

GOOD  
LUCK  
ANDY!

# The California Tech

RESUMÉS  
TODAY

VOLUME LXXXIX NUMBER 6

PASADENA, CALIFORNIA

FRIDAY 6 NOVEMBER 1987

## S/FC Takes Off: They Want Your Body

by Bibi J-N

The planning meeting, held Mon., Nov. 2, for the Student/Faculty Conference was a success in defining specific topics for the conference. The topics have been grouped into seven broad subject areas, each of which will be the basis of a subcommittee. Each subcommittee will research its assigned topic and formulate a report of recommendations to present at the Student/Faculty Conference in February. Listed are the seven subcommittee topics, along with some of the specific ideas suggested at the meeting:

### Non Science Courses:

How can we improve the non-science course offerings?

- expand offerings in BEM, art history, music, H&SS.

### Student/Faculty Relations:

How can we promote more student/faculty interaction?

- faculty rotation through the Houses, resulting in faculty fellows being chosen for each House.
- more and varied student/faculty events like Sports Day.
- revisions in the advisor/advisee system to make it a productive relationship rather than mere card-signing.

### Athletic Facilities:

How can we solve the constant scheduling conflicts of the sports practices and games?

- build a new gym.

### Housing:

What does the future hold for undergrad housing?

- an eighth House.

- more affiliated off-campus alleys.
- more unaffiliated off-campus alleys.

### Frosh Admissions:

How can we attract more applicants (women in particular)?

- generate a more positive image from within.
- more recruiting of high school students in general.
- start a summer program for high school women designed to encourage them to pursue science (at Caltech).

### Curriculum:

How can we change Caltech to make it more attractive to more students?

- expand the junior year abroad program.
- reduce the core curriculum to make time available for option-oriented classes.
- promote/require year-round undergrad research.

### Art Gallery:

How can we get more exposure to art at Caltech?

- revive Baxter Art Gallery.
- create a gallery for exhibition/sale of student art.

All of these subcommittees need chairmen and interested people to discuss and research those topics in order to come up with some concrete recommendations for the conference. If you are interested in any of these, please sign up at the MOSH's office (or your House's lounge) and come to the next meeting Wed., Nov. 11 at 8:00 PM in the MOSH's office.

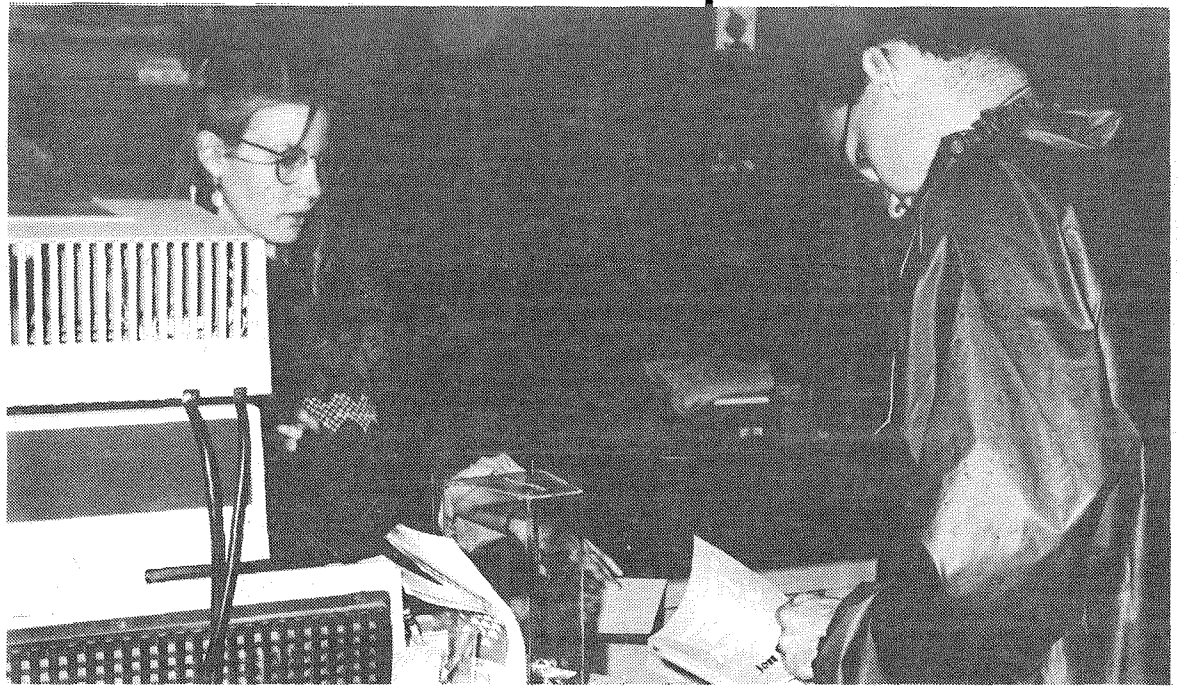


photo by Michael Keating

Commie fascist pig engages in capitalist activity. Nooses are not sold at the bookstore.

## Bookstore: Convenience at a Price

by Marc Turner

*From the most able, to him that can but spell: There you are number'd. We had rather you were weigh'd. Especially, when the fate of all Bookes depends upon your capacities: and not of your heads alone, but of your purses. . . . Judge your six-pen'orth, your shillings worth, your five shillings worth at a time, or higher, so you rise to the just rates and welcome. But whatever you do, Buy.*

(from the preliminary address in the Shakespeare folio of 1623)

According to the Caltech cata-

log, an average student at this institution will spend some \$504 this year on books and supplies. Four years ago that figure was \$345, which amounts to a 10% increase each year. Inflated book prices are the main culprit.

As an example, four years ago an *Apostle I* cost \$36.30, but this year's freshmen dished out \$52.00 if they went to the Caltech Bookstore. They probably didn't know that the same book was available for \$44.50 at PSTB (Pasadena Scientific and Technical Books).

In fact, many of the books required for Caltech courses are cheaper elsewhere. The gravitation text required for Ph236 is \$51.90 at Caltech and \$43.95 at PSTB, and surprisingly even the Feynman lecture series is less. If you know the courses you will be taking, it is a good idea to give them a call a few weeks ahead so they can special order it for you if they don't have one on hand.

The selection of titles at PSTB is comparable to that at Caltech, with an especially impressive collection of computer literature. Benjamin Hopkins, the store manager,

shows his obvious appreciation of the Techer mentality by stocking such books as *The Beauty of Fractals* for computrolls and *Locks and Alarms* for moles. They have a two week return policy, and they will even accept your personal check on a Caltech I.D. They are open 9-6 Mo-Th, 9-5 Fri, and 10-4 Sat., and are located two miles North of Caltech near the corner of Hill and Washington.

The PCC bookstore has something of a void in its science section, but they do offer the Schaum Outline Series of problem solvers at three dollars less than Caltech. Their blue exam books are also cheaper, but unfortunately lacking that vital Caltech logo. A narrow plastic 3-ring binder costs \$1.79, while the same article will set you back \$3.45 at Caltech's bookstore.

At Caltech's bookstore, \$11.57 will buy you a nice lab notebook with 100 sheets of graph paper. For \$4.70, you can be the proud (and naive) owner of a deluxe laminated periodic table. Unfair advantage? Not if you're not forced to buy there. If it seems a little high, it probably is. Try somewhere else.



The Caltech Karate Club is the oldest in the Nation. These are trained professionals. Do not try leapfrogging at your own home. Article on page 4.  
photo by Michael Keating

## Interhouse Is Coming Martha, lock your door! Close your transom!

by John Gehring

Security at Interhouse this year will be tighter than it has ever been before. A grand total of twenty-five security officers will be posted around campus, along with several members of the Pasadena Police.

The principal reason for the increased security is to prevent the violence and vandalism that have happened on occasion in the past. At last year's Interhouse, for example, three students were assaulted, one with a knife, and had to be taken to Huntington Hospital. Security spent several hours after these incidents trying to clear the campus of trespassers.

There have also been instances of vandalism, such as what happened at the Seven House Party, two years ago. The Pasadena Police had to come and shut down the party when it became too loud,

and some angry partygoers destroyed expensive equipment in a lab in Firestone.

In both of these cases, the wide publicity that the parties received was a problem. Before last year's Interhouse party, fliers were distributed in the Plaza Pasadena and West Hollywood. This resulted in the party attracting many more non-students than would otherwise have come. The fact that the band Fishbone was playing at the Seven House Party provided unwanted publicity in that instance.

In contrast to these previous parties, the advertising of this year's Interhouse promises to be a low key affair. The MOSH, Robert Oliver, said that there would be some publicity at Occidental and Scripps, but that otherwise the party's existence would not be advertised.

In addition to avoiding wide publicity there will be many more security officers at this year's party than before. A total of twenty-five security officers, including the regular Caltech security staff as well as additional officers from GHG Security, will be on campus from 8:30 pm until 4:00 am. In marked contrast to the four security officers present at last year's Interhouse, almost four thousand dollars is being spent on security this year.

The director of Caltech security, Harold Ginder, envisions the deployment of the officers as follows: There will be two barricades in the street at the corners of Del Mar and Holliston and Hill and San Pasqual, each manned by a Pasadena Police officer along with a Caltech Security officer. There will

**continued on page 3**

## Return of the TQFR

Last week, due to space requirements, the *Tech* deleted several lines from Jeff Tekanic's article, "ASCIT Presents TQFR Proposal." The article outlined the proposal, titled, "Proposal for a Students' Guide to Caltech Courses." Following is the omitted section, which followed the outline:

The first step will be to create an ad hoc committee to begin this process. The committee will initially be composed of myself, the Director of Academic Affairs and at least one person from each option. To get this project moving in a positive direction much work will need to be done.

But support is not enough; I need about 10-15 people who are willing to do some work to get this project off the ground. I also would like to hear from all the people who are currently on a student/faculty option committee. Without a group student support nothing will be accomplished. So once again, I encourage anyone interested in improving our current situation to contact me, an ASCIT BOD member or your house president. Thank you for your continuing support.

The result of the recall election last week has opened the ASCIT elective office of Director of Academic Affairs to nominations. Since the appointment will end in February, the new Director of Academic Affairs will not be responsible for putting out a TQFR. However, the successor to this position will be responsible for working with ASCIT president Jeff Tekanic in developing a new system for collecting accurate and timely feedback from the various classes. The director will be a voting member on the ASCIT Board of Directors and will take office immediately.

If you wish to undertake this illustrious position, send a signed nomination to Eric "Stompy" Scharin, ASCIT secretary, 1-58, and sign up at the MOSH's office. Nominations will probably close sometime this coming week. Statements in the *Tech* must be submitted by Wed., Nov. 11. Elections should occur on the following Tuesday. If there is a run-off, it will occur Fri., Nov. 20. Nominations are open only to ASCIT members.

## LETTERS

## Abysmal Disgrace

To the Editors:

Thursday, Oct. 15, 1987, members of Page house destroyed between 13 to 21 stolen Pantry shopping carts by throwing them off the North house roofs into Lloyd courtyard. Since the carts cost approximately \$200 each, Page faces a maximum fine for damages of up to \$4200.

This does not include such legal consequences as felony theft charges should the Pantry decide to pursue legal action. Although legal action is unlikely, this is still a criminal act. Some people might defend this incident as being "tradition." Caltech students, however, should be able to come up with traditions other than felony theft and vandalism.

Not only was this a criminal incident, but it was also dangerous. Anyone caught in the courtyard would have been killed underneath the avalanche of tumbling metal.

The Page Frosh on the roof were warned they would face a BOC violation if they were to continue. Assuming they understood spoken English, they have no defense for their actions besides stupidity.

Under the honor system, it seems reasonable to expect Teachers to be responsible. However, no one in Page has come forward and accepted responsibility for their juvenile actions.

Last year, Page was properly apologetic for their actions and promised never to let this sort of thing to happen again. Apparently, they lied. I think Page can come up with something more creative than this idiotic, wantonly destructive episode to initiate their Frosh.

I am dissatisfied with the apparent lack of progress and attention this problem has received. Hopefully, this abysmal situation will be rectified.

Sincerely,  
-Paul A. Searcy

CIA Ads  
Controversy

To the Editors:

I always try to ignore advertisements, but this one struck me: A repeated ad in the *Tech* announced that the CIA is hunting graduated heads at Caltech. Recently I learned that the job interviews will be held on campus. "What's the problem?", you may ask. There are two problems.

The first concerns science. Caltech is one of the most efficient environments for a scientific edu-

cation. That's nice for us. It would be nice for the progress of science and for the world outside the campus lawns, if most Caltech graduates would choose a job where they can use their skills in science. For one reason the CIA does not offer that option: the basic principle of scientific activity is free exchange of information. The CIA and similar agencies are instead busy converting information into secrets...

The second problem—as you may guess—involves politics. As a foreigner, I am concerned about the foreign policy of the CIA (which is not necessarily approved by the majority of U.S. citizens). The agency has a long record in activities against democratically elected governments. Examples: The agency was involved in the overthrow of:

—Mohammad Mosaddeq in Iran in 1953

—the government of Jacob Arbenz Guzmán in Guatemala in 1954

—the "unidad popular" of Salvador Allende in September 1973 in Chile.

The short term "success" in establishing the pro-U.S. dictatorships of the Shah Reza Pahlavi, of Col. Rodolfo Castillo Armas, and of Gen. Augusto Pinochet was in all three cases detrimental for the economy, the situation of human rights and the faint democratic tradition in these countries. More recently the Iran-Contra scandal has revealed that direct intervention in internatl affairs of other nations is still current practice at CIA.

I hope that Caltech graduates have much broader interests than the options which the CIA offers.

Sincerely,  
-Bernhard Wehrli  
Postdoc in E.E.S.

## Collaborate!

To the Editors:

I would like to respond to Eric Fung's article supporting the Math 1a policy. I believe that Eric has missed some key points of the debate.

As a student, I have found that I learn the least in classes that do not allow collaboration. If you cannot solve the problems, you learn nothing from doing the homework. Often, TA's (assuming they are available and that they are allowed to help) simply do not explain things as well as another undergraduate (of course, there is the additional benefit that there are many more undergraduates to choose from).

According to Eric and Dr. Fuller, one of the "joys" of noncollaboration homework is that you may solve the problems on your own. I have yet to find a homework policy that does not allow a student to do his homework alone. While

Dr. Fuller may want to encourage students to solve problems without help, all he is teaching the students who cannot do the problems without help is the frustration of being a Caltech student and that Caltech is way over their heads.

Eric also points out that Dr. Fuller can gauge the progress of each individual student better because the homework grades should reflect the understanding of the individual student. He also states that without this, "there would be greater pressure to make the exams excessively difficult in order to weed out the comprehending from the uncomprehending."

Well, let's consider the purpose of Math 1. First, Math 1 is graded PASS/FAIL; Dr. Fuller does not have to assign letter grades. This is precisely because its purpose is not to weed out the students who do not understand the material. If freshmen do not understand the material, they will have a great deal of trouble in almost every other class they take here. My impression of freshman core classes in general is that they are supposed to take freshmen from many different educational backgrounds and even them out. That is a large part of the reason for grading freshmen pass/fail. Dr. Fuller should not be "weeding;" he should be aiming for maximum understanding from every member of his class.

I believe that a better solution is to have some problems from every homework set designated as no collaboration problems. This will allow the students to get started on the ideas covered by the week's problems and still have a few problems that require the student to work alone. I believe that this would be an appropriate compromise that would benefit everyone.

Sincerely,  
-Elaine Lindelef

Master Keys  
Run Amuck

To the Editors:

I write to suggest a topic for the Student/Faculty Conference; I present this in a letter to the *Tech* rather than through "regular" channels because it seems that more of the people who need to think about this problem will be reached this way, especially if faculty attendance is as sparse at the S/FC as the article by Scratch in last week's *Tech* seemed to indicate.

The topic I would suggest is

Master Keys, or, rather, since master keys seem to be pretty much a non-issue among undergrads, the circumstances that make undergrads regard them as so essential.

At a rather sparsely attended meeting a few months ago on security, grads and undergrads divided right along "party lines" on master keys. Even setting aside the horror stories about some scum selling master keys in Burger Continental and the fact that our homes in Braun, Mosher-Jorgenson, and Keck Houses are not secure, grad students did not appreciate the fact that their offices could be broken into and valuable computer and other equipment stolen by someone who could use a master key to enter the building and then kick in the Medeco'd but flimsy office door (this has happened).

Since, with the wide availability of master keys, it's only a matter of time and carelessness before some leak to people who would do such things, the only solution seems to be to rekey and restrict master keys to the minimum number necessary for security and building services., or even to eliminate them entirely. When some grad students advocated this, however, and, at the risk of sounding like an old fogey (In my day...), I noted that, as an undergrad at Princeton University, I managed to get by without a master key, we were told in no uncertain terms by the undergrads present that master keys were not a convenience but a necessity.

Reasons cited included the need to turn problem sets and exams in at midnight or to get books after hours from department libraries whose librarians are unwilling to issue keys to undergrads. It occurs to me that when policies are such that a large number of people are convinced that they must use illegitimate means to circumvent them, there is likely to be something wrong with the policies; and it occurs to me that something like this is a topic meriting discussion at the S/FC. If the policies in question can be changed so that undergrads are happy, the only reason for anyone not in Security or Build-

ing Services to have a master key will be laziness or sneakiness, and they can legitimately be banned, which would make grads very happy.

Sincerely,  
-Mark Looper  
G3, Physics

P.S. Part of the idea behind the Student Activities Center (South House Basement) was that master keys would not be generally available; however, even before the SAC opened, these keys were starting to circulate. None of the legitimate reasons given above for the possession of general master keys apply here; why, then, should anyone need an SAC master?

THE CALIFORNIA TECH  
Volume LXXXIX • Number 7  
6 NOVEMBER 1987

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Published weekly except during  
examination and vacation periods by  
Associated Students of the California  
Institute of Technology, Inc. The  
opinions expressed herein are strictly  
those of the authors.

Letters and announcements are  
welcome. All contributions should  
include the author's name and phone  
number and the intended date of publication. The Editors reserve the right  
to abridge and edit letters for expediency, literacy, or other.

Turn in copy (preferably on an IBM-compatible, WordStar-formatted floppy disk) to the *Tech* office mailbox, room 40A in the SAC. The deadline for copy is Wednesday at 5 PM; for announcements, Tuesday at 5 PM. Late copy may not be printed even if prior arrangements have been made with the editors.

Subscription requests should be directed to the business manager. Rates are \$3.00 per term, \$8.00 per annum (three terms). Special rate for life subscription: \$75. Printed by News-Type Service, Glendale, California

ISSN 0008-1582

## ASCIT FRIDAY NIGHT MOVIE

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# FEATURES

## Courage, Strength and a Love for Pain

by Cunning Lingus

By now, anyone who uses the gym must have at one time or another noticed a group of people clothed in white, emitting bizarre sounds, and looking as if they were thrashing the wind, an invisible opponent, or each other. The Caltech insane asylum, you conjecture? Not a bad guess.

Actually, what you saw was the Caltech Karate Club/P.E. class; classes and practices are Mon., Wed., and Fri. at 3 and 4 PM respectively, and there are additional practices Tues. and Thurs. at 4:30 PM. All members of the Caltech Community are welcome to join (no experience is necessary). I was surprised to find out that the CKC had been started and is being taught fairly regularly by the President of Shotokan Karate of America, France, and Switzerland, Tsutomu Ohshima.

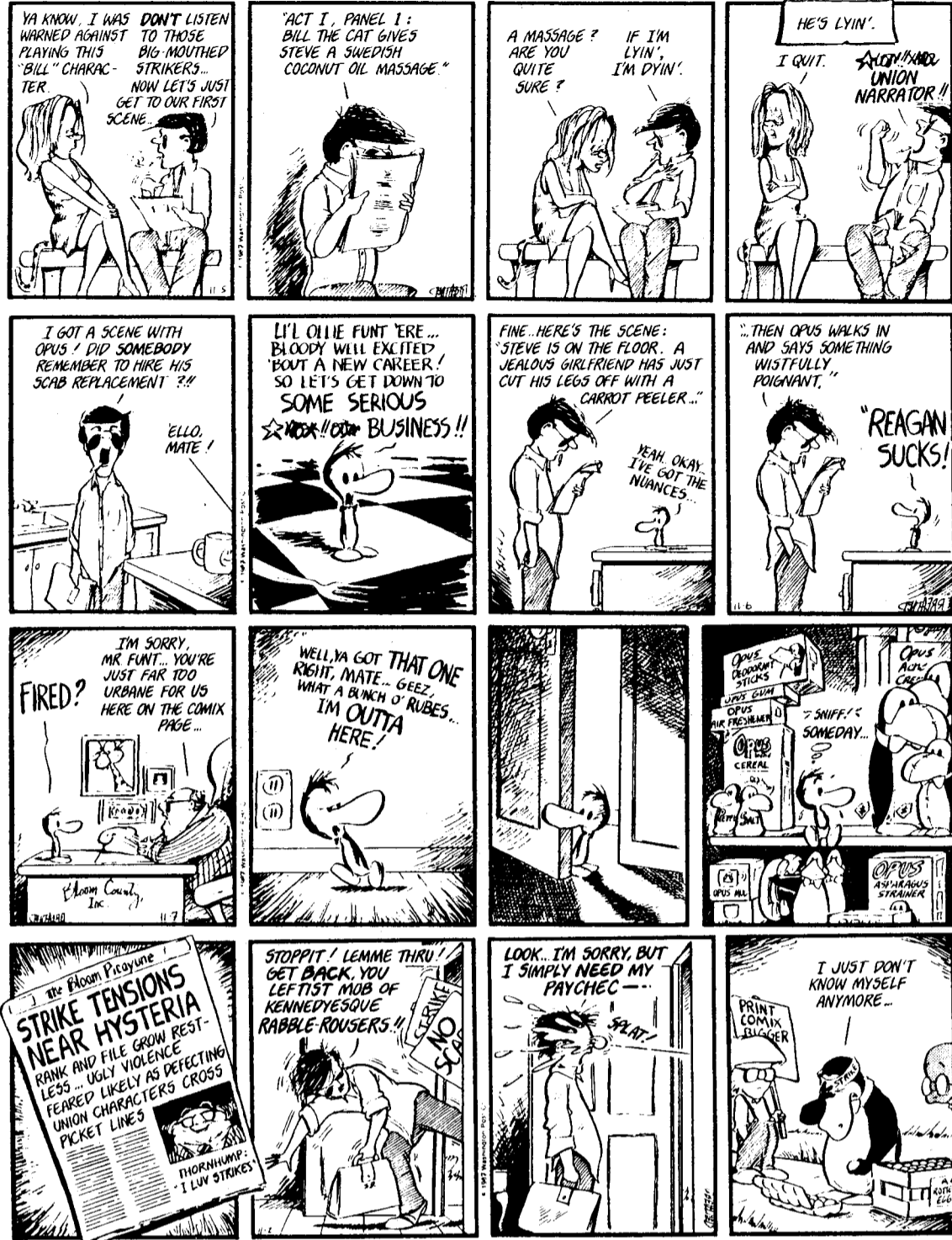
Begun in 1957 (making it the first karate club in the United States), the CKC's goal has always been to make its participants strict with themselves. "We look at who we are with honesty and try to admit to our own stupidity, blindness,

weakness, and cowardice.... we are facing ourselves when we have the courage to admit to our own faults", says Mr. Ohshima in his interview with *Black Belt*, (Sept., 1987).

The essence of each practice includes the fundamental blocks, kicks, punches, kata (the combination of the fundamentals to form a continuous motion), followed by sparring and applications. (*Shotokan* means "way of the open hand"; the use of weapons is not taught.)

I find after 1.5 years of practice that the CKC is beyond just a good way to keep in shape and to learn how to defend oneself, but also a way to improve one's attitude towards life. The friendships I have made through the club are also first order (I had always wondered what Caltech grad turkeys were like, and found out that they are human, too... seriously).

If you have any interest at all in finding out more about the Caltech Karate Club, feel free to call me at 578-9370, or Evan Bak at Ricketts House.



# by Berke Breathed

## BLOOM COUNTY

continued on page 6



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FEATURES

KELROF'ers Run for the Record

by Tzejen  
*That which does not kill me makes me stronger.* -Nietzsche  
 Some say it's a combination of camp-out and marathon. Some say it's an endurance run disguised as a track event. Most think it's crazy. It's around the track. It's 24 hours long. It's *KELROF!*  
 The rules are simple: A relay team of no more than 10 people (no fewer than 2), with each person running 1-mile legs, attempts to pass a baton (or a rubber squid) around the track as many times as possible in 24 hours.  
 The whole thing started at Caltech in 1977 when the track team runners, looking for a glorious way to finish off the season, decided to *do it*. Steve Kellogg, then a Page Freshman, organized this event originally suggested by *Runner's World* magazine. The official name of the team was *KELROF* (for Kellogg's Eighth Light Regiment On Foot). On the morning of May 21, 1977, *KELROF* and a second team of 10 Page frosh set off to claim their places in Caltech history.  
 Amidst a first stage smog alert during the day and a damp fog dur-

ing the night, the *KELROF* team finished 247 miles, averaging barely under a six minute mile pace.  
 The next year, five teams came out. *KELROF II* set the school record of 262 miles and 1316 yards—7th in the world that year.  
 In 1979, seven teams joined in on the fun and excitement. *KELROF III* missed breaking their previous record by a mere mile.  
 In 1980, seven teams *again* were out on the track (see how much fun *KELROF* is?) including a 3-man team (The Triple Threat). *KELROF IV* finished with 254 miles.  
 1979/80 seemed to be the peak years for *KELROF* at Caltech. With Steve Kellogg's graduation, the legendary deeds of *KELROF I-IV* had faded, although the name has stuck to serve as a faint reminder of past glory.  
 All written records of the next four *KELROFs* were burned or shredded. Rumor has it that a two-man team raced—they didn't finish, but they did last over 12 hours. Apparently no organized effort had been made to break the school record of *KELROF II* during the last four years. Finally, a steady

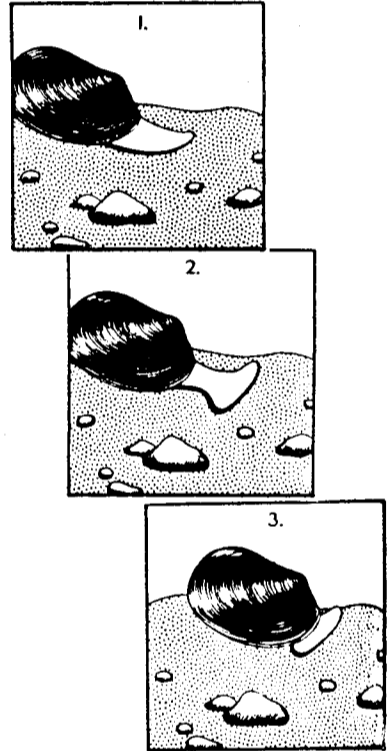
decline in interest forced the cancellation of the event in 1985.  
 1986 marked the beginning of a new chapter in *KELROF* history. Four happy teams (Blacker, Lloyd, Page, Dabney-Fleming-Graduate Students) came out one Saturday morning in late May; four happy teams finished on a Sunday morning.  
 Despite the major conflicts with Alumni Day, Glee Club Concert, Fleming Sports Day, and MA 1c Midterms, last year's *KELROF* drew five teams of 49 runners. Lloyd with the long legs of John Haba was there. Page and a rubber squid were there. Ricketts with their 2 bare foot runners in Karate suits was there. So was the Blacker-Ruddock-Dabney-mystery-Post-Doc-Leftover-Surprise team. And for the first time in Caltech history, a team of 9 women runners was organized by Bibi J-N, with a guest appearance of Jeanne Noda who ran the first mile as the 10th runner.  
 In an attempt to avoid the conflicts late in the year, the Tenth Annual *KELROF* will be run Nov. 21-22 from 9AM to 9AM. (Yes, in two weeks.) It is the weekend after interhouse so all the frosh can come out and run. It is two weeks before finals so no one can BOC the organizers for flunking AMa 95.  
 So what's so hard about running a mile once an hour for 24 hours?  
 --one spectator at the 3rd Annual *KELROF*  
 Food, fresh fruits, and drinks will be provided all 24 hours. A trainer will be on hand. The Gym will be open for the night. Lots of people (runners, score keepers, spectators) will be there. Even Dean Lorden has expressed interest to run. What more could you ask for?  
 If you think you might have a team, or if you don't think you can get 10 people but want to run anyway, please call Bibi J-N (578-9086) or James Shih (x3968) soon.

ENTERTAINMENT

Made In Heaven: A Falling Star

by Jennifer Low  
 Do you believe in true love at first sight? Predestination? *Made in Heaven*. Lorimar Motion Pictures 1987, is the latest release that would like to convince you that there may be that ultimate someone out there, looking for you.  
 If you don't go for that, you might at least settle for someone's rather bizarre idea of heaven and afterlife.  
 The movie introduces itself by proclaiming "This could be a true story...maybe you even know these people..."  
 Timothy (*Taps*) Hutton and Kelly (*Top Gun*, *Witness*) McGillis are the film's "heavenly" match. The two have a great time romping around heaven for the first half of the film. But there is a slight problem (yes, even in heaven) called reincarnation. McGillis gets recalled to earth and, of course, Hutton follows her. So the movie becomes the classic story: boy meets girl, boy loses girl... you know the routine.  
 There are not many surprises in this film except its strangeness.  
 Take heaven, for example. This is certainly no biblical version. No hallelujahs or cherubs, either. In fact, from the houses to the stores to the seedy parks where some questionable characters hang out, heaven looks just like earth.  
 And then there is the rather evil-looking, bitter, chain-smoking Emmett who runs the place. In one very odd, awkward moment, Hutton asks McGillis if there is a God. She hesitates and gives a rather dubious sounding "yes."  
 Very few writers would dare try to give such an explicit picture of heaven. To say the least, this heaven has a lot of incongruities. This makes the whole film rather shaky since it revolves around these ideas.  
 McGillis and Hutton give little to their characters. McGillis becomes such a nice, stereotypical

yuppie, that it is boring. Hutton does a more entertaining version of the kid on the wrong side of the tracks. They are fun to watch but it is in spite of the plot. There is little that is identifiable between them.  
 However, Emmett (the cast list reads "as Himself") is one of the most interesting characters; it's too bad that we don't know more about him. Cameo appearances by Tom Petty, Ric Ocasek, and Neil Young, who all had some great one-liners, make the movie fun to watch. Also good is Mare Winningham, one of Hutton's early, flaky girlfriends.  
 The theme song for the movie, "We Never Danced," (which you will here so many times it is impossible not to go out of the theater humming it) is destined for Pop 40 stardom.  
*Made in Heaven* opens tonight, among other places, at the UA and at Hastings Ranch, both in Pasadena.



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**ON CAMPUS NOVEMBER 16**

# More Inside World

from page 3

Dabney: Patrick J. Wayne, still reporting:

—Full Frontal Nudity

**Fleming:** Well, Fecathalon has come and gone. Who would have thought that Barry Lind would be the best at co-Beer Sucking. The fact that Mark Vermies could eat 26 eggs in one minute didn't surprise me. After all, he's a trained professional. Dan Kollmorgen was best at toilet paper eating. I wonder who he learned that tongue-lip action from? Speaking of which, why is Pete Ying so good at blowing condoms? (Safe Sex by any other name....) Since Scott Miskovich is so good at drinking water, maybe he should talk to Daniels the next time he gets floated 95 times. Or maybe Scott just did that to put out the fire after he smoked 7." Of cigars that is. Gino Thomas wasn't able to beat his record of 30' this year; he was only able to fling the spit 22' 1." Rob Welstand can .. Oh, who cares about what Welstand can do... Oh, by the way. Alley Five is awesome. All the other alleys are filled with sleazebags. Alley Five is the alley of well hung gods. Alley Two on the other hand, couldn't get it up no matter how long they stared at the posters on Hobbs' wall. Maybe Alley Three could help them since they're the Alley of Flaming Homosexuals. Alley Six is of course, filled with blazing assholes. This explains why they face Alley Three. And of course, Four and One make...Five. Five! Five! Five! Five! Five!

### Fleming House Sex Tips

Now that you've read last weeks column on how to pick up women, and you've gone to the Halloween party you presumably have yourself a woman. Now what do you do? Well, read on.... This one's from JJ. When you're having oral sex with a girl and your jaw gets tired, try going through the alphabet. A...B...C...D.... This one's from Bill the RA. If you really love someone, float them 95 times. Works every time. This one's from Kent. Short of condoms? Try taking the used ones and turning them inside out. This one's from Hobbs. If you can't do it with style, do it with a smile. This one's from me, NeanderFlem. If ever have trouble finding yourself a girl, just hit the first one you see over the head with your club and drag her off to your cave. Where you're going to get a cave and a club is your problem. Here's one for all you Frosh.... Switch Hands Occasionally! T.V: Ray Luca is Alive! Ray Luca is God! Ray Luca can live through a nuclear explosion!

### Things that Piss Me Off...

Tech editors who make me use evil computers instead of chisels and stone tablets, the tools of a real NeanderFlem. Inside World editors who won't let me use the F-word, and change it to "boink" instead. (No, not Fleming. The four letter one.) Wesley on the new Star Trek... And the First Officer... And the stupid Psychic Bitch. Alley Six. Seniors. Alley Six Seniors. Frosh complaining about how tough their classes are. SIX HOUR EE32 MIDTERMS! Weirdly arranged Bloom County panels in the Tech because they needed filler!

By the way, I've been getting complaints about the "tone" of my inside worlds being too, well, obnoxious. Well... **TOO BAD! Tough Tooties! Go Suck some Cheese Whiz!**

—NeanderFlem

**Lloyd:** While torrential rains raised the spectre of entombment by seeping muck (and delayed disco softball with Ruddock), at least a few brave souls had their dank autumn days filled with the challenge and adventures of last week's matching game. Five entries were received, but team efforts boost our projected readership to at least eight.

A 95% full box of Betty Crocker "Potato Buds" instant mashed potatoes goes to Lloyd statesman and Indians fan John Haba who scored a perfect 16 for 16, though apparently with some luck. Impressive initiative and insight was shown by the freshman duo of Doug Peterson and John Gass and the sophomore/freshman musketeers Craig Sosin, Dave Townsend, and Paul Socolow who chipped in with strong 11 for 16 scores. Juniors Phil Lee and Carol Choy (obviously fatigued) rounded out the scoring with a 7 and a 6c respectively, Carol's exceptionally neat entry warranting the bonus.

This was a tough contest, for there were many good answers that were not, however, the best. There was doubtless much truth, for example, in answers like "Earl has left the building (DP/JG,musketeers)," "Bunda is Peter Ying's only friend (PL,CC)," and such telling self assessment as "My life has no depth (CC)," and "My life lacks soul as well as sophistication (PL)." Perhaps most disturbing was the incorrect labeling of Montreal's stellar shortstop Hubie Brooks, the self-proclaimed "Bandit of Love," as a low budget Kirby Puckett and owner of 100 wives and 1000 head of cattle.

Until next time, as the great Sonny Bono said, "Babe. I got you babe..."

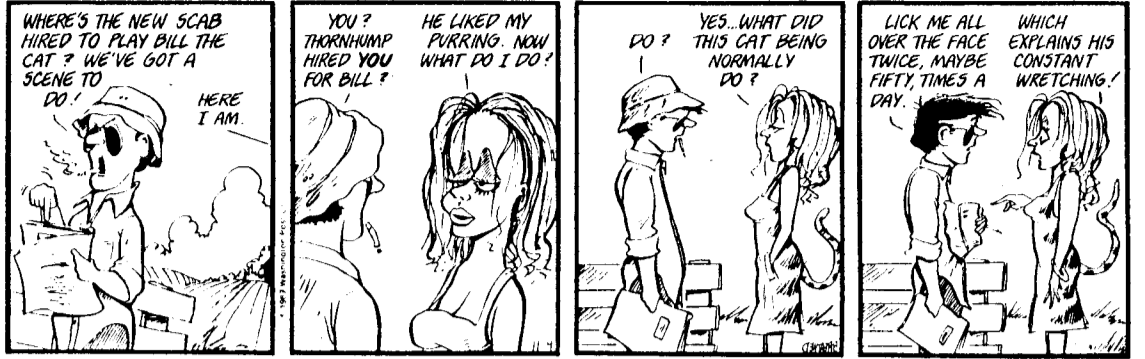
—The King of Spin and Dark Foot.

continued on page 7

from page 4

## BLOOM COUNTY

by Berke Breathed



## SPORTS

### JV Soccer

from page 10

The reasons for their success can be attributed to good teamwork and understanding amongst the players. In the forward positions, we find Varoujian "Goal Machine" Gorjian, Lloyd "That's not a cross!" Farnham, Yu-Hung "Hotshot" Kuo and Jonathan "Eric" Chow. The midfield is dominated by Ming "Pass the ball!" Lee, Wolfgang "Amadeus" Hofmann, Jared "Killer" Smith and Eric "Jonathan" Fung.

And in the back, the team has

the services of Oscar "Run 'em to foot" Searcy, David "the Tank" Townsend, Adam "Boom-Boom" Weissman, Russell "Kill the Man!" Manning and Joel "Get the Ball!" Norris. In goals, we find "Brazen" Drazen Fabris.

On Halloween Saturday, the team played host to the J.V. squad from Claremont. With the rain pouring down it was certainly an interesting match as the players found that trying to move the ball through the mud and pools of water was just as difficult as getting it past the opposition. The game quickly turned into a mudbath for both sides as each side sought to scramble the ball into the net in any way they could.

In the first half, the sides were evenly matched and each side

created good chances in which to score, only to find themselves bogged down in the mud and water. In the middle of the half, Claremont managed to score during a melee in the goal-mouth. The Techers continued to pile on the pressure but could get nothing out of it and was forced to end the half trailing by a goal.

In the second half, the Techers continued to move forward in search of an equalizer, but were frustrated by the ground conditions and the Claremont defense. Claremont also attacked on many occasions and late in the game scored their second goal. The Techers, though, continued to press the opposition, but to no avail. The Techers went down 2-0 to Claremont after a hard-slogging match.



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# Dr. Beaver Talks About Skin

Dear Dr. Beav:

*My bones are rather small, so I have relatively skinny arms. Is there a threshold for the amount of muscle I can develop on them, or can I train and build up the size of my arms, wrists, etc.?*

—Skinny

Dear Skinny:

Yes, a better bod can be in store for you! Genetics play a major role in over-all muscle development and limitations; however, everyone can become stronger through weight training. We consulted a weight training specialist and received the following information.

To achieve maximum results, weight training should include regular workouts with a goal of three times weekly for one hour, along with proper nutrition and rest. Obviously, you should begin your program gradually and under supervision. Increased strength is usually noticed after six months, and an increase in muscle size will follow. Most health clubs have a professional instructor who will tailor a plan for you.

Dear Dr. Beav:

*What role (besides religious) does circumcision play? Does lack thereof aid in the transmission of STD's (sexually transmitted disease)? Does lack of circumcision (I've heard conflicting reports) diminish the female's pleasure during intercourse?*

—Skinny

Dear Skinny:

The role of circumcision is primarily for cleanliness; being easier to keep clean does aid in prevention of infection. There really is no medical indication for requiring circumcision, and parents are given the option when their sons are born. Circumcision does not affect a female partner's pleasure during intercourse.

Dear Dr. Beav:

*What causes the ringing sound in my ears after I have been to a concert or a dance?*

—Sounds of Silence

Dear Sounds:

Some may think it's your taste in music, but actually there is a medical reason. It has to do with



acoustic trauma. The pounding noise through the cochlear (inner ear) fluid causes edema (swelling) in the cochlear hair cells. This produces a temporary threshold shift which can also cause a transient slight decrease in hearing acuity. Continued loud noises can cause permanent damage to this system resulting in permanent severe loss of hearing or even deafness.

What's the story on sore throats, insomnia, stress, depression, acne, first-aid, etc? Ask Dr. Beaver: send your questions to Dr. Beaver, Health Center, mail code 1-8. Questions will be answered in the Tech, and may be submitted anonymously.

# More Inside World

from page 6

Page:

World News Dept.

Devin Leonard finally convinces the powers-that-be that the TQFR is a worthless piece of s — t and is rewarded with an early retirement. Good work, Duges.

Copyright Infringement Dept.

If you want real advice about how to pick up girls, read the original *How To Pull Serious Hardcore Bitches*, by Gladstein and Valentine. Accept no substitutes. *HTPSHB* was written after years of hard research by professionals with lots of experience in the field. The cheap ripoffs you sometimes see were probably written by some red-shirted neanderthal. Marc and Rico's real advice on CalTech women: DON'T EVEN.

More Important Stuff Dept.

Moussefer sticks his finger in Sandip's hole. Letting the Frosh build Interhouse is a good way to keep them off the streets, but some refuse to be helped. We have money, therefore we play golf (-n-stuff). Pseudo-oriental games of chance in Compu-hell are a threat to our mental health. Its a good thing only the Compu-nurfs are affected. The awesome gravity free-roller roller-coaster [sic] conveyor belt ride is in its fetal stage. We hope this one turns out better than last year's abortion. Dwight says there's free beer for hockey fans. Build Interhouse, Frosh!

—I don't know how much longer I can take this.

Ricketts: It's fall, time to think back on your life. Go ahead, get nostalgic. Do you remember the first time you masturbated? How about your first pubic hair? Were you proud? Were you fifteen? The years roll by. Your first orgasm. Was it fun? Were you surprised? How did you clean it up? Did you wonder when it would happen again? Did it happen again? Did you want it to? More years pass. Your first date. Your second date. Your first kiss. You're excited; it happens again. Maybe someday....

It happens again. News from the *Boink Truck*: Windsor and the Fish Man (coming this fall as prime time moves to 7:30) followed Plu's trail to the California Cryobank and gave their all to support the future of mankind (watch out, in nine months there might be hundreds of them). Fishy, however, should learn to work with only one hand or ask them for a wide brimmed cup. And to think, he practiced all day long.

continued on page 8

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# Beckman cont'd.

from page 3

technology to new fields. I am confident that other Board members will respond favorably to the challenge presented them by Dr. Beckman."

The Beckman Institute, with its own endowment, will be an integral part of Caltech. It will eventually be housed in a new building on campus, tailored to its interdisciplinary research projects. This building will also contain major instrumentation available to the entire Caltech community. The Pasadena-based architectural and engineering firm of A. C. Martin & Company has been hired as the executive architect of the Beckman Institute. Al Martin, senior member of the firm, is personally involved in the design of the 106,000 square foot facility. It will be located just west of Beckman Auditorium on the Caltech campus. The schedule calls for dedication and occupancy on October 1, 1989.

"The Beckman Institute will make scientific discoveries of significant benefit to mankind, and for this opportunity we are deeply grateful," said Harry Gray, the Arnold O. Beckman Professor of Chemistry, who was named director of the Beckman Institute earlier this year. "It will provide Caltech faculty members with a rapid and flexible means of obtaining research funds for particularly creative and innovative projects that might otherwise not be supported. In the past, some of Caltech's most significant research achievements have depended on just such funding sources. I would also like to mention my deep personal gratitude with the Beckman Foundation's gift. Arnold Beckman has been my mentor and close friend for many years. I feel enormously privileged to be the Arnold O. Beckman professor and the director of the Beckman Institute."

Research projects to be carried out under the sponsorship of the Beckman Institute will be selected after peer review. Projects will receive facilities and support from the Beckman Institute for specified periods, so the mix of projects will change over time.



## More Inside World

from page 7

The eternal triangle. A man, the woman he loves, the other woman he loves. Yes, we're talking about Sam, Gaby, and Phyllis. Gaby has noticed Phyllis playing with Sam every day before lunch. These lunchtime escapades leave Sam quite content, as Phyllis always knows what to do with her hand. Gaby's no dummy, she sees what's going on, and knows how good Sam is in a rubber. We're hoping she'll bridge the gap between them so that one of Ricketts Hovse's best relationships won't fall down like a house of cards.

Nasty rumours about Su-Lin: She's lame (but it's not her fault). Halloween, the time for nightmares. You're traveling down a dark street, looking for a ghostly mansion. Out of the fog - Horrors! - your old elementary school! And it's closed!

The Inside World writers (that's us) were asked to include the following paragraph by our own hovse secretary. For those of you who understand what she says, we hope you enjoy it:

Regarding certain libelous claims made in last week's Lloyd House Inside World, I wish to protest the flagrant misuse of the word "evil". Am I more evil than a potted pansy sitting on a window seat? I have made every effort to minimize the, er, fire hazards of the physics lab environment, and very few of my students have achieved the ritualistic Death By Shiskabosh a'la Maxwell's Top. I also wish to point to my sterling record in regards to local transformations - only one pickle in three years, and I honestly think that the improved Keith added a certain texture to HQ. Evil? It's all relative...

-The Relatively Innocuous Witch Goddess of Physics 3

Other Naughty Bits: The Great Pumpkin visited Ricketts Hovse Saturday night. But did it have a Tennessee accent? Snatch has been receiving many obscene phone calls recently, with messages being left for Russel Manning. John Schmidt, however, realizes that pleasure must come from within, so he has been trying to get within. Hi James.

The Lil' Cook-Man and the Great Neck Strangler with help from the (Evil?) Witch-Goddess of Ph 3

Ruddock: Hi, we're the Three Amigos and that ghostly frosh. We're filling in for Wayne and VanEric.

VanEric "Coach Cameron" Stein and Assistant Coaches Joe Fierro and Kleber "Macho" Camacho are busy leading an intensive training session for Interhouse soccer. The day starts at 5:00am with three raw eggs for breakfast, followed by a quick 14 mile jog. The lads then split into two on three scrimmages, followed by three on four scrimmages, followed by four on five scrimmages, and so on. Our pre-season victories include the Caltech JV squad, the Caltech women's team, the special olympic team, the Pasadena Elementary School, and the Housewives for Better Soccer (they put up a good fight but we tackled hard). Coach Stein then brings in Billy Boy Foster to train the players in the fine arts of throw-ins, heading, and juggling with the thighs.

Wayne's been trying to develop an aphrodisiac to aid him in his quest to unify the power of Blacker House and Ruddock House. So far he's had limited success with his test subjects, the frosh girls. He's inadvertently administered a growth hormone, a massive depressant, testosterone, and an instant-lobotomy drug. Use these as helpful hints when entering the "Frosh Girls Contest" where the Grand Prize is a wet dream date with the four girls (it sure takes the fun out of it, right Jay). Remember to make reservations if you want to visit the girls in Alley Six. Shaved heads and harmless looks are encouraged.

The party was a big success (for some more than others). Everyone looked better than normal in their Halloween costumes (except for the pregnant Chippendale's dancer).

Our first mistake this year was to venture to the new Coffeehouse. It sucked. Place your orders for next year and watch out for Earl's secret sauce.

Quotes of the Week:

Ed Mao: "I will not suck d \_ \_ k."

Chandra: "Aicee."

Wayne: "But I'm the President, you have to!"

Don't forget the football challenge of Alley 1 vs. Alley 4 on Friday and Interhouse softball against Dabney on Saturday (about 2:00PM). This week's social event is an evening at the Improv with Munir Bhatti, King of Comedy.

-Doug Cheney and the CCF

## IHC Mini-Minutes

IHC micro minutes resurrected:

1. Andrew Huntington complains about the mess in the South Complex laundry room and says, "Get your junk out of the laundry room, clean up your rooms, and do your homework."

2. K.E.L.R.O.F. (That's: Kellogg's Eighth Light Regiment On Foot) is coming up soon. It's being held first term this year instead third term for some reason. [see page 5 for related article]

3. Bibi Jentoft-Nilsen has signups for various Student/Faculty Conference subcommittees. [see related article page 1]

4. This is what everybody should be working on in the coming weeks:

Blacker: Amazon(s) Jungle.

Dabney: Alley Golf.

Fleming: Carnival.

Lloyd: Military [ (?) I guess it's better than Potatoes. -Eds.]

Page: Mardi Gras.

Ricketts: Riverboat.

Ruddock: Hard Rudd Cafe.

5. Warning: cars parked on the Olive Walk may be ticketed or towed away.

6. The administration continues to gripe about Interhouse; i.e. water damage from the Amazon and other rivers, complaints from San Marino, etc. [see page 1 about what has been resolved so far]

7. Brian Catanzaro was annoyed that security closed down the Halloween party in Ruddock at two 'o clock. Dave Lipin was annoyed at finding non-techers roaming around Ricketts during said party.

8. Dave Lipin got the house presidents to agree not to publicize Interhouse to the extent of not even fliers around campus. Anybody in the houses should be able to tell when Interhouse is coming up. The rest of the advertising is left to the powers-that-be.

9. Lloyd and Ruddock did not complete the Discobolus challenge due to bad weather and lack of communication. It was resolved that they should resolve it no matter what by 6:00PM Thursday November 5.

10. Quote of the Week: "Don't substantiate foundationless rumors by denying them." -Frank Vasquez.

## From the Makers of Lite Beer: ASCIT Minutes Lite!

At the weekly ASCIT meeting Tuesday night, the following matters were discussed:

1. Bibi J-N asked for \$300 to help support KELROF. She had already gotten \$200 from the dean and \$200 from another source, whom I don't recall. Jeff moved to give it to her. Thu believes there is enough money to support her, so seconds the motion. Motion passes 6-0.

2. Laura Anderson wants \$206 for a party Nov. 21, to be sponsored by CLAGS. No budget, however, exists for CLAGS. Doug wonders what the order of magnitude of CLAGS is. Laura: 8 undergrads and many un-undergrads (forgot details).

Thu wants to know for him this party is intended, to which Laura says, "Everyone - it's an open party." Sam moves to give them \$150, which represents \$50 a term. Doug points out the difference between a club and a one-time gift (again details hazy). Eric proposes to take the money out of the social

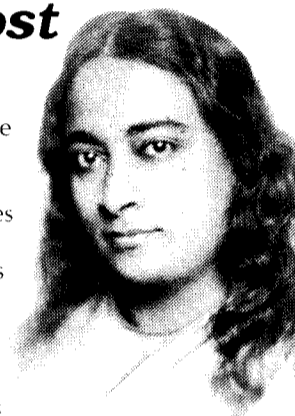
account.

Based on previous experience, people decide that attendance to such events is of adequate magnitude. Thu then supports Sam's proposal. Sam comments that since CLAGS was not at the budget meeting, ASCIT must consider budgeting from event to event. Doug moves to give the money now, but no more until March - the next budget meeting. Unless an exception is made. Thu seconds. Passes 5-0-1.

In passing: copy cards are coming in the mail...Devin was recalled, nominations being taken...the Tech deleted some stuff from Jeff's article (appears on page 2 this week) from last week.

Ed's note: this in no way compares with the highly proficient note-taking done by Eric Scharin, your ASCIT secretary. So please, if you want the real minutes, see him at 1-53. All mistakes herein are the sole responsibility of the Tech note-taker at the ASCIT meeting.

### Making the Most of Your Life



Have you ever encountered that type of individual who seems to glow with inner strength and satisfaction, regardless of the situation? who radiates such genuine happiness that one smile can virtually light up a room with its warmth? And have you ever quietly said to yourself, "I don't know what this person has - but I want it!"

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## SPORTS

### Fencing

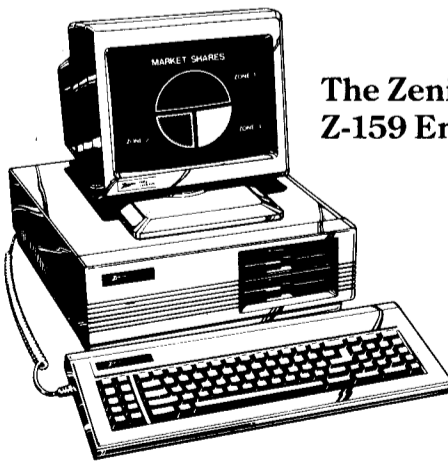
from page 10

and there is much hope for a winning season for the squad, especially if an experienced third can be found (you know who you are).

As a team, the saber squad was the lone bright spot. Matt Himmelstein's three victories over UCSB along with Ray Sidney's pair of wins led the squad to a five to four win, even taking into account the three forfeits incurred by only having two fencers. Ray's victories were especially sweet because he was a recruit from the beginning foil class who had not touched a saber until the day of the meet and had expected to fence epee. Against a much more experienced Long Beach team Ray fenced extremely well, but went without a victory, and Matt, a senior going for a final season, fenced three close bouts winning two by a single touch.

This Saturday the team travels to Occidental College to face Oxy and UCLA. Fencing is scheduled to start at 10:00AM and the the Booster Bus will leave the gym at approximately 8:30AM.

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# SCHOLARSHIPS

from page 12

## Work-Study At The Red Door

Work-Study jobs paying \$6.00 per hour are available at the Red Door Cafe (2nd floor of Winnett, around the corner from The Y). Available shifts are 2-6 pm, Monday-Friday, 12-5 pm Saturdays, and possible evenings from 8-12. The Monday shift may be lengthened to 2-7 pm. Requirements are: a liking for people and the ability to ask for help without embarrassment. Flexibility and a sense of humor are musts. Apply at the Red Door, or call x6158.

## Work Study & On-Campus Jobs

Students who are on College Work Study and those who are looking for work on campus are invited to visit us at the Career Development Center at 8 Parsons-Gates. There are lots of new listings every day. If you would like to do private tutoring, you can also sign up at the Center.

## U.S.D.O.E.E.R.P.

The U.S. Department of Energy has opportunities available for juniors and seniors in their Science and Engineering Research Semester program. Activities include hands-on research, seminars, academic courses, and advanced instrumentation training. See the poster on the bulletin board in the SAC (at the Orange Walk entrance) for more information.

## IBM Co-Op Program

IBM in San Jose has co-op positions available for students interested in Information Development. Jobs will be for six months and will open up in November 1987 and January 1988. Students must be U.S. citizens or permanent residents. Those interested are encouraged to come by the Career Development Center, 08 Parsons-Gates, for more information.

## EOP Scholarships

Undergraduate students planning to pursue a career in engineering or computer sciences are encouraged to apply for the 1988 Equal Opportunity Publications Scholarship Program. One \$500 non-renewable scholarship will be awarded in each of seven different categories. For more information, come by the Career Development Center, 08 Parsons-Gates.

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College students can win thousands of dollars in scholarship money by creating a healthful recipe that uses Sweet 'N Low and can be prepared without a conventional kitchen.

The "Sweet 'N Low Grade 'A' Recipe Contest" features a grand prize of \$5,000, first prize of \$2,000 and second prize of \$1,000.

The recipes must be suitable for preparation in a residence-hall room using only small appliances such as a toaster oven, blender, wok, compact microwave or small refrigerator. They will be judged on the basis of healthfulness, taste, originality, ease of preparation and appearance.

Entry forms are available by sending a self-addressed stamped envelope by December 15, 1987 to: Sweet 'N Low Entry Form, P.O. Box 1901, New York, NY 10116. Entries must be postmarked by December 31, 1987 and received by January 10, 1988.

## Goddard Scholarships

Applications are being accepted for the *Dr. Robert Goddard Scholarship* for 1988-89. The award is for \$7500. Applicants must be U.S. citizens in at least their junior year. Apply by letter to the National Space Club/Goddard Scholarship, 655 15th Street N.W., Suite 300, Washington, D.C. 20005. With your letter include your transcript, letters of recommendation from faculty, accomplishments demonstrating personal qualities, scholarship plans, and proven past research in space related science and engineering. **Deadline is January 15, 1988.** Some additional information is available in the Financial Aid Office, 12-63.

## Zonta/Earhart Fellowship

Women majoring in aerospace related science or engineering fields are encouraged to apply for the 1988-89 *Zonta Amelia Earhart Fellowship*. The grants are for \$6,000. Qualifications are a bachelor's degree, qualifying for graduate school, and a superior academic record. Applications and recommendations must be postmarked by **December 31, 1987**. For applications and further information contact: Zonta International, 557 W. Randolph St., Chicago, IL 60606.

## Planetary Science Scholarships

The Planetary Society is offering five \$1,000 awards to students majoring in engineering and science. Awards will be made on the basis of scholastic achievement, a commitment to a career in planetary related science, and a written essay on a relevant topic. The deadline for completed applications is April 15, 1988. Mail in cards for further information are available in the Financial Aid Office, 12-63 (515 S. Wilson, 2nd floor).

## Hispanic Scholarships

The National Chicano Council on Higher Education is accepting applications for their Science Fellowship Program. Hispanic and Chicano students in at least their junior year are encouraged to apply. Exceptional sophomores may also apply. If selected, sophomores and juniors receive \$400 and seniors \$500. Additional funds are available for graduate studies. Deadline is November 16, 1987. Applications and further information are available in the Financial Aid Office, 12-63 (515 S. Wilson).

## HHMI Doctoral Fellowships

The Howard Hughes Medical Institute (HHMI) is offering 60 doctoral fellowships in biological sciences. The Hughes Doctoral Fellowships will be made to those who have demonstrated superior scholarship and show greatest promise for future achievement in biomedical research. Eligible students are college seniors and first-year graduate students, or others who have completed a limited amount of graduate work. For further information please contact the Financial Aid Office, 12-63 (515 S. Wilson, 2nd floor).

## Attention Swedes!

The Swedish Club of Los Angeles is offering scholarships for 87-88 for \$500 to \$1000. To apply you must be a student residing in Southern California, must be of verifiable Swedish descent, have strong academic qualifications, be a citizen or permanent resident of the United States, and show financial need. Deadline is today, November 6, 1987. Send your resume to R.W. Jackson, 1250 E. Walnut St., Suite 210, Pasadena, CA 91106, or call (818) 795-1098 for more information.

## Living In A Material World?

The Society for the Advancement of Material and Process Engineering (SAMPE) is awarding 19 \$1,000 scholarships to college students pursuing courses leading to a career in Material and Process Engineering. Consideration is given to scholastic average, specific courses of study, academic awards and honors received, technical and other work experience and the student's communicated objectives in Materials and Processing technology. Competition is in progress, and judging takes place in February and March, 1988, with awards being announced in April, 1988. Applications and details are available in the Financial Aid Office, 12-63 (515 S. Wilson, 2nd floor).

## Student Heart Research

The American Heart Association is offering an undergraduate research training program to encourage and introduce gifted students from all disciplines to consider careers in cardiovascular research. In the program, students are assigned to leading research laboratories in California for a ten-week period during the summer to work under the direct supervision of experienced scientists. Each student will receive a grant of \$1,500 for this period.

Interested students should request application from the following address by December 15:

Antone F. Salel, M.D., Chairman  
Student Research Committee  
A.H.A., California Affiliate  
805 Burlway Road  
Burlingame, CA 94010-1795  
or phone (415) 342-5522.

## Central America Studies Group

Much of the discussion surrounding the nations and peoples of Central America is so clouded by rhetoric and ideology that it is difficult to discern what is actually happening there. By bringing speakers to campus who have experience in Central America, we hope to offer an alternative source of information on past and current events in the region. In addition, if you are interested in working with refugees, the sanctuary movement, political action, liberation theology, or any of a number of other topics, we can guide you to the proper organization. If you are interested, call Cindy (x6542) or Marty (x6576).

## Materialists Take Note

The Society for the Advancement of Material and Process Engineering (SAMPE) is accepting papers to be presented at the organization's second International Metals and Metals Processing Conference. The theme of the three-day conference is "Space Age Metals and Technology."

Completed papers must be submitted by April 1, 1988. Unpublished papers and papers not previously presented at SAMPE conferences are eligible for submission. Single-page, preliminary abstracts must be submitted by January 1, 1988, to Dr. Sam Froes, program chairman, AFWAL/MLLS Wright Patterson AFB, Ohio, 45433. All abstracts and papers must include the author's name, affiliation, business address and telephone number. Authors will be notified of acceptance.

For additional information about SAMPE, please contact Ray Cull, conference deputy chairman, (517) 496-4992, or Marge Smith, business director, at P.O. Box 2459, Covina, CA 91722, (818) 331-0616.

## Environmental Studies Group

Advances in science and technology have contributed to better standards of living for much of the increasing world population, but those same advances have also precipitated many crises in fragile and poorly-understood ecosystems. The efforts of this group will be focussed on improving how the Caltech community interacts with the local environment, but we also plan to educate ourselves and other people on national and global ecological issues. The group is still in its formative stages, so input on problems to be addressed and actions to be taken is very welcome. For more information, contact Scott Ross (x6553, 127-72) or Claudia Barner (x6576, 127-72).



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SPORTS



Caltech's junior varsity soccer team practises offense and defense strategies. Paul Searcy and Drazen Fabris test their skills as they fight for control of the ball.

## JV Soccer Plays First Season

by J.V. Fan

On your way to P.E. in the afternoons, you've probably seen a group of men eagerly playing a game, which on further investigation prove to be soccer. These guys would engage in the usual rounds of soccer exhibitionism as they juggle the ball with first two legs, then with their heads and chest and lastly with parts of the body not usually associated with sports. Then, as you scan the rest of the field, another group of guys catch your attention and... WAIT! They're also playing soccer!

Upon closer inspection, we see that it is the junior varsity soccer team and while they do not have the skill nor the style of the varsity squad, they more than make up for it with determination and energy. This year is the first season it is playing intercollegiate soccer and

they have done surprisingly well against their generally more experienced opponents who usually also have more than their fair share

of guest varsity players. The record currently stands at 3 wins and 4 losses.

continued on page 6

## Beavers Fence Well

by Perry Riposte

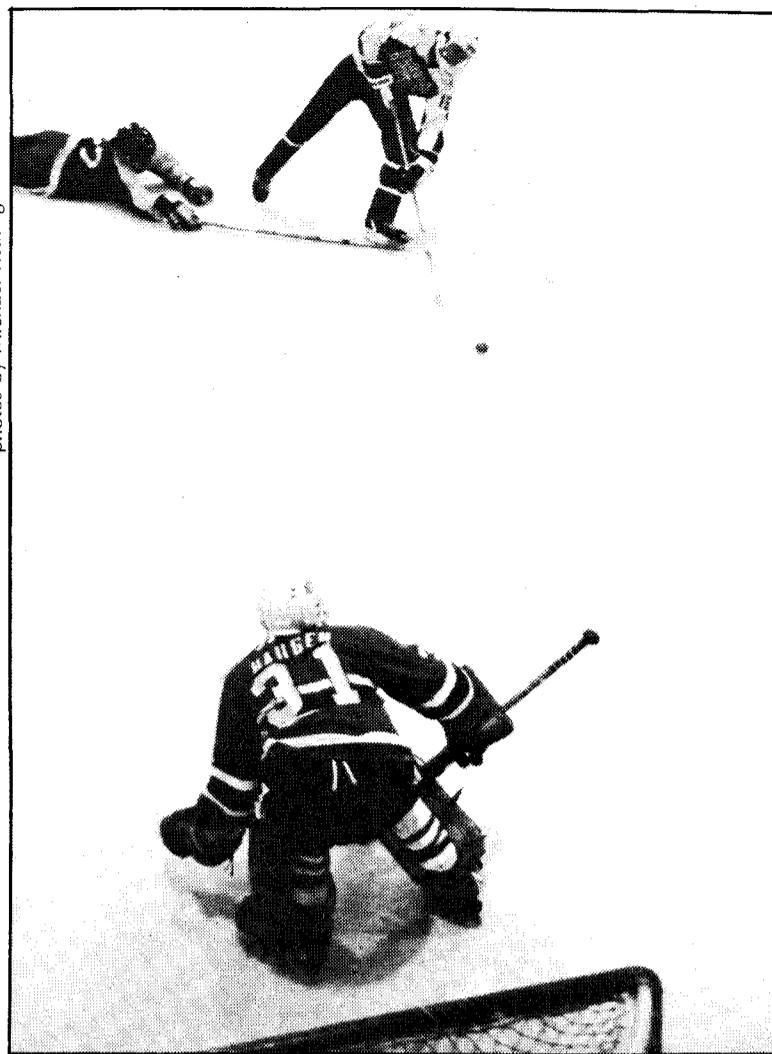
For the first fencing meet of the season the Caltech team travelled to Santa Barbara on Halloween day to face UCSB and Cal State Long Beach. Only eight team members competed in the event four of which were fencing in their first competition ever.

The women's foil team, normally a four person squad, consisted of Miriam Myjak, a draftee from the beginning foil class, and a lot of moral support from all the rest of the women who were un-

able to go to the competition. She fenced admirably, scoring several touches against much more experienced women, lending hope for future competitions and seasons.

The men's epee team was also shorthanded, although only one man down, and was led by Jeff Greason, returning for his fourth year to take on the badge of captain, with Joe Dadek trying his hand at epee for his first competition ever. Although neither fencer won a bout, they both fenced well

continued on page 8



Mike Freeman skates to the Beavers' first goal in their pre-season scrimmage against the maroons last week. Their next match is Wednesday night.

## Beavers Ice CSUN In Year's First Match

by D.B. Puck

The Caltech Ice Hockey Club got rolling in its first game of the season with a 12-0 romping of Cal State Northridge's Division II team. Caltech outshot CSUN 57 to 12 and tallied 50 penalty minutes to a meager 31 by Northridge. The vic-

tory Wednesday night came before a packed house, and included smooth skating and physical hockey.

The onslaught started at 11:31 in the first period as Mike Freeman

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## WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport	Opponent	Location
Sat.	11-7	10:00 am	Soccer	Christ College	Christ College
Sat.	11-7	10:00 am	Water Polo	SCIAC Western Division	Caltech
Sat.	11-7	11:00 am	Fencing	UCLA & Occidental	Occidental
Sat.	11-7	1:30 pm	Football	Siskiyou Coll. Alum.	Caltech
Wed.	11-11	4:00 pm	Water Polo	U.C. Riverside	Caltech
Wed.	11-11	9:45 pm	Ice Hockey	UCI/GW	Costa Mesa Ice Capade
Sat.	11-14	8:30 am	Water Polo	SCIAC Finals	Caltech
Sat.	11-14	9:30 am	Wrestling	Cal Poly Invitational	San Luis Obispo
Sat.	11-14	11:00 am	Cross Country	NCAA Div. III Regionals	Belmont, CA
Sat.	11-14	1:30 pm	Football	Lincoln Heights Rebels	Caltech
Sat.	11-14	2:00 pm	Basketball	Alumni	Caltech
Sat.	11-14	4:00 pm	Basketball	Alumni	Caltech
Sun.	11-15	12 noon	Water Polo	SCIAC Finals	Caltech

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### PhD CHEMICAL ENGINEERS

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## SPORTS

## Ice Hockey

from page 10

released a booming snap shot beating the CSUN goalie on the glove side. Jim Bower and Dave Forte were credited with assists on the goal. The physical brand of hockey being played could be seen in the penalty box. As Dwight Berg sat out the fifth minor penalty of the game, the shorthanded Caltech team stayed on the offensive. Martin Brouillette stole the puck from a CSUN defender and eked past the goalie for the second goal. Then twenty-seven seconds later Brouillette fed rookie Paul Svitek a scoring pass in front of the net where Svitek beat the goalie low on the stick side.

Also adding to the goals were Jeff Hall, Jim Bower, Phil Askena-

zy, and Haj Sano and Mike Freeman collecting two goals each and Paul Svitek completing his first SSCHA hat trick.

The fans had their day also. With twelve seconds remaining in the second period Berg overcame the eight minute penalty barrier when he smashed a CSUN player with a right hand to the face mask, earning a match penalty. All fans in attendance were eligible for a free beverage of their choice as Berg tallied the ten minute penalty. After his two game suspension Berg reminds fans that a two beverage (for away games) eight penalty minute bonus plan will be in effect. The return from vacation coincides with a rematch against CSUN at Pickwick Ice Arena on Sunday Nov. 22 at 11:15AM. The next beaver ice hockey game is Wednesday Nov. 11 at 9:45PM at Costa Mesa Ice Capades Chalet against U.C. Irvine.

## Cross Country

## Women Take Fourth; Men Too

by Runner Velife

Halloween marked the day of the cross-country SCIAC Championship. Accordingly, the entire team arrived at the Conference site, La Mirada Park, in full costume. We were all—you guessed it—cross-country runners! How original!! What made this course especially interesting was the constant downpour of rain during the races. But, being the Battling Beavers that we are, we refused to let the adverse weather conditions impede our performance.

Of the seven teams competing in the Conference, the Caltech

men's and women's teams both finished fourth overall! The Caltech men's and women's teams had much in common that day; both won over Whittier, Redlands and La Verne, while being defeated by Occidental, Pomona, and CMS.

The first Caltech harrier to finish for the men's team was right up there in the top ten. John Gehring blazed his way through the course, clocking his best time ever. At 27:16, John placed seventh overall, ranking him All-Conference.

A mere three runners shy of being ranked all-Conference, Wayne

Lukens could not be dissatisfied with his performance. Racing second for Caltech, Wayne ran his best time as well, 28:53. Following Wayne was the return of the Wall, a continuation of last week's race. Alex Athanasopoulos, Joe Shiang, Scott Kister, and John Haba teamed up to once again form that string of successive Caltech runners, all finishing within fifty-seven seconds of each other. Leaping over the finish line seventh for Caltech was Chris Campo at an amazing time of 31:19!

On the women's side, Bibi Jentoft-Nilsen placed first for Caltech and sixteenth overall. Running her best time of 22:11, Bibi qualified for all-Conference! Great race, Bibi! After Bibi came Susan Schima at 23:30, her best time of the season. Less than eight seconds behind Susan was Margi Pollack, Caltech's third runner. Margi is recovering from her injuries by leaps and bounds with progressively faster times to prove it!

Finishing fourth for Caltech was Liz Warner, at 24:12. Although most would agree she ran an excellent time, Liz was hindered from running to her fullest potential by the sprained ankle she received a few nights before the race. Liz is a perfect example of the eager Beaver spirit incarnate.

Betina Pavri continues to improve, having finished two seconds behind Liz. Her time of 24:14 was a personal best for the season. Ripping through the course at 25:31 was the sixth runner for Caltech, Carmen Shepard. Ami Choksi was not too far behind Carmen, crossing the finish at an incredible time of 25:39. Need I say this was her best time of the season?

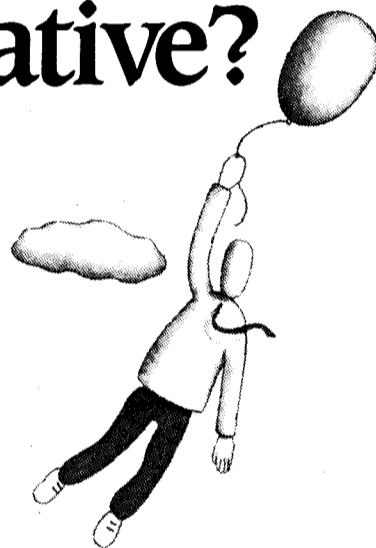
It may have been the heat of intense competition or the true nature of the Beavers showing through in the rain that caused Caltech to have a successful day at the races. The team as a whole was inundated with personal bests and a multitude of beautifully executed strategies.

One of the purposes of this SCIAC Championship was for coach O'Brien to determine which of his fine fleet of runners will go to the Regional meet. Of the men, it looks like John Gehring, Wayne Lukens, Alex Athanasopoulos, Joe Shiang, Scott Kister, John Haba and Chris Campo will be journeying up near San Francisco for the race. Due to the equally outstanding talents of Paul Socolow, Ed Naranjo, and Mark Lyttle, they will be continuing to work out for the Regional meet as alternates.

From the women's team, Bibi Jentoft-Nilsen, Susan Schima, Margi Pollack, Liz Warner, Betina Pavri, Carmen Shepard, and Ami Choksi will be packing up for the trip to the Regional meet. However, the incredible stamina displayed by Selena Forman and Christina Garden earned them the alternate position in the unlikely event that one of the top seven will not be running.

It's been a team effort all the way to the end. With everyone doing their part, each member was able to experience personal improvements as well as participation in team development. Well, Beavers, the next stop is Belmont, California, at the College of Notre Dame for Regionals on Saturday, November 14. This is what we've been practicing for all season. Good luck, and may we leave the other teams in our trail of dust!

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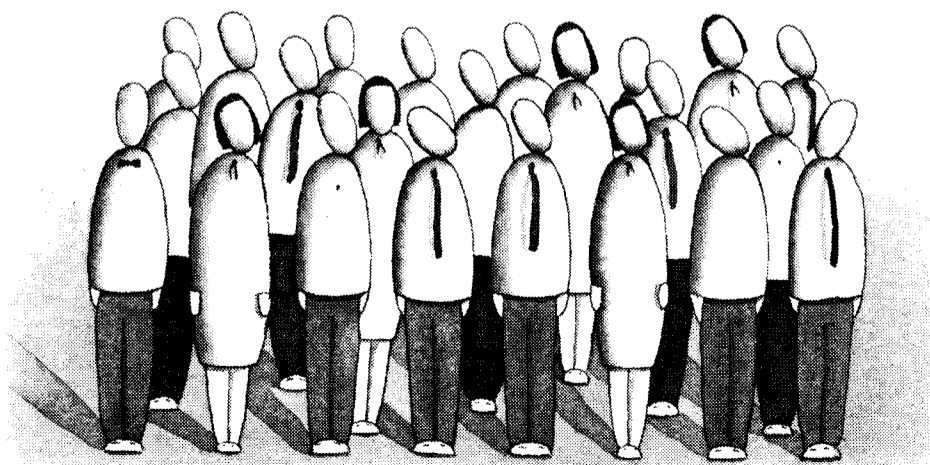
### Who is Printronix?

We design, manufacture and market a comprehensive line of printers for use with micro-computers, mini-computers and mainframe computer systems. Our unique printer technology encompasses non-linear magnetics, high-speed electromechanical dynamics, graphic architectures, logic design, circuit design, VLSI design and software design. We're located in Orange County, California's fastest growing high-tech community, offering the finest educational, cultural and recreational opportunities.

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## ON-CAMPUS INTERVIEWS November 9th



# PRINTRONIX

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WHAT GOES ON

Announcements for *What Goes On* should be submitted on an announcement form available in the SAC copy/mail room (Room 37) or on a plain piece of paper. Please indicate the date(s) you want the announcement to run. Send announcements to 25-58, or put them under the door of Room 40A of the SAC. Announcements must be received by the Tuesday prior to publication.

**KKAL Has Risen From The Grave**

Do you enjoy imposing your musical tastes on others? Do you enjoy talking into a microphone? All those interested in being DJ's or helping to manage Caltech's own radio station, KKAL, come to an organizational meeting, Thursday, November 12 at 8:30 pm at the Red Door Cafe (or leave your name and phone number at the Red Door).

**Candy For A Cause**

Eat chocolate to benefit the Women's Glee Club. We're broke. Just think—if you bought a hundred bags of M&M's at 50¢ each... (you could be broke and fat, but we'd be well off, and most grateful.)

**C.L.A.G.S. Library**

The CLAGS library is open for business, with everything from Plato's *Symposium to Sappho Was a Right-On Woman*. The library is in room 36 of the Student Activities Center. If you want a key, even just to see what a gay-oriented cartoon book looks like, contact Laura Anderson, x3956, or Nancy Matthews (student activities coordinator), Room 37 of Student Activities Center, x2935.

**Women Engineers**

SWE (the Society of Women Engineers) is having a general meeting on Thu., Nov. 12 at 9:00 pm. in the Y-lounge. All graduate and undergrad women are encouraged to come. Organization for this month's AABHAW (jointly produced with OWC) will be done at this meeting; plus, discussion on the "panel of majors" for frosh and the "academic vs. industry debate." Refreshments will be served. For more info., call Carol at x3775 or Catherine at x4744.

**Oliver Takes The Stage**

Auditions for that fabulous extravaganza, the Caltech/JPL musical *Oliver!* will be held on Saturday, Nov. 21 & Sunday, Nov. 22 from 12 noon to 6 pm in Baxter Hall, rooms 25 & 33. Anyone interested in cast, crew, orchestra or production should come by. Any questions? Contact Roberta at x6259.

**S.P.E.C.T.R.E. of Science Fiction**

S.P.E.C.T.R.E., the Caltech Science Fiction Club, will meet at 7:30 pm on Wednesday, 11 November 87, in Club Room B, i.e. Room 15 of the Student Activities Center (south undergrad houses basement). Note changed meeting place! We will show a 1951 British science fiction film, "The Man in the White Suit," and we'll settle logistics for the next star party (come see Comet Bradfield and all the planets except Pluto!). Questions? Call Mark Looper, 304-0006.

**Something For A Sweetie**

The Women's Glee Club figured you couldn't buy enough M&M's to bring us out of poverty, so we're also selling silver jewelry. Acost the nearest Women's Glee Clubber and get a head start on Christmas shopping.

**Poetry At The Huntington**

Benjamin Saltman, Professor of English at Cal State Northridge, will read selections from his own work on Thursday, November 19 at 2:00 pm at the Huntington Library. Mr. Saltman is the author of several books of poetry, including *Blue on Blue*, *The Leaves of the People*, *Elegies of Place*, and *Deck*. This program is supported by the California Arts Council. The program will be in the Overseers' Room of the Entrance Pavilion.

**Planning To Run A Country**

The John F. Kennedy School of Government at Harvard University is looking for future leaders in public affairs. Come learn about Harvard's two-year Master's program in Public Policy, leading to either the Master in Public Policy or City and Regional Planning degree. Joint degree options and cross-registration opportunities with other schools. Meet with Associate Dean Mosley on Monday, November 16, 1987 at 12 noon in Winnett Lounge.

**Campus to Corporation**

*Hispanic Business Magazine* is presenting a one-day seminar for college students preparing for the switch from "Campus to Corporation." Admission is free to the 250 students selected from the fields of computer science, engineering, mathematics and physical science. The event will be held on November 21 at U.S.C. Two participants of the seminar will each receive a \$500 scholarship. Application deadline is November 13. For applications and more information, come by the Career Development Center, 08 Parsons-Gates.

**Ballooning on Mars**

Dr. Bruce Murray, former director of JPL, will speak at a Caltech Y Noon Update on November 19 at noon in Clubroom 1 in Winnett. Hear about future Mars explorer techniques currently under development, and why Jules Verne would have loved them.

**Free Chamber Music Concert**

Conrad Josias and Friends will perform on Sunday, November 8 in Dabney Hall Lounge at 3:30 pm. The program for this Dabney Lounge Chamber Music Concert includes works by Ponchielli, Bolcom, Randall Thompson and Gordon Jacob. Admission is free. Call x4652 for information.

**All The Pizza You Can Eat!!!**

The First Annual Pasadena Pizza Cookoff at the Pasadena Convention Center, 300 E. Green St. on Sunday, Nov. 8 from noon to 5 pm is for the benefit of the Boys Club of Pasadena. Pizza by twenty area restaurants will be judged by celebrity experts including Elmer Dills and Fred Anderson of KABC TV, Jim "Poorman" Trenton of KROQ, Erica Wayne of the *Pasadena Weekly* and Greg Smith of the Parkway Grill. All the pizza you can eat, a raffle, live entertainment and a no-host bar are included in the price of admission: \$8.50 in advance and \$9.50 at the door. The Pizza Cookoff will be held in the Pasadena Convention Center Conference Building. For tickets and information call (818) 577-5817 or (818) 793-2122.

**Gem And Mineral Show**

The Mineralogical Society of Southern California will present its 40th annual Pasadena show of minerals and gems at the Pasadena Center, 300 E. Green St. on Nov. 14 and 15. Thirty-seven retail dealers and 15 wholesalers from around the world will sell minerals, gems, crystals, jewelry, lapidary equipment, fossils and books on these subjects at competitive prices. In addition more than 100 exhibits from museums, institutions and private collectors will be displayed. Admission is \$3.50 per person for one day, \$5 for a two-day pass. 10 am to 8 pm on Nov. 14, 10 am to 5 pm on Nov. 15. For more information phone (818) 793-2122.

**Finest Kind**

"Emeralds of Colombia: The World's Finest" is the topic of a free lecture and slide show to be given by Dr. Peter C. Keller of the Natural History Museum of Los Angeles County. The event will be at the San Marino Women's Club, 1800 Huntington Dr., San Marino at 8:00 pm on Thursday, Nov. 12. Dr. Keller, the Museum's Associate Director, Public Programs, will discuss the aura of adventure and intrigue, wealth and beauty that we find in the emerald. The finest emeralds are of Colombian origin; mining methods will be discussed, including the 15,000 *guaqueros* (treasure hunters) whose lifestyle recalls that of our own Forty-niners during the California Gold Rush. Refreshments will be served. For more information, please call Mary Ann Daus at (213) 744-3438.

**Tziganka**

No, you're not supposed to say "gesundheit"! It's the name of a folk music and dance group that performs Russian and Gypsy songs and Cossack dances accompanied by the balalaika. They'll be at Beckman Auditorium tomorrow, November 7, at 3 pm and 8 pm. CIT student rush tickets: \$6.00. CIT faculty and staff TECHTIX: \$8.75-7.50-6.25. These discount tickets go on sale at noon today, November 6 at the Caltech Ticket Office, located just north of the Beckman Auditorium parking lot. Call x4652 for information.



**Maid O' Cotton**

The 1988 Maid of Cotton will visit four countries in the Far East plus three in Europe during her overseas tour on behalf of the U.S. cotton industry, according to the National Cotton Council. "The Maid of Cotton has always played a major role in the overseas promotion of U.S. cotton," said Adrian Hunnings, executive director of Cotton Council International. "The Maid's overseas tour affords us the chance to thank our many overseas customers." Deadline for submitting applications is Monday, November 9. Application forms are available at National Cotton Council headquarters, P.O. Box 12285, Memphis, Tenn. 38182. The telephone number to call for more information is (901) 274-9030. Applicants must be between 19 and 23, at least five feet five inches tall, and never have been married. They also must be U.S. citizens and residents of cotton-producing states.

**de Karman Fellowship Trust**

The Josephine de Karman Fellowship Trust is offering 15 fellowships of \$3,000 each. These fellowships are available to students entering their senior undergraduate year and graduate students entering their third year or after of graduate school in the fall of 1988. The grants are for one year and are not renewable. For further information please contact the Financial Aid Office located at 515 S. Wilson (2nd floor).

**Exciting Part-Time Jobs**

The Career Development Center currently has two excellent opportunities listed in the office for part-time work at JPL or on-campus. The first job is for undergraduate or graduate students with an interest in error correcting code issues related to the transfer of digital information from micro computers to video tape. Work can be done either on-campus or at JPL. Contact Dr. Jim Stephens in the Technology Utilization Office at JPL. His number is 354-3310. The second position is in High Energy Physics. The Caltech Group working on the L3 Experiment, now under construction at CERN in Geneva, Switzerland, is looking for students with some experience in computing or electronics. The projects will use computers at Caltech, and at CERN (via networks) in some cases. Successful projects may be followed by summer work at CERN, where appropriate. The CDC has more information about job descriptions and requirements. For more information, come by the CDC, 08 Parsons-Gates, or call x6361.



**Job Information Meetings**

TRW will be on campus recruiting on November 11th, 1987. The group meeting will be held on Tuesday, November 10 in the Winnett Lounge from 4:00 to 5:00 pm. O'Connor & Associate, an investment banking company, will be recruiting students of any degree and major on November 30th. An information meeting will be held on Wednesday, November 11th from 11:30 am to 1:00 pm (lunch will be provided) in Winnett Lounge.

**Consulting Engineers \$\$**

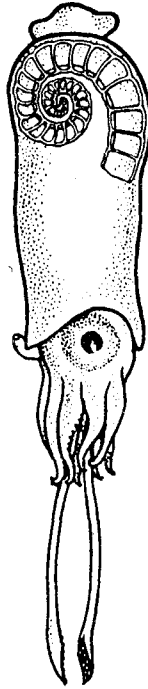
The Consulting Engineers Association of California announces its twelfth annual competition for upper-division, undergraduate scholarships in engineering to be awarded to a limited number of students who are interested in consulting engineering as a possible career. To be eligible, a candidate must be (1) scheduled to enter his or her third or fourth year of undergraduate study in the fall of 1988, (2) in the upper half of his or her engineering class, (3) working for a B.S. degree in engineering, (4) interested in consulting engineering as a career, and (5) a United States citizen. For applications and more information, stop by the Career Development Center, 08 Parsons-Gates.

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The American Society of Naval Engineers sponsors a scholarship program to encourage students to enter the field of Naval Engineering and to provide support to Naval Engineers seeking advanced education in the field. Programs of study include naval architecture, marine, mechanical, civil, electrical and electronic engineering, and the physical sciences. Scholarship awards of \$1,750 each will be made for the 1988-89 academic year. For more information, stop by the Career Development Center, 08 Parsons-Gates, or call x6361.

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