLAC Race Committee, and SERA, the SLAC Emergency Relief Association. It is composed of SLAC and SSRL employees who donate time and money to help members of the SLAC community who are in need of emergency assistance. She served on the board of directors and then became SERA's permanent secretary, a post she held until her final illness. The proud owner of a classic Mustang, Dorothy was also an active member of a local Mustang Club.

(cont'd. on next page)

Fred Hall

Fred Hall was in a real sense one of the co-founders of SLAC as we know it today. "He worked incredibly hard on the design and execution of the civil construction of the lab," remembers Pief Panofsky, Director Emeritus. Fred had a remarkable ability to estimate the cost and schedule of jobs which were still rather poorly defined and developed an unequalled record for having things accomplished on schedule and within budget. He could come up with alternate designs to fit any budget. He will be best remembered by his friends at SLAC for his courage and tenacity in taking on any engineering project and proposing alternatives until a suitable solution was found. Simultaneously inventive and well-organized, Fred would tackle anything. Scope changes were routine and taken in stride with details recalculated "overnight." Pief relates one incident which occurred: "We had completed the preliminary design of the beam dump which had to dissipate about 1 megawatt of beam power. I made a calculation what such a beam dump would look like if instead of being water cooled it were a large sphere of tungsten that would simply radiate all this power away like a giant light bulb. I showed the calculation to Fred, and he sent a note back immediately saying he was ready to give me detailed cost estimates and calculations in a few days!"

An idea man with persistence, Fred worked at SLAC for 26 years until his retirement in 1987. Even after retirement Fred continued to help SLAC in various important

(cont'd. on next page)

Hall . . .

respects until the very last moment. He came from Boston to SLAC during the early design phase, then known as Project M, and brought valuable experience from a world-renowned construction architect/engineering firm.



Fred and Luci Hall

Starting in November, 1961, as Head of the Mechanical Engineering Department, Fred pulled together a team of engineers and designers of accelerator electrical, mechanical, vacuum, and water systems. Fred believed in three-dimensional scale models and full-sized mockups to demonstrate design complexity and to expedite decisions. It paid off many times. Computer graphics didn't exist then.

During early construction his department became known as Systems Engineering and Installation (SE&I), responsible for seeing that these accelerator systems were installed correctly. After accelerator start-up, SE&I combined with Plant Engineering under Fred. The new PED was made up of approximately 150 engineers, designers, maintenance, crafts, and utility operations people.

Fred's interests were varied. He was an avid reader of many scientific journals and philosophic treatises and could discuss them in depth. He wrote many papers for SLAC and proposed methods of alternative energy sources to alleviate the world energy crisis. He had a major role in writing and editing at least four sections of the "Blue Book" which described in detail the construction techniques and problems encountered during early accelerator operation.

Fred and his wife Luci sponsored many annual backyard barbecues, picnics, and dances that brought the group together. Spouses got to know each other and developed long-term friendships. Fred and Luci were active in the SLAC bowling league, tennis, and bridge clubs. Every noon hour there was a spirited bridge game in Fred's office. We will miss Fred's friendly laugh, his compassion, and his ability to make everyone feel genuinely welcome at his home.

—Bill Lusebrink

Chambers . . .

he joined the SLAC staff as PEP IR-8 coordinator, and in 1983 he became coordinator for the ASP experiment in IR-10.

Aside from his many talents at work, Dave had many, varied hobbies that included amateur radio, fishing, powered model airplanes, and a new motor home, where he loved to spend time taking his two grandchildren on excursions.

Dave had many friends at SLAC. We are all very saddened by his death.

—Bob Bell

Edminister . . .

The EFD offices in the A&E building were arranged to provide an open meeting space for visiting experimenters. A large coffee pot was kept in constant service. This was Dorothy's answer to the famous CERN cafeteria. It was profitable enough to pay for all EFD's parties and for a monthly birthday party for coffee club members as well.

Dorothy was a competent and hard-working employee but most people will remember her as a cheerful, friendly person who was always willing to help, whether it was to perform some service or just give sound advice. Her duties will be replaced, but no one can replace her in the hearts of her friends.

Welcome to: Scott Anderson, Accelerator; Zhiqi Bai, Controls; Marvin Brautigam, Plant Maintenance; Phillip Brunner, Plant Maintenance; Alan Conrad, Property Control Warehouse; Hitoshi Hayano, Beam Dynamics; Lori Hirabayashi, Plant Engineering; Ian Hsu, Accelerator; Daniel Knop, Public Affairs; Michael Laha, Accelerator Operations; Gibson Locke, SLD; Ian MacGregor, SCS; Christopher Miller, Electronics; Joseph Olszewski, Power Conversion; Michael Perry, Surveying; Rosalyn Prater, Administrative Data Processing; Patrick Reardon, Power Conversion; George Sawyer, Drafting; James Simpson, Business Services; Jolan Stieber, ESO; Joseph Stieber, Mech. Design; Jeffrey Tennyson, ATSP; Tianbing Wang, Mech. Engineering; Tzu-Hui Yang, Mech. Engineering; Anahid Yeremian, Accelerator

JERRY COLLET—"THE MAN WHO SHOOTS THE GUN"

LAST YEAR JERRY COLLET, Physical Electronics, officiated as a volunteer official at approximately 52 track meets all over California, including the U.S. Youth Nationals in Texas and the Junior Olympics in Spokane, Washington.

Jerry first became involved with the coed Yearlings Track and Field Club in San Jose as a parent volunteer in 1981 after his two daughters (then 6 and 8) joined the club. He learned to officiate at various events and became a Certified Official in 1983. He also helped as an Assistant Coach for about five years, but now he specializes as a starter—that's the "guy who shoots the gun" to begin a race.



With the sound of the pistol, they're off for the 100-meter dash!

In 1986, Jerry received his National Certification that allows him to officiate at nearly all levels—high school, NCAA, TAC (The Athletics Congress of the USA) Youth, TAC Open, and wheelchair games. In 1991, he will try for his Masters in Track and Field officiating.

Jerry's wife, Pauline, and daughters, Lisa and Rachel (now teenagers), are all certified officials of varying degrees. The Collet family is involved with meets virtually every weekend from January through July, and Jerry looks forward to officiating at meets in which his daughters participate when they go to college. In their spare time the Collets camp, hike, and water ski. Jerry says they don't snow ski too often because he saw enough snow in his home state.

Originally from Lewiston in central Maine, Jerry found himself, courtesy of the U.S. Navy, stationed in California where he "got to like" its beautiful weather. So, after graduating from Southern Maine Vocational Technical Institute with a degree in machine tool technology, he and his wife moved here in 1970, where Jerry started at SLAC as a Journeyman Machinist.

Jerry says that his most exciting experience as a parent and as an official is watching his children and other young athletes learn and advance in their training and personal goals in the sport of track and field. The thrill Jerry receives when he sees the athletes he helped coached in 1982 appearing on TV as college athletes is just one of the bonuses of officiating.

—Marian Wehking



Jerry instructs young athlete on proper positioning in the starting blocks.

The Interaction Point is published by Information Services of Stanford Linear Accelerator Center.

Editors: Rene Donaldson and Bill Kirk; Contributing Editor: Marian Wehking; Photographer: Tom Nakashima. Deadline for articles is the 1st of every month. Submissions may be sent on SLACVM to RENEED or TIP or by SLAC mail to Rene Donaldson, Bin 70. Phone: (415) 926-2585.

Spring Intramural Volleyball Results

Hi there, Colliders. I just received the official record of the Stanford spring quarter IM game results from the IM office. The Sigma Chi's who beat us in the semis eventually won the championship. We were *so* close!

Our performance alone contributed a total of 36 IM points, placing SLAC 45th in the IM ranking among 140 participating groups.

—Chang Kee