



Nate gets wet.

Chem 1 students
get revenge



Ron Dolette reviews
REM's new album, *New
Adventures in Hi-Fi*

see page 6

THE CALIFORNIA TECH

VOLUME XCVIII, NUMBER 6

PASADENA, CALIFORNIA

FRIDAY, 25 OCTOBER 1996

Khan supports investment in environmental technology

BY VALERIE ANDERSON

Democratic Party candidate Doug Kahn spoke Friday at the last of a series of discussions with 27th district US House of Representatives candidates presented by the Caltech Environmental Task Force.

Kahn believes that the government should continue funding research into "environmental technology"—processes and equipment that conserve power and cut pollution. He supports Department of Energy programs that, through tax incentives, encourage private industry to develop technology that will save water and power. If environmental research is given enough support, he says, the US will develop technologies that can be sold to other countries. Kahn strongly opposes what he feels is a Republican attempt to "zero

out" investment in environmental technology.

More research into alternative-fuel vehicles is needed, according to Kahn. He believes that there is a market for these vehicles and that the alternative-fuel vehicle industry will grow as long as it is supported. Kahn would like this industry to move to California because of the jobs it would create here.

Kahn admitted that, because of charge-up time and the need for air-conditioning, he is not sure whether electric vehicles are practical for California at this time. However, Kahn believes people should be encouraged to buy electric vehicles and that research in this area should be continued. He disagrees with recent "backpedaling" on mandates that would require certain percentages of all cars produced to be electric.

When an audience member asked

about his position on natural gas vehicles, Kahn stated that he believes that natural gas technology is "advanced" and that the use of natural gas vehicles should be encouraged. He feels that since natural gas is less energy dense than many other fuels, taxes on it should be lowered.

Kahn is against the completion of the 710 freeway. He believes that the freeway would bring a lot of truck traffic into Pasadena and South Pasadena and that it would turn into a "parking lot" five hours a day, causing significant air pollution in the area. This, he says, would "destroy the tax base" of South Pasadena.

In response to an audience member's question about his position on protected wilderness areas, Kahn stated that he believes that the government needs to set aside large areas of land,

not "small islands of habitat," since "we're not smart enough" to know all interdependencies. Also, he feels that certain areas need to be protected from all kinds of vehicles. Kahn described the recent opening of the Alaska pipeline to drilling as "shortsighted." He feels that there is not enough oil in previously protected areas there to make a significant difference in the US oil supply. He believes the pipeline was opened simply because there is enough oil there to mean "big profits" for landowners.

When an audience member asked Kahn to respond to Republican Jim Rogan's view that wetlands need not be protected "for their own sake," Kahn stated that he believes wetlands are worth protecting because of their biodiversity and that he would like a

SEE CETF ON PAGE 2

SURF Talks showcase student research

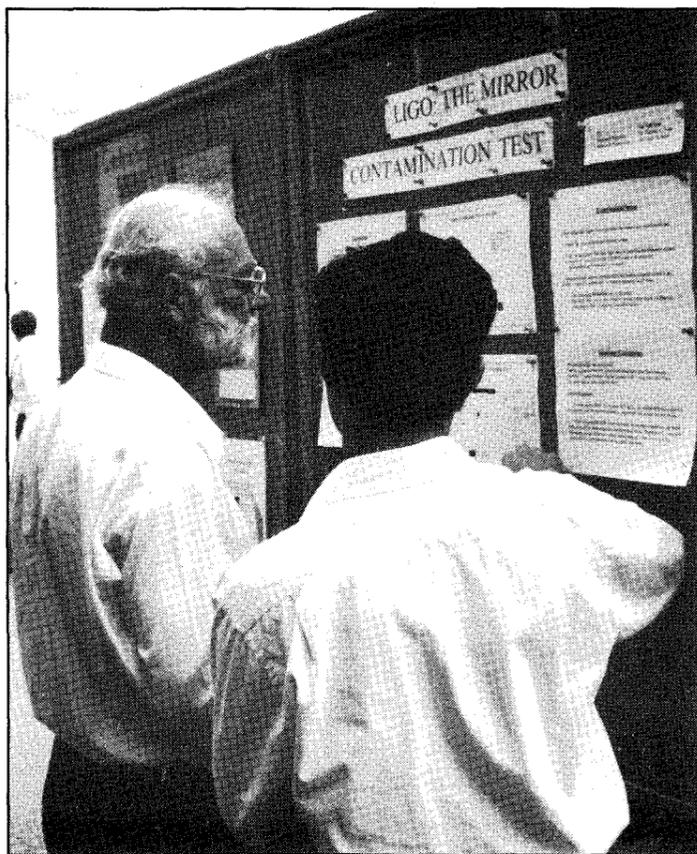
BY TANYA TICKEL

In every undergraduate house last week, students rushed frantically through the hallways trying to find the perfect way to convey exactly what their ten weeks of extensive summer research meant to them.

Students who took advantage of this opportunity presented through the SURF (Summer Undergraduate Research Fellowships) program shared their work with the rest of the Caltech community on October 19 in presentations that lasted through the afternoon. This year, the SURF office helped finance the research of 248 students in fields ranging from engineering to education. The broad range of topics enabled many students to do research outside of their own major. Senior Steve Bennett, a Biologist, was able to do an engineering SURF. "It was cool because I got to build stuff and make stuff and I got to use wrenches," he said, "I learned a lot about engineering and how it's different from science because sometimes you work out the science and it still doesn't work."

For some, expectations of what would happen differed from the reality of the research, but still ended in a positive experience. "At first I was a little disappointed because [the research] was totally not what I expected to do — I was supposed to be doing electrochemistry," said Sophomore Kurt Klein, "but I did enjoy what I was doing and I learned a lot from it."

Other students had never



Siddhartha Padmanabha explains LIGO™ to onlooker.

before been in research. Sophomore Devi Thota said, "You know how at home you'd think about the word 'research' and think it's like magic; just walk into the lab and it's Whoosh! You've discovered something. It's not really like that."

Although her research was arduous, Thota still enjoyed it, "I walked into work the first day and it was like being in another world. I looked forward to it every day because ... I had a chance to work on something that had an effect on the real world."

The reaction of SURF participants to the program was overwhelmingly positive, and perhaps

Senior Steve Michael sums it up best by saying, "SURF is cool."

SURFs give undergraduates at Caltech and students from around the world the opportunity to do top level research in Caltech and with companies working in conjunction with Caltech.

The Surf office announces the opportunity to employ students at JPL (Jet Propulsion Laboratory) early in the year, and researchers there respond with job descriptions. Carl Larson, a staff member at JPL said about the SURF program, "The kids have the experience

SEE SURF ON PAGE 7

"500 L of LN, please."

Dabney House will again be holding the annual pumpkin drop at the stroke of midnight October 31st off of Millikan. Come and watch for the elusive blue flash.



TUTORS NEEDED

The Dean of Students Office needs tutors in all areas—especially for the Insitute requirements, e.g. Ch 1, Ma 1, Ma 2, Ph1, and Ph2. The pay is \$7.50 an hour.

We are looking for upperclass students with a strong understanding of the subject matter and the ability to communicate well. Please stop by the Deans' Office in 102 Parsons-Gates or contact us at x6351 or

sandra_estes@starbase1.caltech.edu for further information.

New!
In this issue!

Schwartz

by
Gene
Plotkin



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LETTERS TO THE EDITOR

Cats in Avery dispute stemmed from misunderstandings, not malice

To the Tech Editors and all Caltech Undergraduates,
Thank you for printing information about the off-campus cat policy in the October 11 issue. While I usually do not write to correct misinformation, I feel the need to do so this time. The statement regarding the student who indicated we had told her only 3

days before she moved in was misleading. The Residence Life Office is not responsible for the distribution of the housing pet policy. I can only assume that, in trying to answer a student's question, our office led her to believe that we distribute the policy and were negligent in doing so earlier. This is not the case.

In reality, this is not an issue of late notification or insensitivity. It is of misunderstanding and assumptions made by all parties involved. Housing and Residence Life staff believed the pet policy in Avery would be like all other off-campus

housing facilities; students apparently believed it would be like the seven on-campus houses. It was not until shortly before students moved in that anyone realized that people had different perceptions on this issue. Once it was realized what had happened, efforts were made to rectify the situation. No one is trying to make students' lives miserable, nor is anyone deliberately misleading students about important information.

I know this was an important issue to the residents of Avery, especially those who had cats. There are numerous

other issues we are or should be dealing with that affect undergraduate life and Avery House. Let's work on those together!

KIM D. WEST
DIRECTOR OF RESIDENCE LIFE

Note from the Editors:
We, the editors, would like to apologize for any offense given to our readership in the satirical fake advertisement placed in the September 27th Tech; the Caltech community is as dynamic as the research done here, and as such it is necessary at times for the editors to be able to reaccess their audience in order for the paper to be able to best serve its readership.

Please send submissions for letters to the editor to

The California Tech
Caltech 40-58
Pasadena, CA 91125

or by electronic mail to

editors@tech.caltech.edu.

Deadline for submissions is Monday at 5 p.m. on the week of publication.

The editors reserve the right to edit or refuse to print any letter for any reason.

The Outside World

by Myfanwy Callahan

ROME, ITALY - Italian police are reevaluating their witness protection program. One member of their program recently went on a killing spree, and shot the wife of an opposing Mafia member and two others. Over 6200 people, mostly family members of Mafiosi, are assisted by the government.

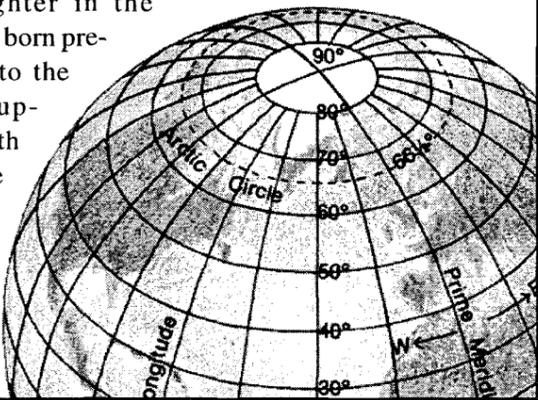
TEL AVIV, ISRAEL - Officials report that Israeli and Palestinian negotiators are making significant progress in talks on Hebron. Israeli Prime Minister, Benjamin Netanyahu hopes that he may meet with Yasir Arafat soon "to tie up loose ends."

YANGON, MYANMAR - Hundreds of Burmese students gathered near the University in Yangon to protest what they say is police brutality. The military government has not yet responded, and no policemen were present.

CORPUS CHRISTI, TEXAS - A drunk driver was sentenced to 16 years in prison for manslaughter in the death of a baby born prematurely due to the accident. Supporters for both sides of the abortion debate are keeping track of the case, as it is the

first in Texas to hold someone criminally liable for harmful actions taken before the victim was born.

MALIBU, CALIFORNIA - Firefighters continued working Tuesday to quench the wildfires that have burned more than 30,000 acres. Almost 100 houses have been destroyed in an area ranging from Big Sur to San Diego.



CETF: Kahn

CONTINUED FROM PAGE 1

policy requiring "no net loss of wetlands." Kahn told the audience that he doesn't believe in "cost-benefit analysis" of environmental issues, since "we don't know what the costs or benefits really are." He feels that cost-benefit analysis is a method of slowing environmental legislation and miring the Environmental Protection Agency in "meaningless red tape."

Kahn believes that buying logging companies out may be necessary to protect forests. He stated that the government should make "small moves" toward removing existing lumber industry subsidies, since there are not enough logging jobs in this country to "make it a big issue." Kahn said that in the future, tourism and fishing in wooded areas may be more profitable than logging. Also, he is against the lumber industry's proposal to allow logging companies to "clean up" forests by removing "salvage wood"—dead or dying trees. Kahn stated that logging companies use "salvage wood" as an excuse to remove healthy trees from protected forests. Kahn would like to see the Forest Service become stricter. He told the audience that he is "pessimistic" about the recent sale of northern California redwood forests. The only way to prevent clear cutting of the forests, according to Kahn, is to pay the owner \$2 billion, which is not likely to happen.

An audience member asked Kahn about water management in California. Kahn replied that "it's a mess here." He stated that as much fresh water as possible needs to be preserved in the state. Another audience member then asked about water subsidies for agriculture. Kahn answered that he believes it is often easier to buy out farms than to continue to provide them with water. Also, he said, as the population grows,

less water will be have to use in industry and in sewers. Kahn believes that people need learn to use less water even "when it's not economically able." He would like to see water eventually cost people what it costs society to provide it them.

Doug Kahn at can reached by mail at 260 S. L Robles Ave. Suite 109, Pasadena, CA 91101, or by phone at (818) 584-1996. More information can be found on the web at <http://dcn.davis.ca.us/gctapio/kahn.html>.

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BY PUBLIC RELATIONS

For almost 50 years, the Paco A. Lagerstrom Chamber Music Concerts at Dabney Lounge have offered intimate programs to chamber music lovers from Caltech and the community. These concerts feature artists of international repute as well as promising young performers.

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All concerts are held on Sundays at 3:30 p.m. Admission is free.

PACO A. LAGERSTROM CHAMBER MUSIC CONCERTS at Dabney Lounge Forty-seventh Season 1996-97

October 27, 1996 **CON GIOIA**
Works for baroque oboe, baroque cello, and harpsichord, including Bach: Sonata in G minor for oboe and obligato harpsichord Telemann: Sonata in E-flat Major for oboe, obligato harpsichord, and basso continuo Vivaldi: Sonata No. 4 in B-flat Major for violoncello and basso continuo Fortepianist and harpsichordist Preethi de Silva, violoncelist Mark Chatfield, and baroque oboist Gonzalo Ruiz will perform this concert by early-music ensemble Con Gioia, this year celebrating its 15th season of concerts. Since its debut in 1982, the ensemble has provided Southern California audiences with outstanding performances on period instruments.

November 17, 1996 **JAMES WILSON** and **JOANNE KONG** Cello and Piano Duo
Fall: Suite Populaire

Espagnole Martinu: Sonata No. 3 Brahms: Sonata in F Major, Op. 99 Chopin: Polonaise Brillante in C Major, Op. 3 Cellist James Wilson is a member of the Shanghai String Quartet. Pianist Joanne Kong, a member of the faculty at Virginia Commonwealth University, is no stranger to Caltech, as both her sister Kathleen and her brother Mike were students here. Both artists bring distinguished and diverse backgrounds to their musical partnership, with a wide repertoire ranging from the baroque to new works written especially for them.

January 12, 1997 **ARLEKIN STRING QUARTET**

Mozart: Quartet in B-flat Major, Op. 10, No. 3 ("Hunt") Shostakovich: Quartet No. 7 in F-sharp minor, Op. 108 Beethoven: Quartet in E minor, Op. 59, No. 2 ("Razumovsky") In 1983, four young musicians at the Moscow Conservatory of Music, who were studying under the world-renowned Borodin String Quartet, joined together and became the Arlekin String Quartet. Latvian Eugene Chukhlov and Ukrainian Dmitri Glovko (violinists), Tatar Rem Djemilev (violinist), and Russian Sergei Riabtchenko (cellist) have toured extensively throughout Europe and the former Soviet Union.

February 2, 1997 **VOXFIRE** with **MICHAEL EAGAN**, lute

A program of medieval and renaissance music. Voxfire, L.A.'s newest vocal trio, is the collaboration of three of the area's most highly regarded interpreters of early and contemporary vocal music: Samela Aird Beasom, Christen Herman, and Susan Judy. The three sopranos have melded their talents as a means of presenting the distinctive works of these eras with their own musical style and dramatic flair.

March 2, 1997 **LOS ANGELES PIANO TRIO** with guest artist **ALLAN VOGEL**, oboe
Works by Schumann, French, and Beethoven This ensemble of internationally renowned musicians has been assembled especially for the 1996-97 season. Featured will be violinist Clayton Haslop, cellist Timothy Landauer, pianist Joanne Pearce Martin, and, as guest artist, oboist Allan Vogel. The program will include a newly-commissioned piece by Tania Gabrielle French.

For more information, contact the Caltech Ticket Office:
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PHONE: (818)395-4652 —
FAX: (818)795-1378 LIVE: 332 South Michigan Avenue, Pasadena, California, USA
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Weight training to fight Osteoporosis

BY THE WOMEN'S CENTER

The American College of Sports Medicine (ACSM) says osteoporosis affects more than 20 million American women. Osteoporosis is known as the "silent" disease because many women do not even know that have it until they break a bone. Fortunately, weight training exercises to increase bone density aid in the prevention of osteoporosis. Aside from the other benefits of weight training, such as strengthening and toning muscles, you can really make a difference in your health and life with a reasonable input of time and energy. The Caltech Braun Athletic Center has a wonderful weight training facility. The weight machines are adjustable to all body types and can be used to strengthen many individual muscles. They are offering a special weight training program for women interested in learning how to use the machines to build up strength and stave off the all-too-common bone loss which leads to osteoporosis. You are cordially invited to attend a one-time workshop to learn about the Caltech weight room and what you

can do to help yourself stay more fit and energetic. We have designed this program for adult women interested in adding weight training to their lives. The program will fit into a single lunch hour. This program will meet in the Braun Athletic Center women's locker room at noon on Tuesday, October 22. The program will include meeting with a trainer who will explain about osteoporosis and weight training. She will show us how to use the machines and will help us select particular machines to maximize our time in the gym. Bring loose fitting clothes and sneakers to change into in the women's locker room. breaking a sweat is not likely, but there will be time to change and return to work before 1 pm.

Please join us on: Tuesday, October 22nd at noon in the Braun Athletic Center locker room. The program begins at 12:10 p.m. and will end by 12:45 p.m. Bring your ID card. You are automatically a member of the gym during the academic year so there will be no paper work. Please RSVP so we can plan the program properly. at x3221 email: kschulweis@starbase.caltech.edu



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PIGs to Improve Administrative Processes

BY MATTHEW SULLIVAN

With the growth of Caltech, the administration's duties have grown as well. The processes developed in isolated systems to handle such areas as personnel and acquisition were not integrated campus-wide. As the bureaucracy grows, these systems are becoming ineffective and inefficient. In order to help overcome this deficiency, a new group has been formed to help streamline the administration's duties. This group is called the Process Integration Group (PIG) and is led by Earl J. Friese. The group is made up of four teams working on similar problems in different areas of administration: personnel, accounting, purchasing, and student af-

fairs.

"It's all about getting from A to B efficiently," says leader Friese. The main thrust of this program will be to change records and daily business from hard copy to email. The first step will take place in late November or early December, when software vendors place bids on software that will be the backbone of the project. Right now, the time line for total integration of the new processes is October 1, 1999.

The changes that will most directly effect the undergraduate population will be in areas where students interact with the administration. Possible results include easier registration, electronic access to grades and transcripts, and improved communication between administrators and stu-

dents.

A great deal of the work of PIG will not directly effect the student population, but will have indirect effects. Reduction in time required for administration and paperwork will have more than just administrative benefits. Friese notes, "Streamlined processes will allow more time for students or research."

Friese is enthusiastic about the process engineering project and assures that the Caltech culture won't be destroyed. He encourages input from all members of the Caltech Community. The Process Integration Group can be reached at ape@cco.caltech.edu or through the APE office at MC 226-81, ext. 3315.

Why Vote?

BY GEORGE STEPHANOPOULOS

How are you paying for college? Perhaps your parents are giving you a hand. Or, more likely, you're financing your education yourself through part-time jobs and student loans. President Clinton's reform of the student loan system, with the introduction of direct lending, has made college more affordable for millions. Now students can bypass the big banks and middlemen and borrow directly from the federal government through their campus student aid office. These loans have been calculated as 20% less expensive than guaranteed loans.

Then there's AmeriCorps, which allows students and young people to earn money for college while working to improve their communities. At the end of this year, AmeriCorps will have provided educational opportunities for over 45,000 young people. In President Clinton's second term, this initiative, along with a \$10,000 education tax deduction, the HOPE Scholarship program, expanded Pell Grants, and a merit-based scholarship, would increase the number of Americans educated at the college level.

Of course, at some point you will pay back your college loans. The good news is that when you leave college you'll be looking for work in a society which has seen strong economic growth and falling levels of unemployment. Perhaps you'll be applying for one of the ten million new jobs created under this administration, particularly one of the four million in high-wage industries. The minimum wage has increased and real hourly wages are rising for the first time in a decade. And as you pay off your debts, President Clinton's tax cuts for 15 million working families and 90% of small businesses will help soften the blow.

And where do you plan to live? Can you be confident that your neighborhood will be a

safe environment for you and your family? The President understands our desire for a better quality of life, as well as the opportunities we need to succeed. That's why he has cleaned up as many toxic waste sites in three years as under twelve years of Bush and Reagan. That's why he has fought extreme Republican measures to roll back years of environmental protection. And that's why he is working to ensure that you and your children have cleaner, safer water and air that's fit to breathe.

President Clinton is working to create responsible, caring communities by confronting the gun lobby, working to keep assault weapons off our streets and preventing more than 60,000 felons from purchasing handguns. He has secured the highest level of home ownership in fifteen years and put 100,000 new cops on our streets. President Clinton's second administration will work with your community to create a safer, healthier world.

No other President has done more to address the concerns of young voters. President Clinton plans to maintain his pro-youth, pro-future agenda in his second term. Talk to President Clinton every day about your concerns. You know he's pushing to create more educational opportunities, safer environments, more unified communities, and stronger workplaces.

Community, opportunity, responsibility. These are the cornerstones of President Clinton and Vice President Gore's campaign. On November 5th, I'm asking you to help us build a bridge to the 21st century. Vote for President Clinton and Vice President Gore.

George Stephanopoulos is Senior Advisor to the President for Policy and Strategy. He is a graduate of Columbia University and a former Rhodes Scholar.



"Not again this year."

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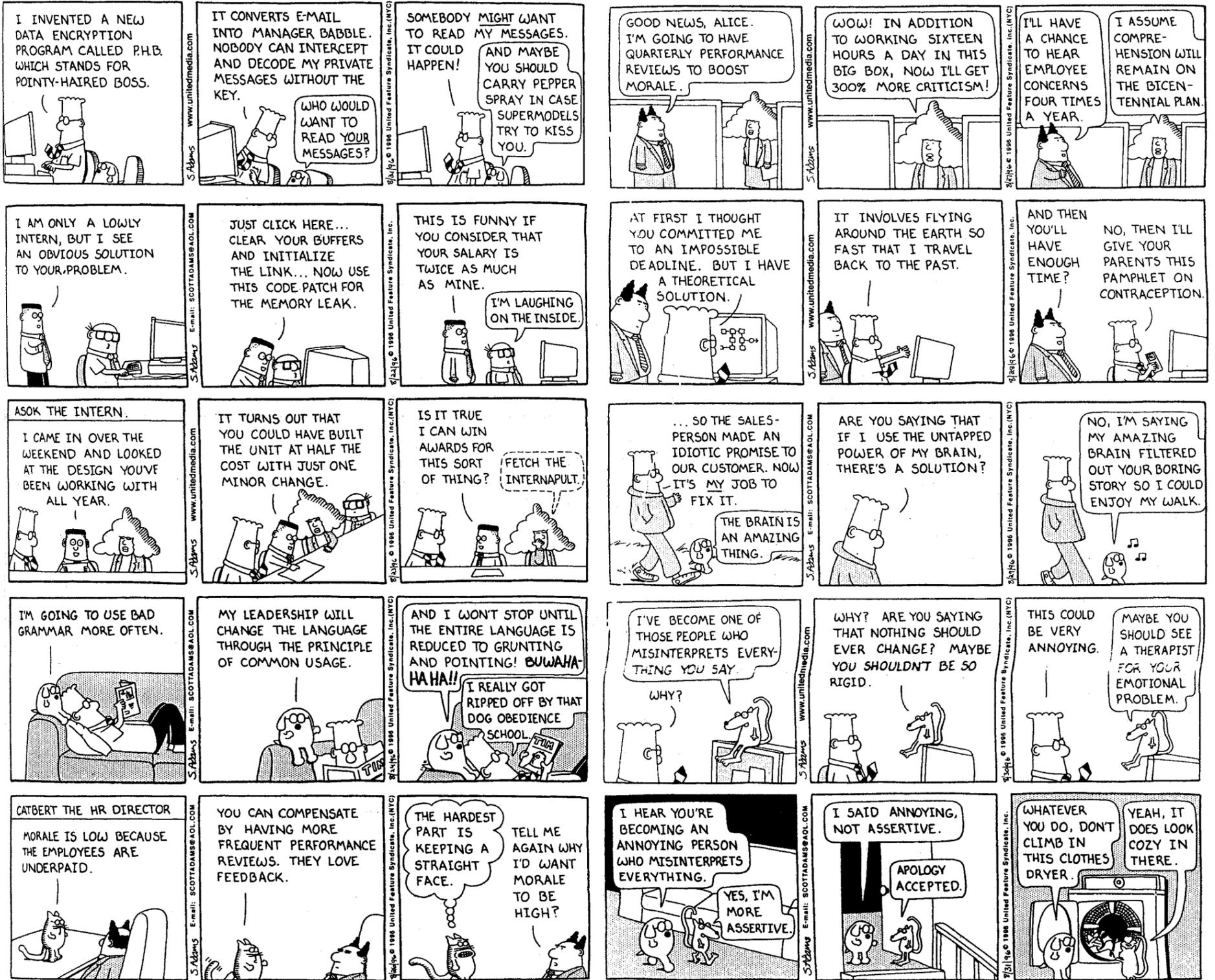
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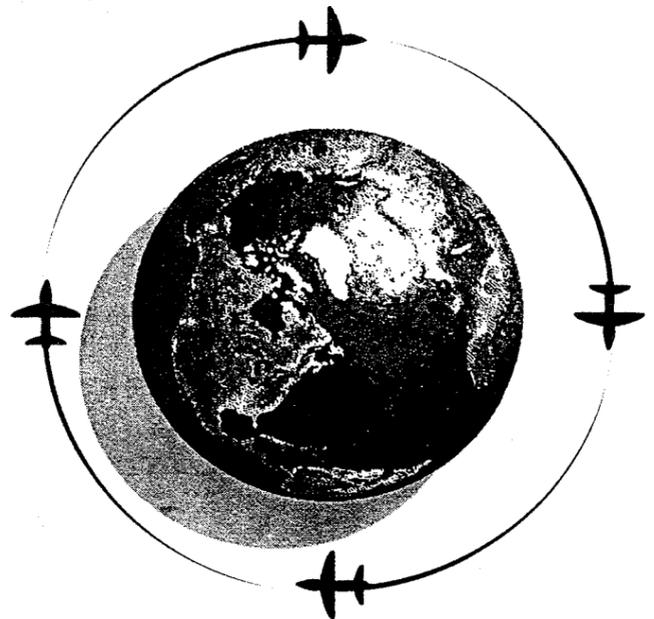
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CASE INTERVIEW WORKSHOP

Are you a graduating senior or a PhD graduate interested in learning how a "case interview" works? If so, please join us for an *informal* session given by The Boston Consulting Group on the "case interview" experience.

Monday, November 18
4:00-6:00pm

Beckman Institute Auditorium
Hosted by
Susan Moffet (BCG Los Angeles)



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n o w hear this.

by Ron Dolette

New Adventures in Hi-Fi

R.E.M.'s newest album in two years, *New Adventures in Hi-Fi*, combines the hard gritty elements of 1994's *Monster* release with the more mellow, yet critically acclaimed *Automatic For The People*.

Though combining two distinctly different albums does not always result in the best of both worlds, *New Adventures* may provide a bridge for those who were fans of one album but not the other. The album features the usual R.E.M. mix of love, hate, and politics; and while many songs on *New Adventures*, such as the current single, "E-Bow the Letter," and the instrumental, "Zither," are reminiscent of 1992's *Automatic*, the new album ap-

pears to be more of a complete spectrum of R.E.M.'s dynamic styles.

"Wake Up Bomb" and "Departure" are perhaps the album's two hardest tracks, while "Leave" has a very hypnotic guitar in the background, which gives them only a few degrees of separation from *Monster*. The overall impression, however, is that *New Adventures* could reflect a newer, louder R.E.M. than what many have come to expect of the Athens, Georgia, band. If you prefer R.E.M.'s recent "What's The Frequency, Kenneth?" style, you'd better stick to *Monster*. Basically, every song on *New Adventures in Hi-Fi* sounds like an *Automatic* hit.

The album features the usual R.E.M. mix of love, hate, and politics.



BY MATT TISCARENO

On Friday, October 18, Caltech's pianist-in-residence James Boyk gave a concert in Dabney Lounge of three piano sonatas by composer Sergei Prokofiev (1891-1953).

Called the "War Sonatas" by the composer because he wrote them in Russia in the midst of World War II, the Sixth, Seventh, and Eighth Sonatas are among Prokofiev's latest enduring works. Although the sonatas, like Prokofiev's other music, make use of sharp dissonances and complicated harmonies, they also contain clear, melodies and musical themes, such that even a novice listener can understand and enjoy them.

Opening the concert was the Sixth Sonata. The first movement was exciting and opened the concert well.

Powerful performance of Prokofiev's "War Sonatas"

Boyk's performance of the two middle movements held me completely entranced. They were lyrical and somewhat light in tone, yet still contained the rich harmonic texture and underlying force

reached the Seventh's swift ing conclusion, he appeared tired. In fact, he had to stop and start over again about thirty seconds into the movement, and for a while it seemed that he was just trying to keep up. But he caught a second wind about halfway through and he finished the pulsating movement strongly and with flourish.

Mostly because of Boyk's fatigue, and partly because any piece of music might seem so following the powerful and dramatic Seventh, Boyk's performance of the Eighth Sonata sounded rather lackluster.

The lyrical second movement was quite pleasant, and the other two movements had some very strong moments, especially the third. But it seemed that, in his comeback concert, Boyk simply did not have the stamina to take on two hours worth of a composer as demanding as Prokofiev.

Although the concert had its difficult moments, Boyk's skill as a musician made it well worthwhile.

I enjoyed myself immensely during the many moments when he was on top of his game, and the other times had their bright spots as well. I wish James Boyk a warm welcome back to the concert stage, and look forward to more concerts from him in the future.

The first movement is one of the most powerful and disturbing pieces of music I have ever heard.

that is so characteristic of Prokofiev. The faster fourth movement started out complex and exciting, slowed down in the middle, but finished well.

After the first intermission, Boyk took on the monumental Seventh Sonata. The first movement is one of the most powerful and disturbing pieces of music I have ever heard. It expresses Prokofiev's deepest emotions regarding the war in Russia. Sometimes thunderously angry, and sometimes dazed and aimless, Boyk's performance brought me close to tears as I listened.

The lyrical melancholy of the second movement was a welcome relief. Although that movement has its tense moments as well, the concluding reprise seemed to invoke past happiness and perhaps hope for the future.

By the time Boyk

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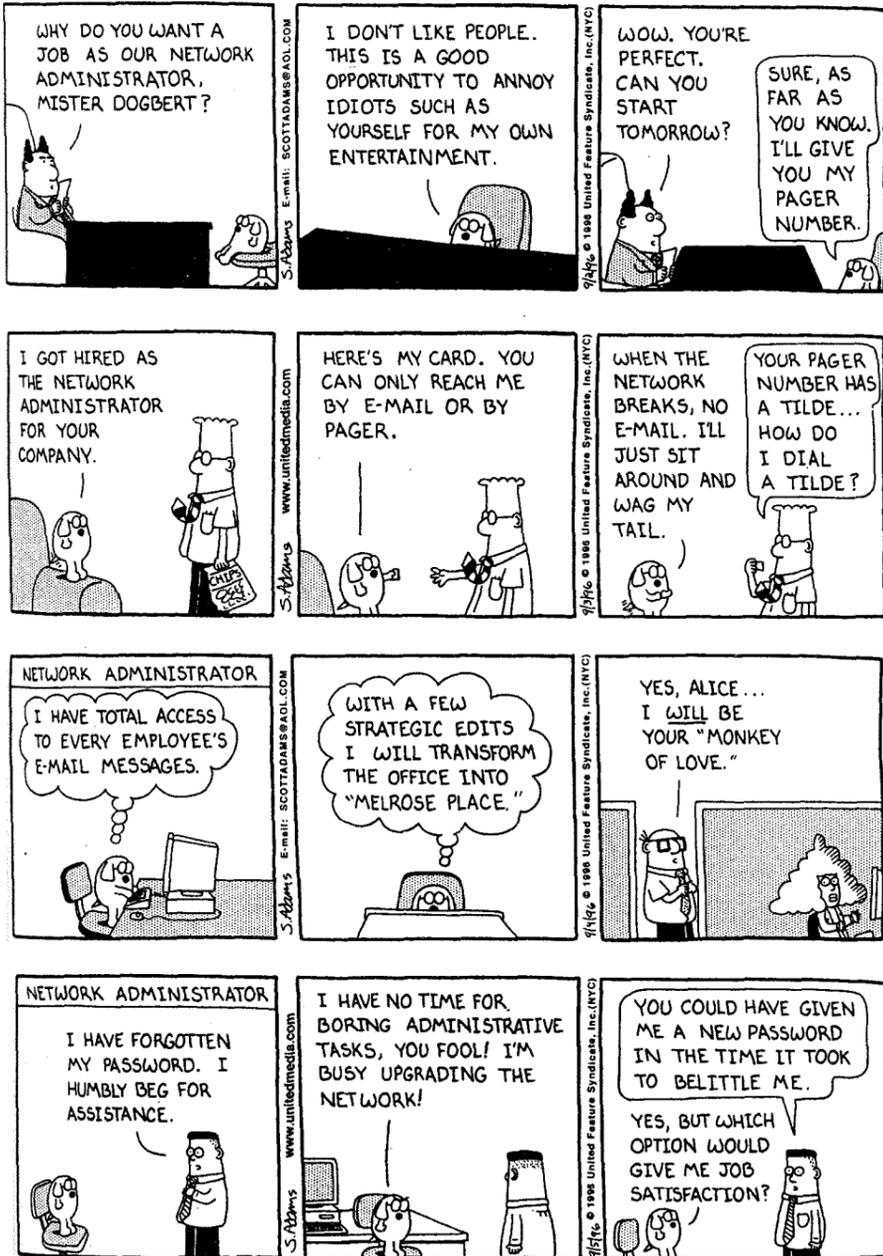
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SURF: Learning through research

CONTINUED FROM PAGE 1

of working with technology that is near and dear to their hearts."

Last November, a project that was started in 1988 and continued by successive teams of students was completed with the launch of an experimental communications satellite. The satellite, called SURFSAT was designed, engineered, and tested by undergraduate students, and completed with a budget of three million dollars.

In addition to Caltech and JPL SURFs there are industry SURFS, which involve working with someone at a local company as well as a Caltech faculty member. Said Merkel, "This gives the student a different type of problem to solve — one with a deliverable needed at the end." Industry SURFs give students an opportunity to see what kind of work is available in the business world.

Obadiah Manley, a senior, worked for Logicon this summer and said, "I definitely saw how things are more product-oriented. [I was] trying to see how to do a particular task as opposed to seeing if I could understand something thoroughly. I'm definitely glad to have worked there."

SURF has grown since 1979 from a program with eighteen students and a total budget of \$36,000 to a 248 student program with a budget of \$890,000. Masella Bonsall, a member of the SURF board for nearly 10 years said, "I'm amazed at how this program has advanced since it started. The quality [of the students' projects] has gone up so tremendously; I mean it was very good before, but now it's excellent."

The stipend, too has gone up tremendously from its original \$2,000 in 1979 to \$3,600 this summer; and next summer will be increased to \$4,000 in order to remain competitive with comparable summer re-

search jobs within and outside of Caltech.

SURFSAC (SURF Student Advisory Council), a ten-member committee will be printing student-authored research papers in a new publication called the Caltech Undergraduate Research Journal (CURJ), which will be out in a couple of weeks.

CURJ was started last year by SURFSAC. Carolyn Merkel, director of the SURF program, said, "We wanted the students' technical papers to be as important as the oral presentations so they developed the journal to give that same visibility to the technical journals. This [publication] is unique in the country in that it is led by, done by, and published for the students."

Part of the reason for SURF seminar day is to find semifinalists for the Doris S. Perpall SURF Speaking Awards which will then be narrowed down to a group of finalists, three of which will win the award.

Twenty-nine semifinalists have already been chosen, and will begin presentations on November 11. The presentations are open to viewing by anyone, and will end on November 15. This years semifinalists are Saurabh Saha, Lisa Ngo, Priya Rai, Neil Jones, Julius Su, Matthew Barnet, Fay Peng, Sudipta Bardhan, Barry Shapira, Chris Chang, Johanna Yao, Jason Roth, Edwin Soedarmadji, Victoria Tanusheva, Emily Chiu, Nicholas Choly, Obadiah Manley, Steve Chase, Steve Bennett, Matthew Tiscanero, David Tytell, Samantha Foster, Alana Laurence, Dave Relyea, Paul Storaasli, Dave Bacon, David D'Urso, Sebastian Maurer, and David Farnham.

Students wishing to find more information about SURFS should contact the SURF office: 137 Beckman Institute, Fax 449-9649, phone x2885.

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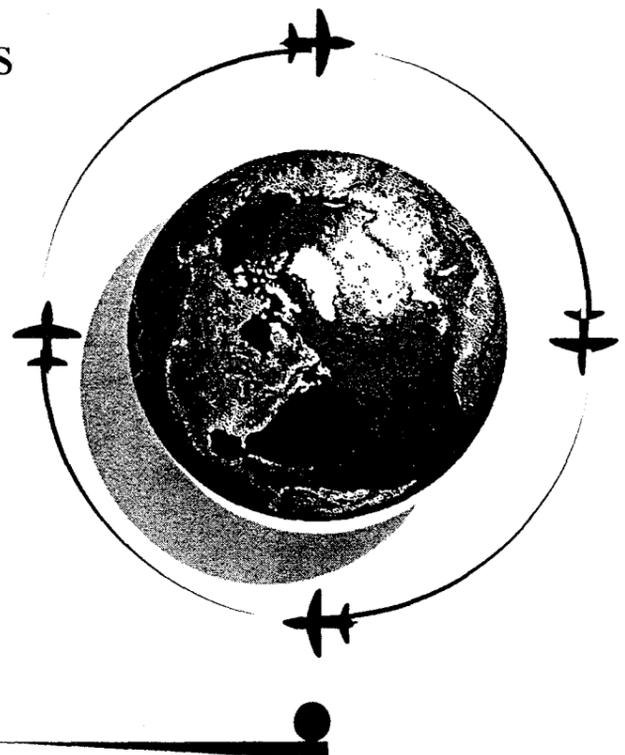
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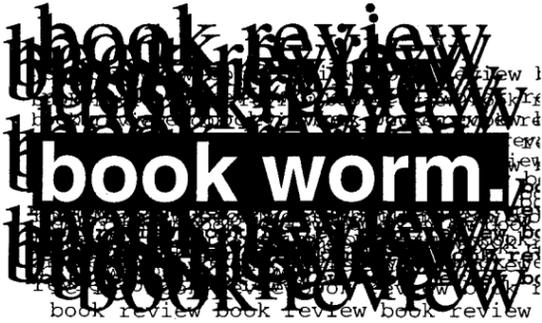
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BY DAISY JAMES

- ☆☆☆☆☆ A truly wonderful work of art
- ☆☆☆☆ Slightly imperfect
- ☆☆☆☆ Well written but not enjoyable
- ☆☆☆ Fun to read, poorly written
- ☆☆ Bad writing, no fun
- ☆ Birdcage liner

Lord Peter Views the Body

by Dorothy L. Sayers

☆☆☆☆

I had been told several times that I should try this series, and at one point I started one. I never made it all the way through the book, so a few weeks ago I decided to give it another try. I'm glad that I did because this book put Sayers on my list of favor-

ites.

It is a collection of short stories, set in nineteen-twenties and thirties England, about Lord Peter Wimsey. He is a sleuth more in the style of Holmes than Poirot, but with fewer of the incredible deductions that sometimes make Doyle's stories a bit hard to believe.

Which is not to say that reading this book does not require a healthy suspension of disbelief.

The stories also feature Wimsey's faithful manservant, Bunter; the Egoists' Club, where

you can talk about yourself as much as you like (Wimsey is a

Mossflower

by Brian Jacques

☆☆☆

I read this book thinking that it was a children's book, but when I went to buy the sequel I found it in the fantasy section. I think that it could be classified as either, though it might be a bit too violent for some younger readers. *Mossflower* is technically the second book of the *Redwall* series, but as it is the prequel I read it first.

The story is about a group of animals who live in Mossflower Wood and their re-

bellion against a despotic queen. What impressed me most about this book is the very accurate account of the fall of a monarchy, similar to what I've read time after time in history classes.

It also includes several battle scenes, a quest, and many descriptions of food (have something on hand to eat while you read this.) It is an exciting book, definitely light reading. My only complaint is that things seem a bit out of proportion, i.e. a mouse, however heavily armed, could not fight a wildcat.

Pelican at Blandings

by P.G. Wodehouse

☆☆☆☆☆

I don't think that Wodehouse wrote a book that I would not give a six ☆ to. Certainly not a *Blandings Castle* one. *Blandings* is the ancestral

home of Clarence, ninth Earl of Emsworth, a scatterbrained man whose only true interest is his prize pig, the Empress of Blandings.

Clarence, ninth Earl of Emsworth, [is] a scatterbrained man whose only true interest is his prize pig, the Empress of Blandings.

The Pelican of the title is Galahad Threepwood, Lord Emsworth's younger brother and a former member of the Pelican Club. The Efficient Baxter does not appear in this particular book, but it does feature several impos-

tors (which are common at *Blandings*), Lady Constance, the Earl's imperious sister, and two enormously complicated love affairs.

Although that is more or less a description of any of Wodehouse's books (some have three or four love affairs) it doesn't make any of them less worth reading. He writes with wonderful humor and doesn't bother you with anything like social commentary.

...a collection of short stories, set in nineteen-twenties and thirties England...

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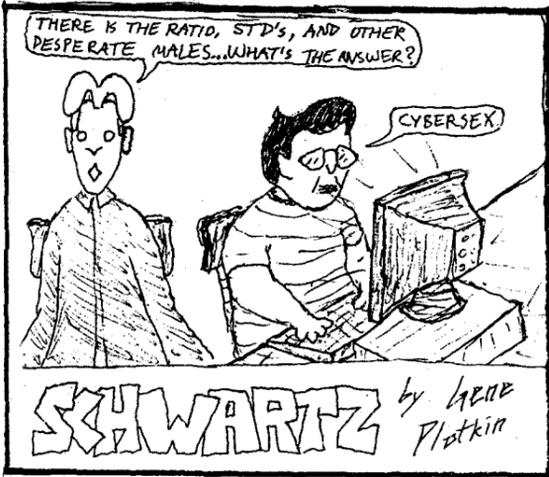
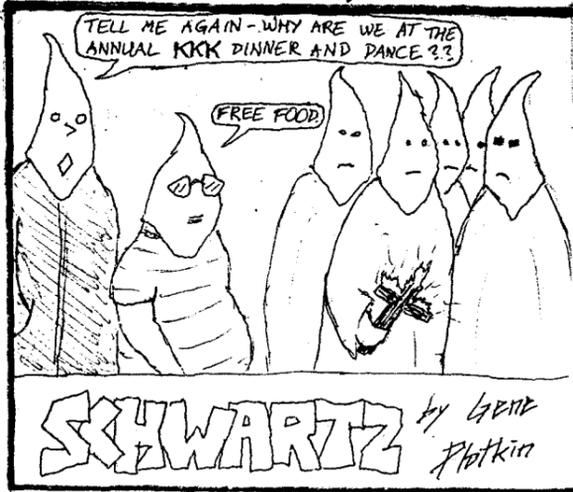
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by Gene Plotkin



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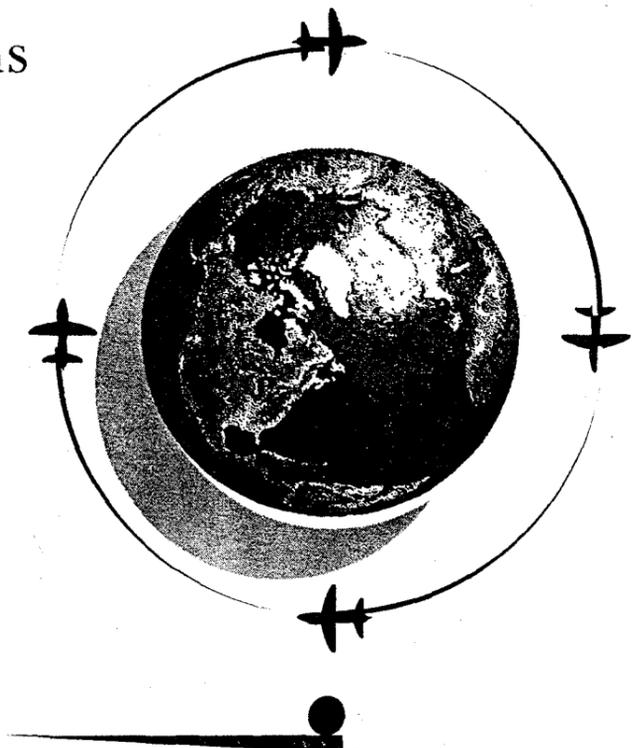
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NEWS

Y NEWS

BY DONNA EBENSTEIN

The Caltech Y will be having a Halloween-themed Haunted Mini-Decompression next Thursday on Halloween. Come to relax, eat snacks, and watch scary movies. It's your chance to escape the stress of midterms, if only for a few hours.

There is a mountain biking trip this afternoon - stop by the Y to find out the details. The trip is your chance to take your spiffy mountain bike somewhere it's never been - the mountains!

The second in our bi-weekly series of Weekend Y-Hikes will occur this Saturday, 10/26; it will leave from

the Y at noon, so show up with a lunch and your hiking boots. The Weekend Y-Hikes offer you the opportunity to get away from the smog-filled L.A. basin and into the San Gabriel or San Bernadino mountains. If you've never been hiking before, you'll like it, so show up on Saturday.

As always, we can use volunteers for several area programs. If you're a work-study student, you'll receive \$12/hr while participating in a worthwhile activity. See Chris at the Y (x6163) or email sundbergc@starbase1.

THE 1996 BIG T

DO YOU STILL NEED TO GET YOUR COPY OF THE 1996 BIG T?

Here's a list of people from whom you can get a copy. To qualify, you must have been a member of ASCIT for the 1995-96 year. You may pick up a copy of the Big T from any of the following - this year you don't have to write your name down on any lists, so please remember to comply with the Honour Code:

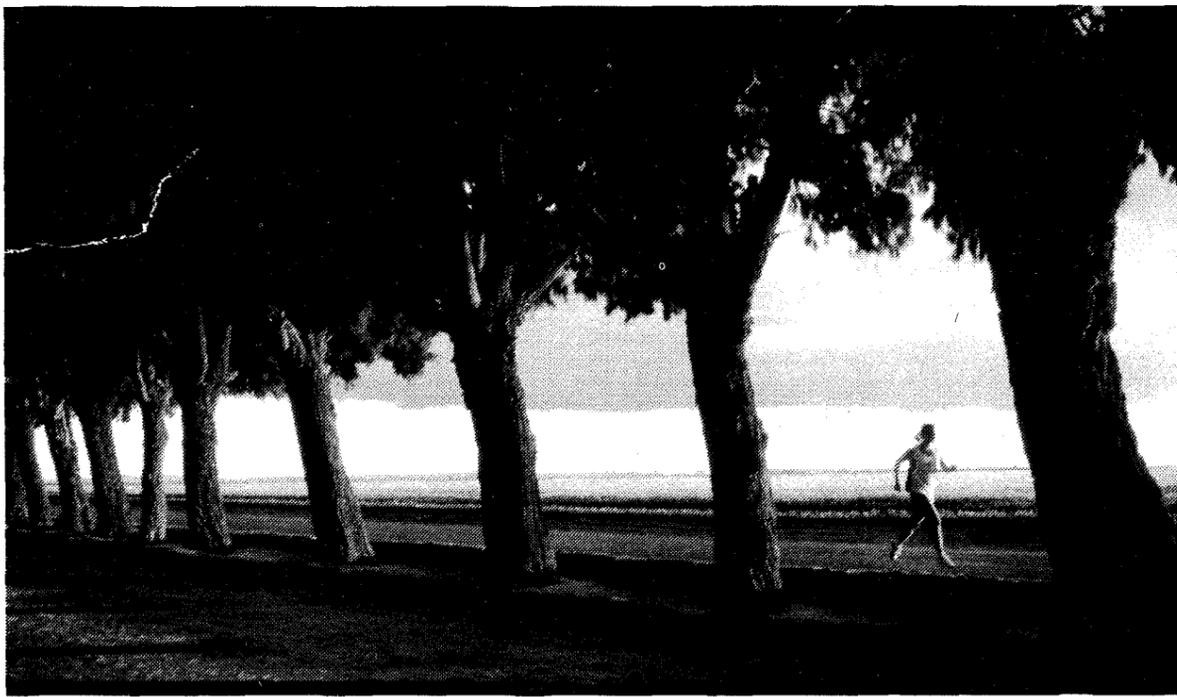
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If you never got a copy of the 1993, 1994 or 1995 Big T - and you qualified to get one - these are also available. If you cannot obtain a copy from any of the above, please send an e-mail message to bigt@cco.caltech.edu.

We are always looking for volunteers who are interested in helping contribute to the making of the 1997 Big T. If you would like to assist by being photographers, layout people, or people who would otherwise participate in recording the 1996-97 year at Caltech into posterity, we would be delighted to have your help. You can always contact us by one of the following mby Public Relationseans:

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Womens' Volleyball places fourth in tournament

BY AMANDA SCHAFFER

The Caltech women's volleyball team finished fourth out of seven teams at the tournament held last Saturday at Braun Gymnasium.

The team's 3-3 record in round robin play was good enough to advance them to the playoff round. Caltech lost to the College of Notre Dame in the semifinals, then lost an extremely close con-

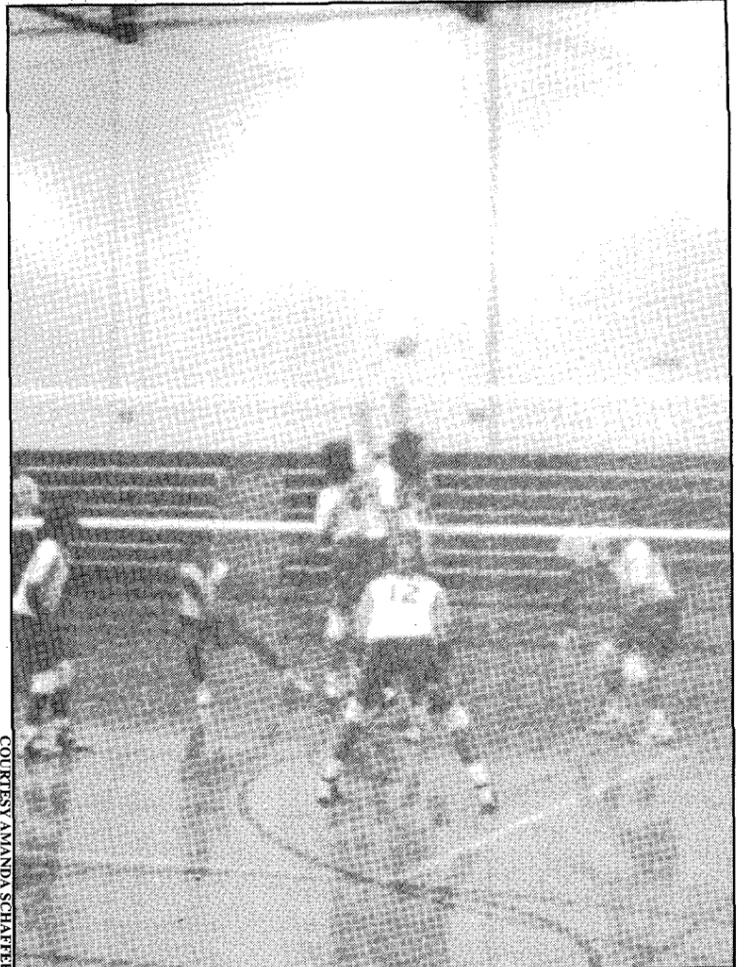
solation match, 15-7, 15-13, to LIFE Bible College. Pacific Christian College won the tournament with a victory over Notre Dame in the final. Caltech's performance was highlighted by the play of

Grace Yang and Janet Sun, who earned All Tournament First and Second Team Honors, respectively. The two were backed by a solid team effort that included contributions from many subs. Coach

Maureen Burl said that everyone played well throughout the tournament, and pointed out that the losses during pool play came in close games.



Lady Beavers stand around.



Girls jump for ball.

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Announcements

•The **Dean of Students Office** needs tutors in all areas—especially for the Institute requirements, e.g. Ch 1, Ma 1, Ma 2, Ph1, and Ph2. The pay is \$7.50 an hour. They are looking for upperclass students with a strong understanding of the subject matter and the ability to communicate well. Please stop by the Deans' Office in 102 Parsons-Gates, or call at x6351 or e-mail at sandra_estes@starbase1.caltech.edu for further information.

The Vice President for Student Affairs Office is hiring a part-time **work-study student** office assistant to answer phones, file, word process, and run campus errands for 6 afternoon hours a week. The student must be able to work 3 to 5pm some Friday afternoons. The perks: a good pay rate and free soda; for more information, please see Jerri in 108 Parsons-Gates.

A dark green hooded Nike sweatshirt, blue terry cloth towel, and one white t-shirt have been left **unclaimed** from **Frosh Camp** and are currently waiting their owners in the Dean's Office, 102 Parsons-Gates.

The **Fellowships Advising & Resources Office** is desperately seeking **student workers** for a wide variety of projects. Find out about fellowships and work and study abroad while you earn money. If you are interested, please contact Karen in the Fellowships Office, Room 25 of the SAC, or x2150.

Events

•This week's **ASCIT movie** will be *Braveheart*, showing at 7:00pm and 10pm in Baxter Lecture Hall. Admission is \$2 for members, \$2.50 for non-members (cheaper than renting!).

•**Gerald Gamm**, professor of political science at the University of Rochester, will be giving an Ulric and Evelyn Bray Seminar entitled "Neighborhood Roots: Institutions and the Urban Exodus of Jews and Catholics" on Monday, October 28th at 4pm in 237 Baxter.

•The first in the **Women's Center's series** of programs covering health issues is scheduled for Monday, October 28th at noon at the Caltech Women's Center. Paula Swinford will be hosting a talk discussing sexual intimacy issues facing young women today. This program will also be used as a forum to discuss women's health concerns as well as future programs. To make a reservation (and guarantee a lunch) please call the Women's Center at x3221.

•The **Skeptics Society** presents Dr. Frank Sulloway, visiting scholar in the program in science, technology, and society from MIT, in a lecture entitled "Born to Rebel: Birth Order and Revolution Personality" on Wednesday, October 30th, at 7:30pm in the Baxter Lecture Hall at 7:30pm. Donation is \$8 for nonmembers and \$5 for members and non-Caltech students.

•The **Caltech Ballroom Dancing Club** will sponsor their first dance this Halloween, October 31st, at 8:30pm in Dabney Hall. All are welcome to come, especially in costume.

•The **Wellness Week Planning Committee** will meet for lunch Thursday, October 31st, in the conference room of Young Health Center. Interested students, staff, and faculty are invited to join. Please call Deborah Southerland at x8331 for more information and to place a sandwich order.

Caltech is sponsoring a two day **blood drive** which will be held in the Winnett Student Lounge on Wednesday, November 13th, between 10:15am and 3:30pm, and on Thursday, November 14th, between 12:15pm and 5:30pm. Please contact Vilia Zmuidzinas via e-mail at hvdvz@hr.caltech.edu or at x6001 for an appointment. Walk-ins are also welcome.

From the Counseling Center

Looking for a safe and supportive place to discuss issues such as coming out, being out, dealing with family,

coping with a homophobic culture, and being GLB at Caltech? Want somewhere just to make new friends? You are invited to the **Gay/Lesbian/Bisexual Support Group**, which meets on the first and third Tuesdays of each month from 7:30pm till 10:00pm in the Health Center lounge. This is a confidential meeting and attending does not imply anything about a person's sexual orientation—only that he or she is willing to be supportive in this setting. The group usually discusses a particular relevant topic and then moves on to the general discussion. Refreshments are served. If you would like more information, please call x8331.

Fellowships and Scholarships

From the **Fellowships Advising and Resources Office**, extension 2150, e-mail lauren_stolper@starbase1.caltech.edu:

•**Graduating Seniors** applying to Ph.D. programs that are related to the process and theory of integrated manufacturing may apply this year for the **Integrated Manufacturing Predoctoral Fellowships**. Applicants must be U.S. citizens or permanent residents. Up to 3 years of support are available. The applications are available via the Internet at <http://fellowships.nas.edu>

On Friday, October 25, at 11am in Winnett Club Room 1, **Dr. Susan Duby**, who is the program director for **NSF Graduate Fellowships**, will hold a special information session for students applying for the NSF. This is a great opportunity to have questions answered and hear the inside scoop on the NSF. The fellowships advising office is also inviting juniors as Dr. Duby will not be able to visit CIT the next academic year.

Applications are available in the Fellowships Advising Office or through the Web for the **National Science Foundation**. The URL is: <http://www.nsf.gov/ai/ai/Menu.htm> Lauren Stolper, the Fellowships Advisor, is available to help review student's NSF essays. Please call extension 2150 or e-mail lauren_stolper@starbase1.caltech.edu for more information.

The **Churchill Fellowship** gives students a chance to spend an academic year at Churchill College, Cambridge University. Fellows must be U.S. citizens between the ages of 19 and 26 and hold a bachelor's degree by the time the fellowship commences. Applicants must do graduate study in the sciences or engineering which leads to a certificate, diploma or M.Phil degree. Cambridge has a number of one year M.Phil programs, and two applicants will be nominated by Caltech. Eighty applications are available in the fellowship office.

The **Gem Fellowship** provides fellowships for minority students who wish to pursue an M.S. degree in engineering or Ph.D. degree in science or engineering. Applications are available in the Fellowships Advising Office. The deadline is December 1st. The Gem Web page can be found at <http://www.nd.edu/~gem/>

Hertz Applications are available in the Fellowships Advising Office. Applicants must have a 3.75 GPA during the last two years of undergraduate work. The deadline is October 18. Graduating seniors and grad students at any phase in their studies except for the final year may apply.

Graduating seniors who are female or minority student are eligible to apply for the **National Physical Science Consortium**. The Fellowships Advising Office has a sample application; e-mail mpsc@nmsu.edu or request info through the NPSC home page at <http://www.nmsu.edu/~mpsc>

The **Zonta/Amelia Earhart Fellowship Awards for Women** is looking for applicants that have a B.A. or

Mints

• denotes a new announcement.

B.S. degree in an area of science or engineering closely related to aerospace related science or engineering. Applicants must have a well-defined research program in an area of aerospace related science or engineering. Women graduate students of any nationality are eligible to apply. Applications are available in the Fellowships Advising Office.

The **American Scandinavian Foundation** offers students the capacity to study in Denmark, Finland, Iceland, Norway or Sweden. Applicants need at least some ability in the country's language and must be U.S. citizens or permanent residents. Applicants must be graduating seniors or grad students at any level including post-doctoral projects.

Students who have completed less than one year of graduate study toward a degree in the biological sciences or undergraduate seniors are qualified for **Howard Hughes Predoctoral Fellowships in the Biological Sciences**. To obtain an application via the internet <http://fellowships.nas.edu> or e-mail infofell@nas.edu.

From the **Deans' Office**, 102 Parsons-Gates:

The **Harry S. Truman Scholarship Foundation**, established by Congress in 1975, is the official federal memorial to honor our thirty-third President. The Foundation awards \$30,000 merit-based scholarships to junior-level college students who wish to attend graduate school in preparation for careers in government or elsewhere in public service. Scholars may attend graduate schools in the United States or in foreign countries. In 1997, up to 85 students will be awarded Truman Scholarships. They will receive leadership training, graduate school counseling, preferential admission and merit-based aid to some premier graduate institutions, and internship opportunities with federal agencies. They will establish friendships with persons sharing similar values and interests. Scholars are eligible to receive \$3,000 for the senior year of undergraduate education and \$27,000 for graduate studies. The Foundation defines public service as employment in: government at any level, uniformed services, public interest organizations, nongovernmental research and/or educational organizations, and public service oriented nonprofit organizations such as those whose primary purposes are to help needy or disadvantaged persons or to protect resources. The eligibility requirements are: a full-time junior-level student at a four-year institution, committed to a career in public service as defined above, and in the upper quarter of his or her class, and a U.S. citizen. If you are interested in applying for the Truman Scholarship, please contact the Dean of Students Office, 102 Parsons-Gates. The deadline is late **December, 1996**.

From the **Financial Aid Office**, 515 S. Wilson, second floor:

•**Northrop Grumman** is beginning their scholarship selection for 1996-97. They will be offering one scholarship to an undergraduate who has a career interest in the Aerospace/Defense Electronics Industry. Applicants must be U.S. Citizens, full-time students in 1996-97, and must have a GPA of 3.0 or above. Applicants must also be majoring in one of the following fields: Electrical Engineering, Mechanical Engineering, Aerospace Engineering, Computer Science/Engineering, or Manu-

facturing Engineering. The deadline has been extended. To apply, submit a resume and an academic transcript to the Financial Aid Office by **November 1st, 1996**.

The **John Gyles Education Fund** is offering financial assistance to students in Canada and the United States. Canadian or American citizenship and a minimum 2.7 GPA is required. Selected students will receive up to \$2,500. The deadline is **November 15th** (postmark date). To receive an application, send a stamped (U.S. \$32), self-addressed No. 10 envelope to: The John Gyles Education Fund, Attention: R. James Cogle, Administrator, P.O. Box 4808, 712 Riverside Dr., Fredericton, New Brunswick, Canada E3B 5G4.

Applications are now being accepted for the **1997-98 National Academy for Nuclear Training** scholarships. Scholarships are \$2,500 each and will be awarded to eligible students majoring in nuclear engineering, power generation health physics, or chemical, electrical, or mechanical engineering with nuclear or power options. Applicants must be U.S. Citizens, have minimum 3.0 GPAs, and be full-time sophomores, juniors, or seniors in 1997-98. Preference will be given to students demonstrating specific preparation for employment in the U.S. nuclear power industry. Applications must be postmarked no later than **February 1st, 1997**.

•The **American Society of Naval Engineers** is offering \$2,000 scholarships for academic year 1997-98 to students who are interested in naval engineering. Applicants must be U.S. Citizens, must demonstrate a genuine interest in a career in naval engineering, and must

be applying for either their last year as an undergraduate or for one year of graduate study (doctoral candidates not eligible). The deadline to submit application is **February 15th, 1996**.

The **Jewish Family and Children's Services** is pleased to announce the continued availability of financial support for Jewish individuals and their families. JFC provides hundreds of students loans, grants, and scholarships to Jewish students. Individuals may apply for up to \$5,000. Special scholarships are available for study in Israel. To be eligible, students must have financial need, have at least a 3.0 GPA, and be residents of San Francisco, the Peninsula, Marin or Sonoma counties, or the Bay Area. There are no deadlines—applications accepted throughout the year and are available in the Financial Aid Office.

The **Elie Wiesel Foundation for Humanity** announces the 1997 Essay Contest for the Elie Wiesel Prize in Ethics. The essay contest is open to full-time juniors and seniors. First prize is \$5,000, second prize is \$2,500 and third prize is \$1,500. Essays must be accompanied by a completed entry form. To obtain an entry form send a self-addressed, stamped envelope to: The Elie Wiesel Foundation for Humanity, 1177 Avenue of the Americas, 36th Floor, New York, NY 10036. Essay entries must be postmarked by **January 17th, 1997**. For more information about the contest, come to the Financial Aid Office.

Women who are full-time juniors in 1996-97 are invited to participate in **GLAMOUR Magazine's 1997 Top Ten College Women Competition**. This competition recognizes exceptional achievements; the vision, determination and academic excellence of female college juniors from across the country. Winners will receive \$1,000, the opportunity to meet with top professionals in their fields, and national recognition in **GLAMOUR** October 1997 issue. Applications are due **January 31st, 1997**.

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Scurve sabotages Dabney environmental expedition; R.A. wounded

DABNEY I

A member of Ricketts House infiltrated and sabotaged a Dabney House wilderness mission to reintroduce spotted owls into their native habitat. After succeeding in destroying 12 prefabricated Teflon "Hooter Home"® brand owl nests, Josh Adams brutally attacked Dabney resident associate Markus Ehrengrüber while shocked Darbs looked on. While Ehrengrüber was purifying a potential water hole, Adams clubbed him in the back of the head with a small tree. Ehrengrüber fell into the frigid waters of the 'fish-bowls,' nearly drowning due to multiple lacerations, splinters, and shock at the lack of LOVE. He was saved by loyal Darbs who braved the water to drag his unconscious body ashore. "And he isn't even a fish," said one wet Darb at the scene. Subsequently, sobbing Darbs carried his body out over 50 miles of abandoned logging roads. Unfortunately, they were forced to leave all twelve of the now homeless owls behind. "I was shocked, simply outraged," said Seth LaForge. "To think that such peaceful purpose could be responded to with absolute brutality is at odds with my loving upbringing in Dabney."

Geoffrey Matters, Dabney's Nuclear Free Africa consultant to the UN, speculated that the incident was a response to Dabney's pot rescue mission, which had taken place the previous week. "The fact that Ricketts was disturbed by Dabney's Los Angeles area "make it green, make it keen" urban beautification project is at odds with my loving upbringing at Dabney."

Last weekend's outrage was not entirely unprec-



Josh Adams clubs Dabney RA Markus Ehrengrüber with a tree as Darbs look on in horror. Photo taken from a videotape of the beating.

ented. Three days earlier, Ricketts members had clubbed baby harp seals at their new home in Dabney's public aquarium (inappropriately referred to as the "hot tub"). The "Luv dem Pups" display had been open free to the Pasadena public for most of the summer. The exhibit is now closed until the blood is scrubbed from the bricks of the courtyard.

Other Scurve atrocities include slash and burn agricultural techniques in the rain forests of Brazil to fuel "the pot" as well as unprecedented oil drilling in the Antarctic for manufacture of such air pollutants as "the acetone bomb". Such mindless destruction has never been seen before. The pattern of escalation becomes more apparent by the week, while uncomprehending Darbs ask, "Where's the LOVE, man?"

While their wounded R.A. recovers in an intensive care unit at Huntington Hos-

pital, Darbs are planning a tie-dye party in protest of the brutality seen last weekend. Ac-

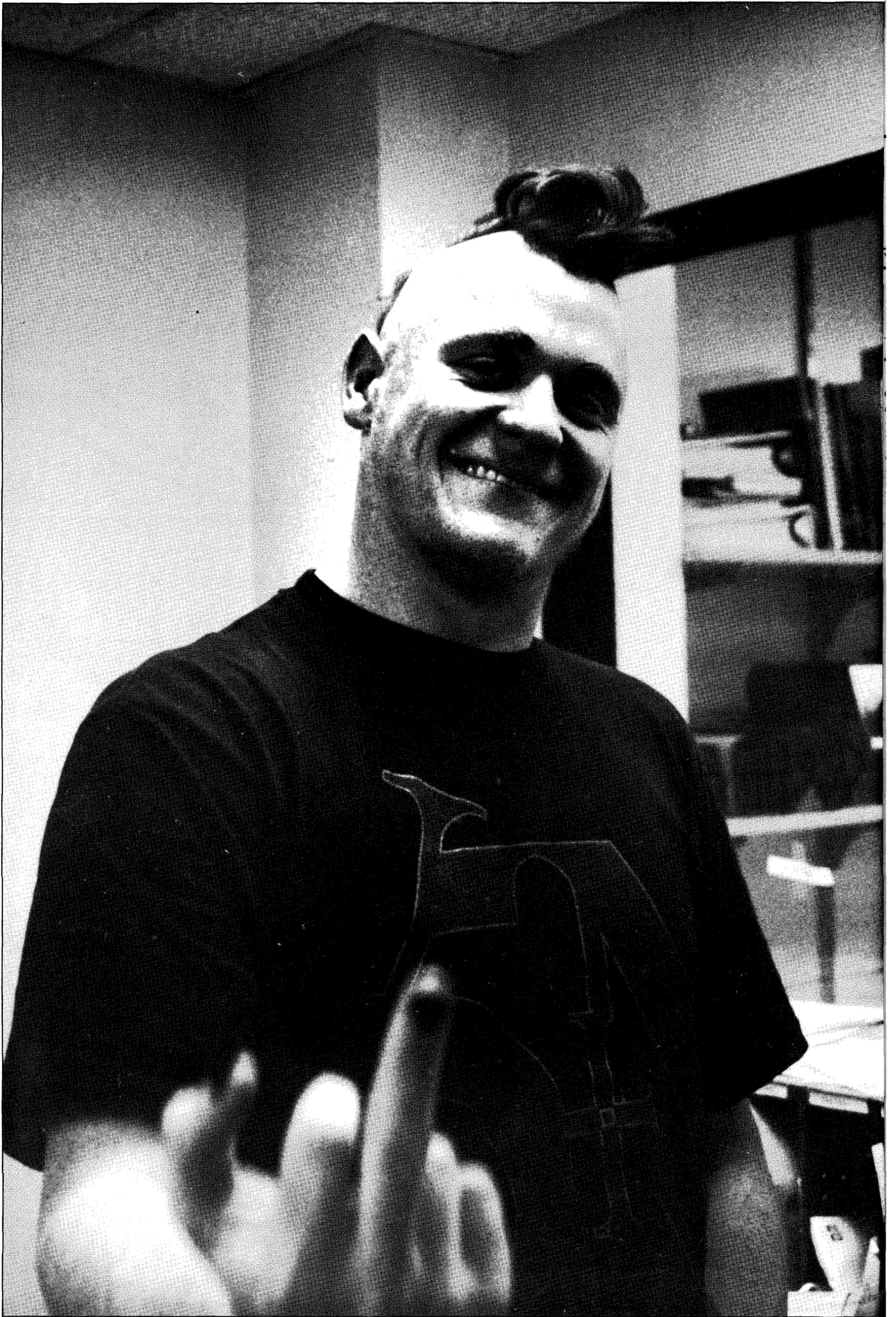
tivities will begin around 1 p.m. on Saturday the 26th in the Dabney courtyard. All are

welcome, including any Scurves who have realized the error of their ways.

EAT MEAT

NO
INFORMATION
HERE. TRY
AGAIN NEXT
TIME.

PHOTO COURTESY DABNEY HOUSE



FUCK THE DARBS...