

The Interaction Point

Events and Happenings
in the SLAC Community
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PBS Reunites Homebrew Computer Club

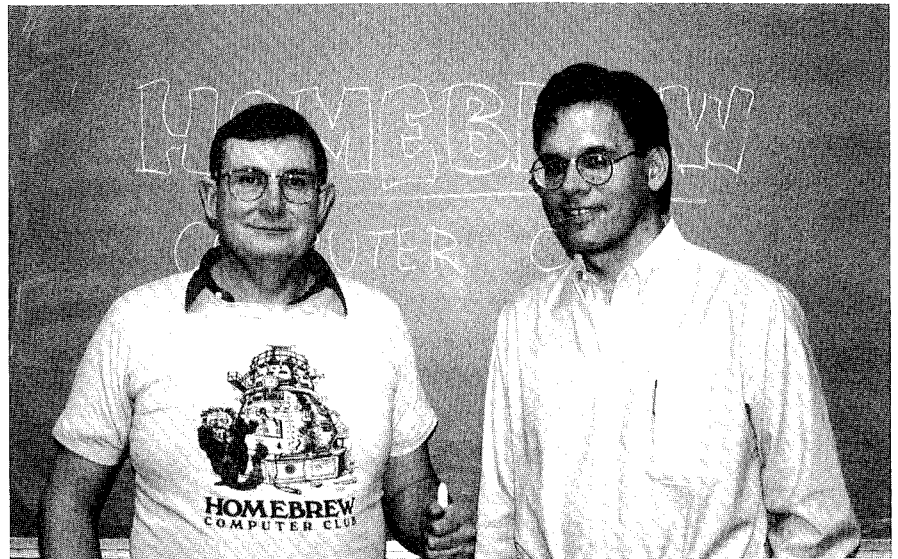
by P.A. Moore

A TELEVISION CREW descended on SLAC recently to videotape a reunion of some of the members of the Homebrew Computer Club for a PBS television documentary. The club was best known in the 1970s as the meeting place of early enthusiasts in the computer world. Now-famous members included Steve Jobs and Steve Wozniak of Apple Computers.

The program will be hosted by Robert X. Cringely, a columnist for *InfoWorld* and author of *Accidental Empires*. He devised the concept of a Homebrew reunion as a theme for the first in this three-part series on the history of computers.

Local hackers began meeting in the SLAC auditorium in the spring of 1975 in response to an invitation from Gordon French and Fred Moore, two Bay Area men who were interested in learning more about what was happening in computers. When Moore was called out of town on business within a few months of the group's formation, Lee Felsenstein stepped in to become the group moderator. He remained in that role for several years, presiding over an eclectic group of hardware and software devotees.

Hacker was a term that originally had a connotation of respect, especially when the hacking was done with style and skill. Because some hackers carried the dictum that information should be free to



P.A. Moore

Lee Felsenstein, left, and Robert X. Cringely. Felsenstein displays the original Homebrew Computer Club t-shirt, with an original design by Larry Gonick. Felsenstein owns the copyright on the t-shirt. Gonick is now well-known for his cartoons on cosmology and the nature of the universe, which are published in numerous books and magazines.

its extreme, they gave the term hacker a negative meaning. According to Steven Levy's book, *Hacker* (1994), the computer industry owes its existence to hackers, since they were the impetus for the popular use of computers.

During the interview at SLAC, Cringely questioned Felsenstein about the early days of computing. "The computer in those days was considered a giant brain attended by serious men who had direct contact and would harvest print-outs." Felsenstein likened this group to priests and said that one of the purposes of the Homebrew Computer Club was to "break the mythic power of the computer...to make the computer understandable by

making the machine easier."

Cringely saw the Homebrew Club as a leveler among different ages and social strata. Felsenstein agreed, stating that club members interacted freely based on interests. However, the Homebrew Club was almost exclusively male: few women were interested in the strange culture of the hacker world at that time.

Also featured in part one of the series were Homebrew members Roger Mellon and Harry Garland. Look for the series on your local PBS station soon and hear about SLAC's role in the history of computers and the Homebrew Computer Club.

Changing behavior makes safer workplace

WHAT IS behavior-based safety? Janice Dabney, Gail Gudahl, and Jerry Belk can tell you. They recently attended a safety seminar by Behavioral Science Technology (BST), Inc. in which this new system was presented. As Janice reported to the Self-Assessment Committee, "This new system wants to support the employee by determining the safest way to perform a task."

The point is not to find fault or lay blame, but rather to focus efforts where they will be most effective in improving safety performance. By addressing the cause of accidents, the behavioral sciences offer a tested technique for reducing the occurrence of unsafe behavior.

Employee behavior is at least as important to the company culture as is employee attitude. According to BST, 80 to 95% of all accidents are attributable to unsafe behaviors. This does not mean that employees are at fault—employee behavior is directly related to management systems.

Where safety is concerned, it is the long-term goal of most managers to create a company culture whose expectations promote safe behavior. However, as BST points out, without any guidelines the people at a safety meeting can only fall back on their individual interpretations of how to work safely.

Doctors Thomas R. Krause and Kim C.M. Sloat, authors of *Attitude Alone Is Not Enough*, say safety-conscious workers still may not use the proper protective equipment to do a job. "The theory of planned behavior explains that just because a worker has and expresses a strong attitude in favor of safety, in no way does it assure that he or she is going to behave in a safe way."

So why do employees behave in an unsafe manner? Krause and

Sloat believe that, "Behavior-based assessments show that individual hunches and experiences can be misleading about the kinds of behaviors and number of incidents that truly characterize a work group....A link between attitudes and behavior needs to be established and maintained actively because although attitudes are often general, behavior is specific."

Car seat belts are a good example of how a change in behavior can result in a change of attitude. Before seat-belt use became law, many people never wore them, and they were generally considered to be a nuisance. Now that wearing seat belts is the law, people are used to them, and most drivers now feel unsafe without their seat belts fastened.

The same principle applies in the workplace. According to BST, at one facility they analyzed, the accident reports revealed that one of the behaviors implicated in a significant number of accident/injuries was unsafe body placement.

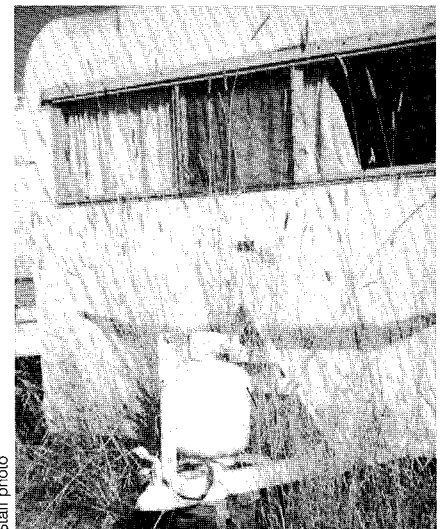
This is not unusual. It happens here as well. For example, workers will sometimes stand near a pump to check the rotation. On some pumps, this is done with the mechanical guarding removed. As long as the worker stands where he or she will not be hurt if the coupling flies apart there is no problem. But standing in the wrong place at the wrong time is, literally, standing in the line of fire.

Both the workers here and at the BST facility had taken for granted that unsafe body placement was just being efficient. They thought they were helping the company, not realizing that they were increasing their odds for accident or injury. After having this pointed out to them, the attitude of the BST crews changed dramatically within six to eight months. The same workers who

used to think of unsafe body placement as acceptable came to regard it as irresponsible behavior.

Krause writes that "...within certain limits, it does not matter at first what the worker attitudes are about safety." As with car seat belts, if the behavior of workers is adjusted to develop good safety habits, the attitudes will change to reflect the behavior pattern. By addressing the cause of accidents, the behavioral sciences offer a tested technique for reducing the occurrence of unsafe behaviors.

—Gene Holden



Staff photo

Tall grass = fire hazard

THE FIRE DEPARTMENT requests that all RV space users cut the grass in their slots by August 11. The tall grass growing around the RVs (see photo above) presents a serious fire danger. If you cannot cut the grass in your space, call Santiago at ext. 2135, page him at 132, or call him at home at (408) 294-2962. He will cut the grass during lunch or after hours for a small fee.

—G.J. Collet

RV Space Coordinator



Leadership Institute launched

IN MID-MAY, SLAC launched its Leadership Institute with a pilot class aimed at improving organizational and interpersonal communication skills for supervisors and managers. The course, which began May 15, had 36 participants and ran for five consecutive half-day sessions with morning classes for first-line managers and afternoon sessions for middle management supervisors. Overall, the course generated enthusiastic participation and some unexpectedly candid discussions about managerial problems.

At the beginning of the first day many participants were not sure what they were going to achieve by taking the class and found it hard to tear themselves away from their busy work schedules, especially on a Monday morning. Looking back on that first day Karl Swartz recalled, "I signed up for the class somewhat begrudgingly, mainly because I knew my boss wanted me to do it; but by the second day, despite the 8:00 AM start, I was attending because I wanted to be there. It was fun and proved itself to be a valuable learning experience. Almost everything was relevant to what we do every day."

As designed by the Training Advisory Committee, this course will be expected training for all

supervisors in an effort to improve leadership and communication skills. Tineke Graafland says, "It's a good move on the part of SLAC to have tried this again and I hope that all managers, including the directorate, will go through it."

The participants think it is vital for supervisors to understand that there are a variety of effective decision-making styles that can be used rather than just acting alone. Michael Harms emphasizes that "we need to do more collaborating within our groups rather than managers making decisions on their own without input from the people involved. Supervisors don't have to give up the right to make decisions in order to do collaborative work. It's crucial not to make decisions in a vacuum." Bernie Romero says, "This class reaffirmed for me that flexibility in making decisions is an asset, not a liability." Additionally, Glenna Stewart stresses that "good two-way communication is essential to all successful working relationships."

Thinking back on how the course demonstrated that active listening and open-ended questions were effective communication tools, Ali Farvid says "I'm not asking 'why' questions anymore, rather I'm asking, 'What happened?' I'm still getting the information I need without making the other person feel defensive."

Most of the participants were relieved that the class did not include role playing and gimmicky techniques. In retrospect Nina Adelman Stolar emphasizes that "an important dynamic of the course was our on-going feedback and the instructor's flexibility to tailor the class on-the-spot to our real work situations. In that way we shared some responsibility for

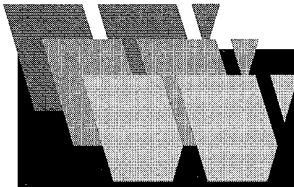
designing the course and felt a sense of ownership."

As stated during the class, the course is not intended to solve all the organizational problems at SLAC. Rather, it is intended to give supervisors a variety of practical tools for effective leadership and problem solving so they can improve those areas where they do have some control, namely within their own working groups. Says Janice Dabney, "My goal is to vary my style of interacting with people according to the needs of the situation rather than always using the default Dabney style."


—Eleanor Mitchell


Welcome Guests and New Employees

Geoffrey Arnold, SLC; **Benjamin Brau**, Experimental Group A; **Matthew Campbell**, Power Conversion Engineering; **Alexander Chen**, Environmental Protection & Restoration ; **Sean Conrad**, Klystron Manufacturing; **Amber Crenetz**, SLC; **Tamiko Freightman**, SSRL; **Erik Gaderlund**, SLC; **Kenneth Hearne**, Power Conversion Development; **Ivan Kazarezov**, Klystron; **Erin Kennelly**, Facilities; **Scott Merritt**, SSRL Beam Line Construction Projects; **Molly Moss**, Technical Information Services; **Alexander Novokhatski**, Klystron; **Joseph Pope**, Environmental Protection & Restoration ; **Andrew Schultz**, Klystron Testing; **Michael Sherman**, SCS; **Christopher Spenner**, Technical Information Services; **David Sullivan**, Environmental Protection & Restoration; **Wanetta Taylor**, Experimental Facilities; **Yury Tokarev**, Klystron; **Jamie Walker**, Accelerator Theory Beam Dynamics; **Amanda Weinstein**, Experimental Group C.




News about The World Wide Web at SLAC

 An online version of the *SLAC Administrative Services Handbook* is now available via the WWW. The Handbook itself is in PDF format, and to access it requires that you configure your Web browser to launch the Acrobat Reader. The intro page for the Handbook is at:
<http://www.slac.stanford.edu/pubs/slacdocs/handbook/handbook.html>

 The HTML version of *Life at SLAC: A Users' Handbook*

is available on the WWW at the following location:
<http://www.slac.stanford.edu/pubs/slacdocs/lifeslac/lifeslac.html>

 The *Environment, Safety, and Health Manual* is available on the WWW in PDF format, like many other ES&H documents. The URL for the intro page for the ES&H Manual is:
<http://www.slac.stanford.edu/pubs/slacdocs/eshmanual/eshmanual.html>

Phone-access code changes for campus numbers

TO PHONE a Stanford campus number you used to precede the 5-digit campus number with the 1-digit access code 8. For example, to dial the campus number 5-1000 from SLAC you would dial 85-1000. That has changed. Now you need to use the 2-digit access code 88 and dial 885-1000 instead.

We have been virtually out of switch capacity for some time. To wire the new Engineering and Physics building and to accommodate some other needs, SLAC recently increased switch capacity by 300 lines. The additional numbers are in the range 8500 to 8799 (for example, 926-8500), which conflicts with the 1-digit access code for campus numbers; hence, the need for the new 88 access code. —Ilse Vinson

SF—Stanford van pool seeks riders

A COUPLE OF SEATS are open in the commuter vanpool that runs daily from San Francisco to the Stanford campus and back. This vanpool is well-established: it was organized in 1987 and has operated continuously since. We are a friendly and diverse group of Stanford employees who are interested in saving gas, wear and tear on our cars, and our sanity (not necessarily in that order), while

helping reduce air pollution in our own small way.

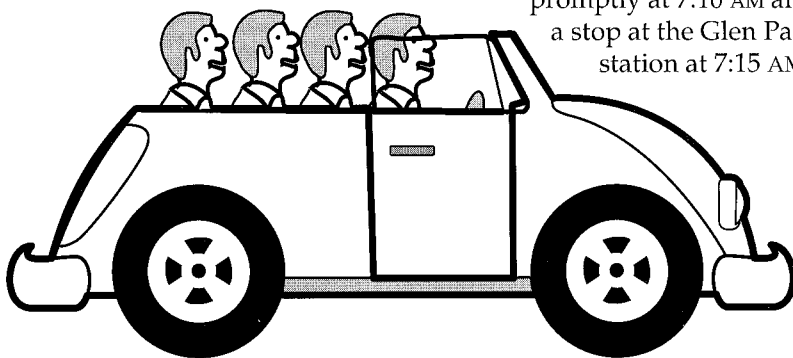
We lease a 1994 12-seat air-conditioned luxury van from VPSI, the biggest lease company in this business. The seats recline fully and come equipped with individual reading lamps. Needless to say, we get a lot of sleeping and reading done during our commute.

The van departs from the Glen Park/Noe Valley neighborhood (parking is not a problem) promptly at 7:10 AM and makes a stop at the Glen Park BART station at 7:15 AM. We

arrive at SLAC at around 7:50 AM; pickup at SLAC in the evening is at 5:20–5:25 PM. We arrive back at the Glen Park BART station at approximately 6:00 PM and wind up back at our point of origination (Glen Park/Noe Valley) at around 6:05 PM.

The cost is \$115/month for full-time riders and \$57.50/month for half-time riders. One additional benefit to consider (particularly at this time of year) is that ridership entitles you to a state tax credit (i.e., a dollar-for-dollar reduction of your tax due) of up to \$480 each year.

If you are interested and would like to check us out, we would be happy to have you join us for a complimentary ride before making any commitment. For information please contact Chris Yates on the campus at 725-4223. —Chris Yates



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