

Tech Wins Oingo Boingo Concert!

Color Me

THE CALIFORNIA TECH

Lurid

VOLUME LXXXVIII

NUMBER 7

PASADENA, CALIFORNIA

FRIDAY 7 NOVEMBER 1986



What else to do while waiting for the pumpkin to drop? Go make the scene—like these folks at the BFLR party.

Pumpkin Drop Fails!

Blue Flash Goes Unconfirmed for Another Year

by Jennifer Low

Down came the pumpkins, all three of them, with crashes and splintering shards. But still no blue flash.

As Eric Schell (freshman, Fleming) put it, "Disappointing."

The pumpkins went into deep freeze at Dabney House after lunch on Halloween. When they were pulled out eleven hours later, their nebulous outlines seemed only appropriate on this night. And they felt cold and hard (although Dan Harrison admitted later that there just wasn't that feeling of "fine china").

After ample warning and threats to the crowd from Andrew Huntington (on top of Millikan

with the bullhorn), the countdown began. At exactly midnight Dan Harrison let the first pumpkin fall, toward some two hundred spectators below.

These observers had *ooohed* and *ahhed* when liquid nitrogen was poured down the west side of Millikan Library just before the pumpkins were dropped. Unfortunately, the pumpkins received slightly less enthusiasm. They had failed their mission: to glow upon impact.

Harrison will conduct further research and testing to insure against no such product failure next year.

In Dabney Gardens, Blacker, Fleming, Lloyd and Ruddock hosted a Halloween party that was

reputed to be everything from "great, well attended" to "pretty dead," depending what time it was. The party pretty much emptied at midnight. Presumably its members were witness to yet another confirmation of gravity, version 1986. And thus passeth Halloween.

Bye, Bye Bernie:

Deputy MOSH To Leave Tech

by Steve Bard

The Master of Student Houses, better known as the MOSH, is one of the best-known and most respected people on campus. The Master, Christopher Brennen, is the one who gets called at all hours of the day and night to resolve any problems which occur in student life. In return, Brennen gets to live in the comfortable Master's Quarters on Holliston Avenue. In addition, the Master has one of the most interesting jobs around, for the students of Caltech certainly get into some amazing situations.

In the fall of 1984, the Master's Office decided to take some of the load off the Master by employing an assistant, the Deputy MOSH, to act for the Master when out of town, ill, or simply sick of the job.

Now Caltech's first Deputy MOSH is retiring. As of December 17, Bernie Santarsiero will leave Caltech to teach Chemistry for a term at the University of Washington, after which he will take a position in Biochemistry at the University of Alberta in Edmonton for three to five years.

Bernie got the job of Deputy MOSH by applying when the Master's Office decided to set up the position. The job entails not on-

ly covering for the Master, but also acting as full Master over the summer, and as Master and Resident Associate for students living in off-campus houses. This means that the deputy MOSH invites the off-campus residents to dinner during the year to find out how things are going, just as Chris Brennen does the on-campus students.

The Deputy MOSH also gets a perk for his hard work; Bernie lives in the Deputy MOSH's apartment at 1170 Del Mar, which he calls, "... a very nice apartment. I got to furnish it myself since I was the first assistant MOSH." Before becoming Deputy MOSH, Santarsiero taught Chemistry 1a, assisting Sunney Chan. He came to Caltech on a Vantrell Research Fellowship in December of 1980 and did organic metallo-chemistry. He also was director of the X-ray division for three years. Bernie says that he most enjoyed teaching Chemistry with Sunney, and being Deputy Master.

When asked what kind of odd things happened while he was Deputy MOSH, Bernie told about the time Fleming demolished an off-campus alley.

A Fleming off-campus house on Wilson was slated to become

[CNB]—The Anne P. and Benjamin F. Biaggini Professorship of Biological Sciences has been established at Caltech, President Marvin L. Goldberger has announced. According to Dr. Goldberger, the first holder of the

part of a new parking lot, so Fleming House got the permission of the MOSH to have a house-demolition party. The Flems went at the house with sledgehammers and loud, loud music on the day after Halloween. Bernie, of course, joined in the fun. But some time after the party began, the police dropped by to let the Flems know that the noise was annoying the neighbors. So the zealous workers pointed the speakers inward and continued their smashing and bashing.

About an hour later, when the house seemed to be softening up, Campus Security arrived to investigate. So did the Pasadena police. And sleepless neighbors. And to cap it all off, a helicopter, complete with searchlight, dropped by to check out the situation. The Flems were thus prevailed upon to turn down the noise and go home.

Despite the sometimes odd hours, Bernie Santarsiero says he really enjoyed being Deputy Mosh. "I highly recommend this job. It's fun, and never boring."

Anyone who is interested in the exciting position of Deputy MOSH can contact the Master's Office, or Bernie, preferably sometime before December.

Bingo! Boingo Win Was 'In the Cards'

by Steve Clinard

Officials of the Honda Scooters "Back to School" Bash Promotion informed Caltech Wednesday that it had won the right to present a concert by the group Oingo Boingo. Caltech undergraduates entered the contest by filling out and delivering over 51 thousand entry cards on October 13, the official deadline.

The results of the nationwide contest were to be announced within a week after the deadline. Adam Slovik of Fleming House, who organized the effort and repeatedly called the promoters and KROQ for contest results, said that the two week delay resulted because the entries from two schools, one of them Caltech, had to be counted to determine the winner. The promoters would not, however, tell Slovik who the other school is or any other details.

The results may have been delayed by Caltech's methods and

tactics. "There was some question to the legality of the Caltech entries," said Slovik, "but due to the enthusiasm and number of entries, they decided to give us a concert anyway." Caltech entries were not validated at Honda dealers or mailed separately. The other school may be given a concert as well.

Since the results weren't known soon enough to hold the concert before November 20, stated in the rules as the last day possible for the concert, it will be scheduled for December or early January. According to Slovik, Caltech authorities have agreed to have the concert in Beckman Auditorium, but the students are also considering holding it at the Pasadena Civic Auditorium.

The concert will be open to Caltech students and their guests. Also, if the concert is held at the Pasadena Civic Auditorium, Scripps College may also be invited, said Slovik.

Biaggini Professorship Created

newly endowed chair will be Dr. Melvin I. Simon, whose research includes the study of molecules that enable organisms, from bacteria to mammals, to respond to changes in their chemical and physical environments.

"We are at an extraordinary period in the history of biology," said Dr. Goldberger. Fundamental discoveries, such as those being made by Mel Simon, are not only giving us powerful insights into the mechanisms of life, but also into the nature of disease. This generous gift by our friends Anne and Benjamin Biaggini to establish this professorship will significantly enhance this rapid progress.

"The endowment of the Biaggini Professorship will aid the quests for deeper understanding of ourselves as living organisms and for new therapies for our illnesses," said Dr. Goldberger.

Mr. Biaggini, retired Chairman of Southern Pacific Company of San Francisco, received his B.S. degree, magna cum laude, from St. Mary's University in 1936. He also attended St. Thomas University in Houston and the University of Houston, and in 1955 completed the Harvard Business School Advanced Management Program.

He began work with Southern Pacific in 1936 as a civil engineer, advancing to become president of the parent company, the Southern Pacific Company, in 1964. In 1968, he became chief executive officer.

In 1976 Mr. Biaggini was elected chairman of the board of Southern Pacific. He relinquished his role as president in 1979, and retired in 1983 as chairman and chief executive officer. Since then,

he has served as director and consultant to Santa Fe Southern Pacific Corporation, which was formed as a combination of Southern Pacific and Santa Fe Industries.

Mr. Biaggini is also a director of Carter Hawley Hale Stores, Inc., and SRI International. He is also a founder and vice chairman of the California Round Table and a member of the Business Roundtable and the Business Council.

Since 1970, he has also been a member of the Caltech Board of Trustees and serves as chairman of its investment committee.

Anne Payton Biaggini was born in Nogales, Arizona, and raised in San Antonio, Texas. She attended Incarnate Word College in San Antonio. Anne Payton and Benjamin Biaggini were neighbors in San Antonio and met through family friends. They were married September 9, 1937. The Biagginis have two daughters, Constance Sue Guittard and Anne Krattelbol.

Dr. Melvin I. Simon, the first Anne P. and Benjamin F. Biaggini Professor of Biological Sciences, received his B.S. degree in chemistry in 1959 from the City College of New York and his Ph.D. in biochemistry in 1963 from Brandeis University. After a postdoctoral fellowship at Princeton University, he joined the faculty of the University of California at San Diego. He came to Caltech in 1982 as a professor of biology.

One focus of Dr. Simon's research has been the effort to understand how signals from the retina of the eye and from receptors on the surface of bacteria are transduced, or changed into a form that the living organism can use.

continued on page 8

LETTERS

Virgin Hovses

To the Editors:

The recent graffiti incident in Blacker House has prompted me to encourage people to lobby the powers that be to reconsider their position on the newly renovated South Houses.

I and many of my fellow students don't want to live in a house with virgin blank walls. Perhaps they remind us too much of the notes we didn't take in the lectures we didn't go to, or the papers we have yet to write. Whatever the reason, we enjoy the comments and graffiti and history of those who have been here before us. Those few words they leave behind serve to remind us that there are people who have managed to escape from this institution.

It has been said of the renovations that they have institutionalized and sanitized the South Houses. And it appears that the powers that be are putting up a determined effort to see that they remain sanitary.

History has shown that if left to ourselves we will aid entropy, especially when interhouse and ditch day come around. However, the cumulative damages that we wreak upon the houses can usually be fixed with a new coat of paint every five years or so, and students have been providing cheap (often free) labor to do this for decades now.

Now the policy is to keep the houses in continuous perfect condition, fixing every place where entropy rears its head. An example from Ricketts: the only public access to Snatch roof (for people who are not into technical rock climbing like myself) is the window in the staircase from Cherry to Snatch. However, if one performs the maneuver up to the window while wearing shoes it is very easy to leave black marks on the wall under the window. (I don't know which Scurves would be wearing shoes, but it appears that there are some who do.) The powers that be have noticed these marks, and are planning to paint over them soon. Everyone involved agrees that the marks will probably reappear, and they plan to keep painting over them.

It seems obvious to me that this is a waste of perfectly good paint,

and that it is not necessary to repaint more than once a year, at most. I don't know ANY students who live here who object to the marks and think that the way to deal with them is to paint over them. The only people who are bothered by them are the powers that be, and they are determined to keep the houses in conditions that they like and approve of.

I think this policy is silly.

Sincerely,

—Steve Waltman
Ricketts 57

Real Feedback

To the Editors:

I am writing as a faculty member in support of Mark Fischman's letter to the editors criticizing the TQFR. While I appreciate that students are often frustrated with their courses, public humiliation of Caltech professors, or for that matter, anyone else, does no one any good. In many ways the surveys miss the point, which is not that we faculty, like students, differ in ability and in the amount of time that we have for a course. What is important is that we teach as well as we can with the ability and time that we have.

My own experience is that the most effective feedback is from students that come to my office with specific, tactful suggestions. This requires considerable maturity and integrity on the student's part, and it certainly earns my respect and gets my attention. It also allows a discussion that can be very helpful to both the student and me, because it often happens that there is fault and misunderstanding on both sides. It can be particularly helpful in rewriting handouts, revising software, changing lectures to make them clearer, and improving lab procedures. The suggestions are private and specific, and the changes can be immediate. They give a student a more active role in his education, and I even suspect that they are more effective at relieving a student's frustration than an anonymous personal attack in the TQFR.

I worry that the official forms of feedback: the TQFR, the ombudsmen, and the student-faculty conferences, are viewed as effective substitutes for this most basic form of feedback, because they are

not. Much more effective than these official exercises would be a solid Institute tradition of individual students talking with professors about their classes.

—David Rutledge
Electrical Engineering

Taking Liberties

To the Editors:

Having read Huy Cao's two letters in recent issues of the *Tech*, I must disagree with his views, expressed primarily in his first letter, on the subject of liberty and the freedoms we have in the U.S.

Mr. Cao states that "in their worst use, the First Amendment rights are used as justification for doing anything we want." Well, we obviously can't do anything we want, but the Constitution gives us some very broad rights, rights which Mr. Cao seems to defend only when they are in some sense "proper" or "responsible". He expresses shock and indignation that some, primarily the ACLU, seek to extend these rights to people who are using them for non-serious or immoral purposes, people who, by his definition, "do not [do] good with [their] freedom". Among these people he lists pornographers, Nazis who seek to march in a Jewish neighborhood, and Dr. Bayer who lectured here some weeks ago about Nicaragua.

The trouble is that, of course, in judging these people and their actions we are forced to use our own definitions of what is proper use of our precious Constitutional rights. Mr. Cao frowns on Nazis who use their freedom of assembly to march through a Jewish neighborhood. What is his opinion of 1960's civil-rights marches that went through largely white neighborhoods? What is the essential difference? What about the right of gay people to hold marches?

Of course, the Nazis express a message of hatred, while the civil-rights marchers were peaceably

assembling to seek equality. But that's not what many people thought in the sixties. Should we allow such moral judgments to restrict freedom of expression?

And what of political judgments? Let me examine a particular example: Dr. Bayer's Nicaragua talk. Huy Cao does disagree with Dr. Bayer's statements (which is of course his right), but he also disapproves strongly of Dr. Bayer's "un-Americanism" in expressing these statements. Of course Dr. Bayer disagrees with U.S. foreign policy. But is that wrong? Mr. Cao points out that "in the Soviet Union, critics make the grand tour of Siberia." A very wise observation—this freedom to disagree with the government is one of the cornerstones of democracy. And when the government's pronouncements of facts are as unreliable as they are (surely you didn't find the recent disinformation scandal surprising?), opposing viewpoints become essential.

Mr. Reagan wants hundreds of millions of dollars to overthrow the government of a foreign country, and he needs votes to do it. Are we, then, to believe what he says about that country? The mainstream news media are, for different reasons, also somewhat unreliable: TV seeks the highest ratings and eye-grabbing images, newspapers seek the highest circulation and good headlines. Both must explain any situation to the average reader in a matter of minutes, and both send out reporters totally unfamiliar with the local culture and, often, even with the language and expect them to send back exciting stories.

Bayer gave the American press a 5 out of 10 rating; this is not so pessimistic as it may seem. The European press should probably go several points above the U.S. For a detailed analysis of the wretched job the U.S. press did in covering a recent event of great global importance—the Iranian revolution and hostage crisis—I recommend Edward Said's *Covering Islam*. (I

also recommend the class H 8a, but it's a bit too late to add that now.)

My point here is that Dr. Bayer's disagreement with "official" U.S. policy does not make him wrong or an "apologist for totalitarianism". A sober, studied opposing viewpoint is both legal and even to be welcomed, whether or not you agree with it. To denigrate, for moral or political reasons, a person's right to express his views, is both wrong and dangerous. Once our rights can be given or taken away on so tenuous a basis (and tenuous is the right word—morality is *not* carved in stone, the things that "all right-thinking people" believe have changed quite a bit in the past decades), their power begins to erode. Once only certain things can be expressed, it becomes all too

continued on page 3

THE CALIFORNIA TECH

Volume LXXXVIII • Number 7
7 November 1986

EDITORS IN CHIEF

Jens Peter Alfke • Josh Kurutz

ENTERTAINMENT EDITOR

•Help Wanted•

FEATURES EDITOR

Amanda Heaton

PHOTO EDITOR

Joey Francis

SPORTS EDITOR

Michael Keating

TAPE & PURPLE PAPER GUY

Josh "Chevy Malibu" Kurutz

REPORTERS

Jim Bell • Huy Cao
Steve Clinard • John Haba
Jennifer Low • Gary Ludlam
Glenn Tesler • Dave Lomax

PHOTOGRAPHERS

Shubber Ali • Joey Francis
Teresa Griffie • Rosemary Macedo
Chris Meisl • Glenn Tesler
Sing Ung Wong

THE INSIDE WORLD

Blacker: Alex Wei
Dabney: Alex Gilman
Fleming: Steve McAdams
Lloyd: Keith Owens, John Wiltse,
and Sho Kuwamoto
Page: Michael Keating
Ricketts: Sam Weaver
and Lisa LePome
Ruddock: Betsy Andrews

BUSINESS MANAGERS

David Goldreich
Gavin Claypool

PRODUCTION & LAYOUT

Mike Klein • Gaylon Lovelace
Josh™ Susser • Nick Smith
Glenn Tesler • Mimi Zucker

THE CALIFORNIA TECH
107-51 Winnett Student Center
California Institute of Technology
Pasadena, California 91125

Phone: [818] 356-6154

Published weekly except during examination and vacation periods by the Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors and do not necessarily reflect those of the editors.

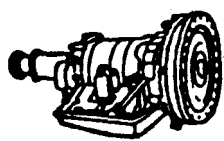
Letters and announcements are welcome. All contributions should include the author's name and phone number and the intended date of publication. The editors reserve the right to abridge letters for expediency or for any other damn reason they feel like. So there.

Turn in copy to the *Tech* office mailbox, room 107 Winnett. The deadline for copy is Wednesday at 5PM; for announcements, Tuesday at 5PM. Late copy may not be printed unless prior arrangements have been made with the editor.

Subscription requests should be directed to the attention of the business manager. Rates are \$3.00 per term, \$8.00 per annum (one year), \$100 per life (many years).

Printed by News-Type Service, Glendale, California

ISSN 0008-1582



PASADENA TRANSMISSION

AUTOMATIC TRANSMISSION SPECIALISTS

Free estimates

Towing available

26 N. Hill (at Colorado) (818) 792-6104

10% discount to all Caltech students and faculty

ASCIT FRIDAY NIGHT MOVIE

MAIN FEATURE:

CAT
BALLOU

FOLLOWED BY:

DONALD DUCK IN
MATHEMAGIC LAND

BAXTER LECTURE HALL 7:30 & 10:00 p.m.
\$1 for ASCIT members \$1.50 for others

NEXT WEEK: *Creepshow*

SERVING CALTECH
SINCE 1945

Authorized Agents for Airlines,
Hotels and Steamships

H.B. BENNETT
The
Finest in
Professional Travel
Services
TRAVEL AGENCY

(818) 795-0291
(213) 681-7885

CAMPUS EXTENSION
3091

690 E. GREEN ST.
PASADENA, 91101
(between El Molino & Oak Knoll)



LETTERS

from page 2
easy to make that set more and more restrictive.

But I forget myself. Huy Cao nowhere says that he is in favor of illegalizing those things he's not in favor of. He merely feels that it's somehow wrong, improper, *ungrateful* for us to stretch the rights that we've been so generously given by our Founding Fathers. And to this end he scorns those who use their rights in "improper" ways, and those who seek to help them protect their rights.

Mr. Cao no doubt feels good about never having stated that those things he finds improper should be outlawed, and perhaps he *doesn't* want them illegalized. There are, however, all too many people these days who *do*, and those who think like Huy Cao play right into their hands. If we do not today respect the rights of those we disagree with, the bell tolling next week may be the Thought Police, calling on us.

—Jens Peter Alfke
speaking for himself

Nicaragua

To the editors:

Regarding Huy Cao's very thoughtful letter concerning David Bayer's talk on Nicaragua, I'd like

to clarify some matters and raise some objections.

First of all, I don't see why calling President Reagan "un-American" is anti-American. Can we say that we were anti-Philippine because we criticized Marcos, and suddenly we aren't because we like Aquino? Incidentally, the 26% figure Bayer gave was the percentage of eligible voters who voted for Reagan; the source of the confusion is, above the fact that Bayer used the inappropriate word "calculus", that the apathetics who comprise about a half of this great democracy didn't bother to vote at all.

Hasok Chang:

"I don't see why calling President Reagan 'un-American' is anti-American."

It would be a good idea for anyone to find out what "monopolistic corporate capitalism" or "imperialism" actually means before becoming angry at the connotations that those terms carry with them or the way certain people use them. There is no space for a whole lecture here, and I'm not qualified to give one, but just look at some simple facts. In 1978, 5 U.S. industrial

corporations had total sales of over \$229 billion, total assets of over \$137 billion, and net profit of nearly \$11 billion. In the late 60's, General Motors' yearly operating revenues exceeded those of all but a dozen or so countries. Of 420,000 U.S. manufacturing firms in 1962, the 20 largest owned 25% of the total asset. The list of American overseas acquisition in history includes the Samoa Islands, Hawaii, Guam, Puerto Rico, the Philippines, and the Panama Canal Zone. The countries which have been invaded for largely economic reasons include Mexico, Cuba, Colombia, Nicaragua, and the

Dominican Republic. (source: Hunt, E.K., and Howard J. Sherman. Economics. New York: Harper & Row, Publishers, 1981.) I won't cite cases of more "subtle" methods of control such as coups, air raids, rebel-aids, or sheer economic pressure, employed in the past and the present. Suffice it to say that the U.S. has rarely disassembled the lucrative economic structures created in those countries by force, unless it had to as in Cuba or Nicaragua.

Huy expressed the opinion that criticizing "the very system that gives them the right to criticize" does injustice to the system. However, hardly anyone criticizes the U.S. for providing freedom of expression; the criticism is directed at other aspects of the system. More fundamentally, why does a society need freedom of speech if not for self-criticism?

Finally, I'd like to point out that it is a common yet grave mistake to consider that benevolence in domestic policies of a nation automatically implies decency in its international behavior. The United States is perhaps the best example that can be found. How much moral righteousness is there to Americans who condemn Soviet atrocities in the world while they choose not to use their precious rights and power to stop similar actions of their own government?

—Hasok Chang
1-59, 792-2659

continued on page 4

Tina & Michael
HAIR DESIGN

Specializing in Unisex Haircuts, Perms, and Color
20% off to Caltech community
Walk-ins and Appointments
991 E. Green Street
Pasadena, California
Parking on 108 S. Catalina
793-2243 or 449-4436



Greg Susca
Painting and Wallcovering
Interior and Exterior
(818) 249-5646
License #456757
Special discounts to Caltech community

BURGER CONTINENTAL

BUY YOUR CALTECH CARD AND SAVE

ALWAYS **10% OFF** WITH YOUR CALTECH ID

PROUD PROVIDERS OF CALTECH'S FOOD SERVICES

We feature:

- CHICKEN TAVOUK KEBAB
- FRESH SEAFOOD SPECIALS
- GOURMET GIANT HAMBURGERS
- DAILY SPECIALS ON THE BOARD
- REFILLS ON SOFT DRINKS AND SALAD BAR

all at reasonable and affordable prices
all include French fries or rice pilaf, infinite salad, pita bread and butter

FOR THE ENTIRE MONTH OF NOVEMBER
A FREE ROOT BEER FLOAT TO ALL JUNIORS, SENIORS, AND GRAD STUDENTS
FACULTY, GRAD STUDENTS, ATTEND!
MONDAYS & TUESDAYS ARE BEER DAYS. HALF PRICE ON BEER.

535 SOUTH LAKE AVENUE
1/2 BLOCK NORTH OF CALIFORNIA

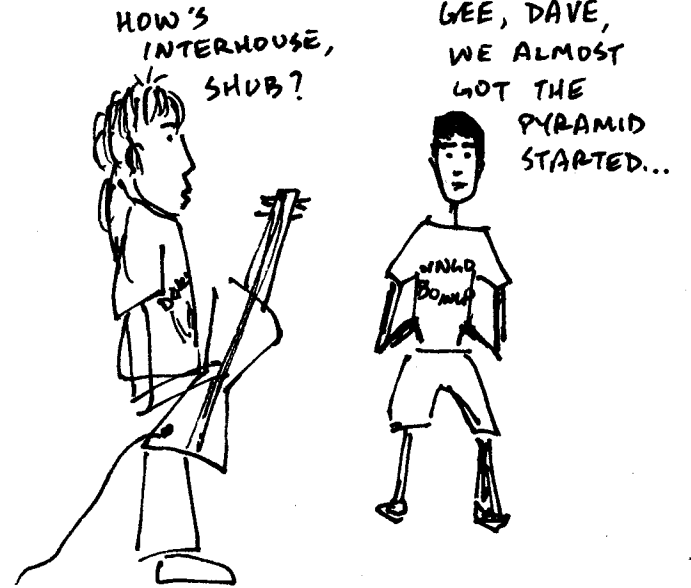


The Inside World

Blacker:

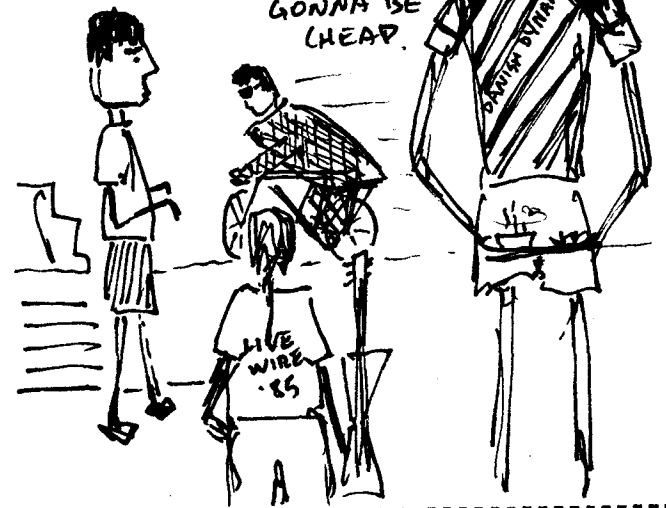
THOSE DARN MOLES

by Alex



BUT WE GOT HEIROGLYPHICS ALL OVER THE PLACE.

WE CAN GET SAND FROM THE BEACH IF WE'RE GONNA BE HEAD.



AT LEAST WE HAVE ENOUGH MONEY FOR NEW EQUIPMENT.



meanwhile...

YOU IDIOT. YOU LOST ANOTHER ONE IN THE FROSH CRUSHER!



continued on page 6

OPINION

The Outside World

The Outside World is a weekly forum for the presentation of international news and commentary. The opinions expressed in The Outside World are solely those of the authors and do not necessarily reflect those of the Editors.

The Outside World welcomes any informed contributions from readers. If you're interested in becoming a regular writer, please contact Hasok Chang at mail-code 1-59, phone 792-2659.

The current writers for the Outside World are (in alphabetical order):
 HUY CAO.....Europe and U.S.S.R.
 HASOK CHANG.....Central America, Arms Control and the Pacific region
 MANEESH JAIN.....Asia excluding Middle and Near East
 PARESH MURTHY.....Middle and Near East, North Africa
 KEVIN NELSON.....Sub-Saharan Africa, South America

Nakasone Makes His Move

by Maneesh Jain

Japan's Prime Minister and emerging statesman is out to make new friends and influence more people. A fortnight ago he returned from a visit to the South Korean President, Mr. Chun Doo Hwan and is about to welcome President Aquino of the Philippines and Singapore Prime Minister Lee Kwan Yew. Starting in late November, within a space of two months, he intends to meet the leaders of China, the U.S. and the Soviet Union.

Mr. Nakasone's visits are perhaps intended to reverse the general unpleasantness caused by some indiscreet remarks, including his earlier blunder concerning racial superiority as well as Education Minister Fujio's hurtful comments about the Nanking massacre, which raised much ire in Asia.

Nakasone's series of meetings are definitely a bit of clever diplomacy. Japan wants a China that is stable and easy to negotiate with. Nakasone's visit is a diplomatic maneuver intended to calm Chinese nervousness about Mr. Gorbachev's forthcoming visit to Tokyo, the first ever by a Soviet leader. A decade ago, China was critical of Japan's security pact with the U.S. but now it sees it as a restraint on the Russians. Too

much warmth between Russia and Japan would worry China.

Again, Japan must balance its relations with China against those with the two Koreas. South Korea does not have diplomatic relations with China. South Korea's President, Chun Doo Hwan, recently prompted an over-Constitution arrest of opposition Rep. Yoo Sung-Hwan in order to cut domestic opposition. He justified it by "concern about the maneuver of radical left-bearing elements to destroy our free democratic system," despite his own use of rather undemocratic methods to contain the opposition.

Hwan would like to gain more footage by improving South Korea's relations with China and has asked Nakasone to act as a link. Thus, while visiting Peking, Nakasone would have to be firm and yet subtle in pushing the South Korean suit so that he does not embarrass his Chinese hosts by provoking the North Koreans and at the same time keeps the South Koreans convinced that he actually wants to improve relations between their two nations.

Far-East Asian diplomacy can be as intricate as a chess game, but it is worthwhile as long as it maintains peace.

continued on page 9

"Teaching People To Be Good People"
 Who's Responsible for Student Ethics?

by Huy Cao

Earlier this week, the Carnegie Foundation for the Advancement of Teaching released a study about the state of undergraduate education. The report took three years and \$1 million, and surveyed thousands of instructors, administrators, parents, and students. The study has negative observations about both colleges and their undergraduates. Since the study was about the American undergraduate college in general, some of the criticisms aren't applicable to Caltech. Some, however, are especially applicable to Caltech. For example, it criticizes research universities for emphasizing research too much over teaching.

But the observation most applicable to Caltech and its undergraduates is that students go to college mainly to attain a "detailed grasp for a specialized field," whereas "formulating values and goals for life" isn't so important for today's students. Two decades ago, the former goal was much less important, and the latter goal was at the top of students' list of goals. The report also urged colleges to develop a more coherent core for general education. A specific suggestion was that students should be required to write a thesis about their field of study in a historical, social, or ethical context.

Caltech does indeed specialize students for science. Unfortunately, science is concentrated on a lot, and the humanities aren't given much attention.

The Caltech undergraduate himself can be accused of being apathetic, of not caring very much about what happens outside of Caltech. This is also a fair accusation, since most Caltech students aren't up-to-date on outside events or issues. But to be just, the situation has to be put in context: The student seems to always be swamped with homework, so can you blame him if he doesn't know, or care, who won Tuesday's elections?

Whether we should blame the student or not, we should admit

that science will change the world, for the good or bad, through applied knowledge or through brute force. And because of science's power, those who practice it—scientists—ought to be, if not historically, politically and socially aware, then at least morally aware, of what is right and wrong.

It has been my empirical experience that many students here don't care much about their humanities courses: "You don't have to worry about your humanities—This is Caltech!" Perhaps worse, most students don't think about the implications of how their future work can affect others. And by not thinking about possible consequences, they are being amoral.

After all, people do tend to be amoral if left to themselves, so I think it is up to the college to a large extent to help students think about the proper use of knowledge. Colleges in recent decades haven't accepted the responsibility of giving students moral guidance, and Caltech isn't an exception unfortunately. Modern institutions for

higher learning are great at teaching students how to become good lawyers, doctors, physicists. But teaching people to become good people? Unheard of! Old-fashioned! In the name of objectivity, the words "right" and "wrong" are avoided.

Colleges have to teach ethics. They give students knowledge, so shouldn't they also help students decide the use of the knowledge? It would be naive to think that everyone can decide every time to do everything right with their knowledge.

Ultimately though, it is the person himself who decides whether he will, for example, work under a military contract to build better weapons or splice genes to "send in the clones." If he decides to, after deliberating seriously, fine! If he decides not to after deliberating seriously, fine! The important thing is for him to take his knowledge and his integrity seriously enough so that he doesn't hurt people. And wouldn't it be a bonus if he could actually help people?

PLAY BRIDGE!

Tuesdays (7:15 p.m.) and Wednesdays (7:45 p.m.) are Caltech nights at the Bridge Center.

Bridge fee for Caltech students and staff will be \$1.75 (normal fee is \$3.75).

Caltech students and staff may play in any other Bridge Center game for \$2.50.

Please call for our complete schedule.

Bridge Center
 333 N. Santa Anita Avenue
 Arcadia
 (818) 445-3797

LETTERS

from page 3

Abandoned Cars

To the Editors:

Most of the Caltech community is well aware of the current parking difficulties at the Institute. A new parking structure, costing millions of dollars, is being constructed next to Catalina II on Wilson. The city, as we were informed by a notice in our mail, has lifted parking restrictions on the streets in the immediate vicinity of Caltech. Much attention is being given to the problem.

Why, then, does the Institute fail to enforce its own parking regulations? What continually amazes me is the assortment of abandoned and permanently parked cars in the lots, particularly in the lot next to Del Mar and Michigan. There we find an incredible assortment of old, decrepit vehicles. Many are caked in a layer of Pasadena dust which is months old. One bumper sticker informs us, "Do not wash this car, it is undergoing a scientific test!" Leaves have collected in the sheltered crevices between tire and pavement, and several cars sport

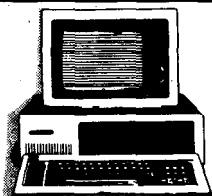
flat tires, listing slightly to one side.

In security's own leaflet, we are informed that vehicles left over seven days are subject to impoundment. Hah! A good ten to fifteen cars haven't moved in the last year. More have sat for several months. These wrecks are a dead weight on the parking situation, tying up space and forcing commuters and visitors to park either where spots don't exist or on distant surrounding streets.

It is time to call a tow-truck.

—Paul Miller

Applied Physics/Aeronautics



IBM XT CLONE \$889

PRICE INCLUDES: 2 Floppies, Monochrome Monitor
 640K RAM, MS-DOS 3.2, GW Basic

LEADING EDGE MODEL "D"

- 2 Floppies..... \$1090
- 1 Floppy 20MB..... \$1495
- 1 Floppy 30MB..... \$1595

PRICE INCLUDES:
 512K RAM, Monochrome Monitor,
 MS-DOS 3.1, Basic, Word Processor

- IBM AT Compatible..... CALL
- 8MHz CPU Speed
- IBM XT 286 Compatible..... CALL
- 8MHz CPU Speed
- Toshiba P321..... \$469.00
- Citizen Premier 35..... \$469.00
- Leading Edge 1200B..... \$139.00
- 2400B..... \$279.00

PC SYSTEM DESIGN CORPORATION

Open Monday-Saturday, 10 a.m.-6 p.m. (Open Sunday, 1-5 p.m. in Pasadena only)

BEVERLY HILLS: 276 S. La Cienega (213) 659-9886 PASADENA: 455 N. Lake (818) 792-1391

SELF-SERVICE COPIES

3 1/2 ¢

kinko's copies

Open 24 Hours
 SEVEN DAYS A WEEK

visit our new location!

Kinko's Glendale

441 N. Brand Blvd.
 Glendale
 (818) 500-1811

NOW OPEN!
 (but not 24 hours)

Copies beyond belief from state-of-the-art Xerox copiers for great-looking flyers, newsletters, brochures, theses, reports, and resumes.

Print quality and incredible speed at prices that will astound you!

kinko's

827 E. Colorado Blvd.
 Pasadena
 (818) 793-6336

ENTERTAINMENT**Review:****Anna Russell Gives 'Pasadena Farewell' in Beckman**by **Amanda Heaton**

"How many times have you heard someone say, or perhaps you've said it yourself, 'The thing I would like to be, more than anything in the whole world, is a sing-ar'?"

Anna Russell, comedienne and

opera parodist *par excellence*, gave her "Pasadena farewell performance" last Saturday, 8 November. In beginning with a joke, she set the tone for the whole performance.

"Now what you need is a glorious voice. Period," Russell explained. The only problem with having a glorious voice, she continued, is that thousands of people have glorious voices, so, even with a trained, beautiful voice it can be impossible to find a job which pays even mediocreatly. Thus, she concluded, "really, you not only need to have a glorious voice, but must also be an independently wealthy, sexy, politically-motivated bitch."

After this introduction, Russell began her opera satire. Using excerpts from an entire opera which she translated to English, she pointed out the irony of the words and music. She handled duets and

trios well, singing one part at a time or jumping back and forth to emphasize contrasts, giving the mood of the piece. She also made fun of the singers themselves: the flitty sopranos through the over-serious basses, her great range and tonal variation making her portrayal of the different parts effective. At the end of her first piece, Russell had the audience participate in the finale of the opera.

Next, Russell gave a "Short Course in Music Appreciation—Presenting the Bagpipe." After a series of jokes, during which she assembled a bagpipe, she brought in a real piper in full Scottish garb, ending the first half of the program.

The second half of the program lasted slightly longer than the first. She began with a parody of Gilbert and Sullivan, moving one of their typical themes into an American

setting. A New York City aristocrat wants marry his daughter, Pneumonia, to a wealthy man, Claude Billibunion, to pay off his debts. Pneumonia, of course, is in love with John Smith, a nobody. Russell used hats to accompany this satire, singing a few lines of John Smith's stereotypical tenor aria "in 6/8 time" and a parody of the Major General's song from *The Pirates of Penzance*—"I am a very miserable but rich tycoon."

Following this scene, she continued her use of hats in a satire of the "Ladies' Club Annual Festival" with a large, flowered straw. Although she did not sing in this segment, the audience received it well, laughing almost continuously.

She preceded the next piece, her traditional Wagner satire, with an apology for the frequency with which she had performed it, but, as expected, the audience did not

protest, instead applauding even before she began. Singing many excerpts from the *Ring*, including the infamous "Ride of the Valkyries," she commented, "That's the beauty of grand opera—you can say anything—as long as you sing it."

In closing, Russell again had the audience join her, in the chorus of an "old folk song"—"Susannah's a Funny Old Man." This song, about a man and his pig, required the singers to make various animal noises with accompanying hand motions. Despite, or perhaps because of, the silliness of this song, the audience sang enthusiastically.

Russell did a superb job of entertaining her audience. Although she did not actually sing opera, she uniquely pointed out its foibles, successfully joking and keeping the audience laughing throughout the performance.

CALTECH
*public events***DELVE INTO UNDERWATER ADVENTURE THIS WEEKEND****"The Stan Waterman Show,"**

a program of underwater adventure films, returns Saturday evening at 7:30 p.m. in Beckman Auditorium. Co-sponsored by the Kelpers, Caltech's scuba diving club, these short films cover topics from diving around Cayman to handicapped divers and the majestic right whales. Tickets to 'The Stan Waterman Show' are priced at \$8.50; students \$7.00.

On Sunday you can hear the music of the **Walden Trio** in a free Dabney Lounge Chamber Music Concert at 3:30 p.m. Richard Rehwald, bass, Darryl Denning, guitar, and George Alwan, flute, perform works by Bach, Haydn, Debussy, Villa-Lobos, Jobin, and Joplin.

Renowned archaeologist **Richard Leakey** will give a lecture Monday, November 10 at 8 p.m. in Beckman Auditorium. The topic of his talk will be "**The Origins of Mankind.**" Co-sponsored by the L.S.B. Leakey Foundation, this is the Allen O'Brien Memorial Lecture. Tickets are priced at \$8.50. There may still be a number of tickets on sale for \$4.25 each at the Caltech Ticket Office. (Limit 2 tickets per CIT student I.D.)

Next weekend brings the hilarious **Moving Picture Mime Show** in "**Passionate Leave**" to Beckman Auditorium on Friday, November 14. A living comic strip in the style of commedia dell'arte, "Passionate Leave" is the enchanting tale of an ordinary Englishman abroad. The Moving Picture Mime Show's portrayal of characters and inanimate objects is vivid, versatile, and outlandishly funny. CIT student prices are \$7.50-6.25-5.00; rush tickets for \$6.00 each go on sale the day of the event. CIT faculty and staff can purchase **TECHTIX** - half price tickets (the same price as CIT student tickets) - from noon to 4:30 p.m. the day of the show Caltech Ticket Office. Regular faculty and staff ticket prices are \$13.00-10.50-8.00.

On Sunday, November 16 the **Dorian Wind Quintet** with **Minoru Nojima** will give a Coleman Chamber Music Concert. The performance will begin at 3:30 p.m. in Beckman Auditorium and will feature the works of Mozart, Bach, Barber and Berio. Tickets are priced at \$15.00-13.50-12.00-10.00; students \$4.00 off. Beginning Tuesday, November 11, 50 free tickets and 50 tickets at \$6.00 each will be available to CIT students (limit one free and one at \$6.00 per CIT student I.D.) These will be sold at the Caltech Ticket Office.

For further information about the exciting Public Events scheduled this season, call campus ext. 4652.



© TRW Inc. 1986. TRW is the name and mark of TRW Inc.

Key Opportunities

TRW Will Be On Campus: November 18

The future is under your fingertips. And TRW may hold the keys to your future. Our Electronics and Defense Sector can offer you a seemingly endless choice of opportunities. Opportunities in Microelectronics, high energy lasers, large software systems, communications and scientific spacecraft.

With your ideas, TRW will continue to make firm impressions in the future. Key into tomorrow's technology today.

Please see your Campus Placement office for additional information.

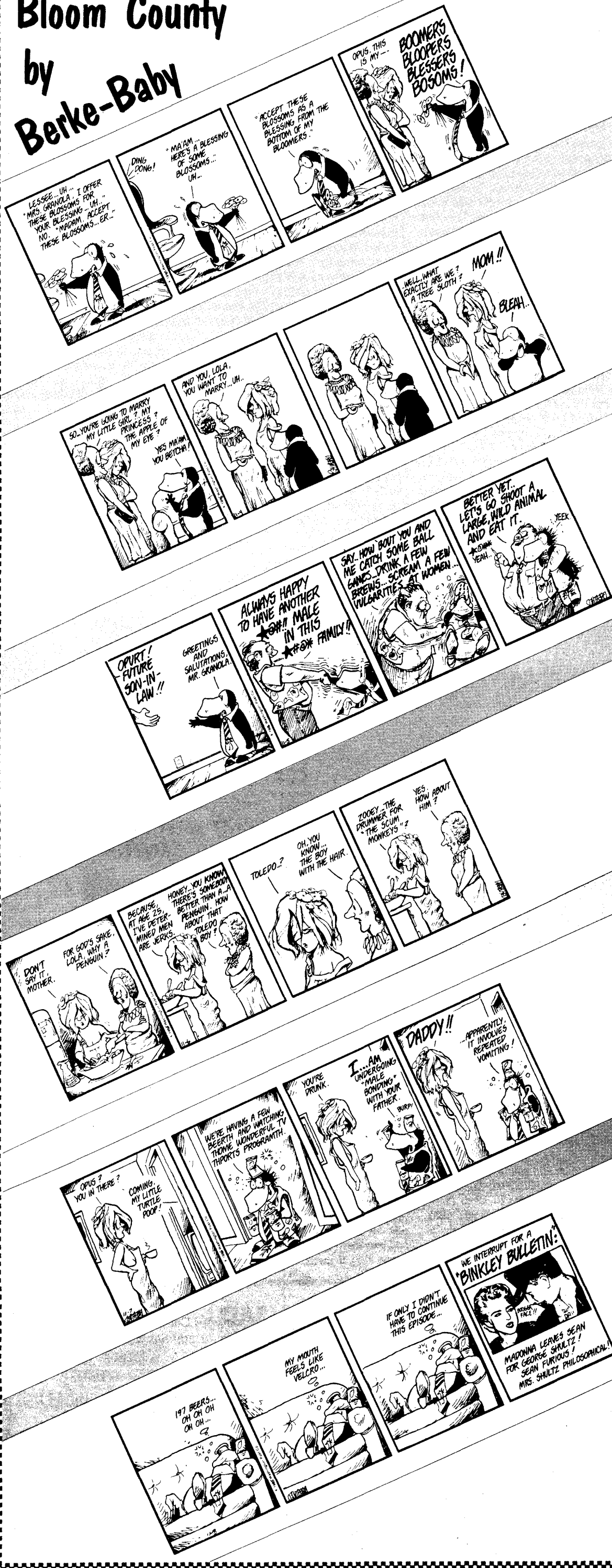
Tomorrow is taking shape at a company called TRW.

Equal Opportunity Employer
U.S. Citizenship Required

TRW
Electronics & Defense Sector

Bloom County

by Berke-Baby



More Inside World

from page 3

Fleming: Well, you'd better watch out, you'd better not cry, you'd better not pout, I'm a'tellin you why: Oingo Boingo is a'comin' to town. Yes, all that effort was actually worth while a couple of weeks ago, and it looks like we've just snagged ourselves the campus-wide party of the decade. More details later. Thanks and congratulations go especially to Brian Daniels and Adam Slovik for the bone-crushing, nail-biting, blood sweat and tears put into this project (calling KROQ every day for the last couple of weeks can be rough) and also to everyone else who filled out the postcards (in *nearly* all the Houses). Thanks everybody. Party hearty.

By the way, those two unwords used in last week's Inside World referring to the boys across the walk should have been *anarchous* (that's a-n-a-r-c-h-o-u-s) *creodonts* (c-r-e-o-d-o-n-t-s) not *anarchist creodontes* or whatever it finally ended up as. Sorry, boys, but we can't be responsible for what happens to the text between here and the press. [Well for starters, writing legibly or submitting your text on a floppy (as many progressive houses are doing) would help a lot. Anyway, you guys spelled it wrong yourselves (see the picture), so don't pass the buck, okay? -Eds.]

News Flash: Woolverton is officially in charge of the Coke 'fridge now (or shall I say "the expanding soft drink empire"). A new 'fridge is scheduled for insertion into lower 6 in the coming weeks, so look out for that. Also, according to Woolverton "the evil Coke dictator," there are quarters taped on the bottom of every sixth can of Coke. Also: Coke prime means Pepsi. If you want the full details of all of the other nuances involved, go seek an audience for yourself.

Social event this weekend is the Icehouse. Be there and guffaw maniacally with the rest of us.

Work on Interhouse!

Ultimate Sunday at the Court of Man at 2:00PM.

No odobenus! That means you!

Until next time...

-Al Fansome

Lloyd: A couple of nights ago, two of us went to see "Sid and Nancy" with Lloyd House Prez. Chris Nolle. A brief review:

John: "I liked it."

Keith: "I thought it sucked."

Chris: "Did you know that movie was about Sid Vicious?"

Friday's Halloween Party was a real blast, featuring such characters as Snow White and the Caltech Ratio, Spudkank the potato, and McMahon the ninth dwarf. Speaking of parties, Interhouse is nightmarishly close. Got Thunderdome built yet, Earl? Also Jay's Musical Extravaganza is Sunday, featuring "Hands On Wheels." Will U3 or Oingo Bingo be there too?

continued on page 8

ase anarchus (reodontes a

Figure 1: Note misspelling of "creodonts". Score: Eds. 1, Fleming 0.



USE SYSTAT ON YOUR PC TO GET MAINFRAME CAPABILITY WITH MICRO CONVENIENCE.

If you're tired of waiting for output, try SYSTAT on your microcomputer. SYSTAT is the only microcomputer statistics package to perform advanced applied statistics in economics, psychology, biology, technology, and political science.

No other micro package has the scope of SYSTAT. Simple and multivariate analyses, graphics, tables, unbalanced ANOVA, MANOVA, repeated measures, discriminant, cluster analysis, multidimensional scaling, non-linear modeling, time series, ARIMA, log linear, multinomial logit, probit, tobit, Rasch models, simultaneous equations - all in a compact package with simple, integrated commands and a spreadsheet data editor.

Meet your statistics deadlines with the micro package professional statisticians have chosen.

Or wait in line.

IBM-PC/XT/AT™, Apple II™, Ile™, Macintosh™, HP 150™, HP 9000™, DEC Rainbow™, Kaypro™, VAX™, Alpha Micro™, CP/M™, MS-DOS™, UNIX™

\$595 USA and Canada, \$695 Foreign Site licenses and quantity prices available.

SYSTAT Inc.
2902 Central Street
Evanston, IL 60202
312 864.5670

ORACLE®



Fastest Growing Software Company in the United States Seeks Top Gun Candidates

If you are in the top 10% of your graduating class and have academic credentials to brag about (great GPA, high school valedictorian, National Merit recognition, et cetera), then you should talk to **Oracle** about joining the best. **Oracle** is the fastest-growing software company in the United States and the creators of ORACLE, the number-one Relational DBMS that has been chosen over IBM and DEC by users polled in the Software News Users Survey.

Last year I hired over 50 of the top graduates from the finest schools. This year I am looking for even more graduates for every area of **Oracle**, including: Development, Sales, Support, Marketing, Consulting, Finance, and International.

If you want to discuss opportunities at **Oracle**, sign up for an interview or call directly (be sure and leave a message if I am unavailable). **We will be interviewing at Caltech on December 11 and 12.**

Larry Lynn
Director of Recruiting
Oracle Corporation
20 Davis Drive
Belmont, California 94002
(415) 598-8183

A career at Oracle Corporation will give you:

Exceptional Compensation

We pay exceptional salaries for exceptional employees. We offer complete medical/dental/life coverage, and flexible hours, and every employee, through our stock option program, has equity in the company.

Fascinating and Challenging Work

We need to staff development, marketing, and support positions to work on projects in distributed database, interactive graphics, and networking of heterogeneous computers, to name a few.

Exposure to the latest and most advanced technology

We already offer products on Suns, Apollos, MicroVAXes, and almost every IBM machine including personal computers and the RT PC. Today we are developing products using technology that is not yet in the marketplace.

A superior work environment

Oracle is headquartered in a new building in the rolling hills overlooking the beautiful San Francisco Bay. Additionally, we have offices in most major cities in North America, and subsidiaries in all major markets worldwide.

A superb group of peers

Company-wide, we hire only the best and the brightest from the finest of schools. When you work at Oracle, everyone you work with is a Top Gun Graduate.

A sign-on bonus

If you meet the Oracle standard of excellence, you may be eligible to receive a one-time bonus equal to 10% of your annual starting salary.

AIDS: It Could Happen Here

by Bruce Kahl, M.D.
[First in a series]

A few nights ago after dinner at one of the undergraduate houses a number of the house's residents and I—the invited guest of the evening—repaired to the RA apartment for conversation, a chance for us to get to know each other a bit and for me to talk a little about the psychological counseling service. I was asked by one person during this talk about the presentation on AIDS that had been given at the New Student Orientation by nurse practitioner Lori Mulvaney: Why was such a talk given? Did I think there was really a need for such a talk at Caltech? Did I think there was a chance this illness could occur at Caltech?

I was so astonished by the questions I forget exactly how I responded; I think I mumbled something about a "national health crisis" and the need to educate everybody. But I did not address the implications of the questions, which seemed to be: Aren't Caltech students somehow protected from this illness by their "obvious" differences from the rest of the population? Since the apparent number of gay people at Caltech is so small do we really have to worry about AIDS here? Aren't non-gay people at no risk for this disease at this time? Did I think there might be bi-sexual people at Caltech? Maybe there were other implications; I'm sorry I did not ask that student to explain his question. But I wish to respond now to the implied questions as I perceived them and to present this as the first of several articles on AIDS, its cause, treatment and prevention.

To my knowledge nobody has done a careful study of the sexual habits of the Caltech student body. I must therefore presume (with the help of my observations of students in psychotherapy) that these habits are not far different from those of most college-age individuals: there is a fair amount of relationship-exploring and sexual involvement that goes with this process in most cases. Some individuals may seek contact with prostitutes for various reasons. Some people explore sexual involvement with members of the same sex, find they do not care for it and move to heterosexual relations. Some people enjoy sexual contact over time with members of both sexes. And some people enjoy strictly homosexual involvements. Of course, sexuality is a subject with which many are uncomfortable privately as well as publicly; discussions of specific sexual fantasies and behaviors are not usual conversation topics, even between close friends, especially if the fantasies or behaviors are perceived as "unconventional" and/or unacceptable by the surrounding community. For this reason many gay and bisexual people stay very tightly "in the closet," this is certainly the case at Caltech.

I discuss sexual behavior because it is the most common way in which the presumed causative agent of AIDS, the HIV virus, is transmitted. The next most common way is via intravenous injection with a contaminated needle, the source of infection in street drug users. I hope this source is not

a possibility at Caltech but I am not surprised by many stories anymore; nobody who knows the Caltech student population well will deny there is a strong interest in street drugs shown by some students at the Institute. The other known means of transmission of the AIDS virus is from mother to child via breast-feeding.

Some other facts: AIDS is not a gay disease, it is a human disease; though approximately 70% of new cases of AIDS in the U.S. are in homosexual males this fraction is

decreasing; of non-drug-related cases approximately 7% are in heterosexual individuals and this fraction is increasing and transmission has been documented for both male-to-female and female-to-male directions. (In countries such as Zaire and Uganda people with AIDS are virtually all heterosexual.) Though large-dose exposure to the virus—such as through repeated sexual contact with infected individuals—is demonstrably more likely to insure its transmission this is not at all a

requirement; there are plenty of cases on record in which a single exposure sufficed. Though the virus is not very contagious—it is not air-borne or transmitted by simple contact (hand-shaking, kissing) with infected individuals, nor by eating food prepared by such people—it is potentially deadly and does live well in the body fluids, especially semen, blood and vaginal secretions. Though the virus occurs in saliva it is present in very small numbers and is thought extremely unlikely to infect via this medium.

Because of the potential lethality of the AIDS virus I feel, as does the American College Health

Association, that all students (not to mention staff and faculty!) must be well-educated about the nature of this virus and the diseases it causes. Can AIDS happen at Caltech? Don't kid yourself—of course it can. Caltech community members are not immune from AIDS any more than they are from other sexually transmitted diseases and should take proper precautions.

NEXT TIME: more about the cause(s) of AIDS; some specifics about prevention. If you have any questions about AIDS call the Caltech Health Center, x6393, and ask for either Lori Mulvaney or Bruce Kahl.

More Inside World

from page 6

After exhaustive research, we have come up with the top ten funky haircuts in Lloyd. In ascending order:

- 10: Keith Owens.....Can't see it under the seed cap
- 9: John Wiltse.....Plastic Lego hair
- 8: Sho Kuwamoto....."I did it myself"
- 7: Kevin Chase.....The Prince Valiant look
- 6: Katie Swift....."What color is it? I don't remember!"
- 5: Khan Nguyen.....The Commander Static look
- 4: Ken Chaney.....The Tuft from Hell
- 3: Kurt Hargenbargen.....The Third Reich look
- 2: John Haba....."I just got up"
- 1: Jean Tang....."Fuck off!"

Well I think we've met our rudeness quota for the week. Drink of the Week is the Anita Bryant. Rum, orange juice, and a touch of crême de menthe over crushed ice. A full day's supply of vitamin C...and the kids love it!

—Jethro, Skeeter and Enos

Page: Well, Earl, we beat Lloyd in Discobolus football. Final tally 40-15. Next up is that softball powerhouse, Ruddock. Game time 2:00 pm. Be there.

You shouldn't let people piss you off. But it's even worse to be pissed on. Isn't that right, Ed? Good shot "Bullseye Bob."

The social event for tomorrow night—Broomball with the Dudds. What an election day Tuesday was. The official Beck-ballot certainly solved any intra-house disputes.

The spontaneous barbecue on the olive walk went off as planned. Next time, we need to get all of the R.A.'s and security to join in a chorus of "Andy 'The Flem.'" Next week we have four spontaneous events scheduled. Wear your rubbers, Ed.

Sorry, Christie, no more single. Build Interhouse, Frosh!

—Pervis

Ricketts: Avast, ye Scurvy Scum! Now that the worst of midterms are past, we must celebrate! Pie night will tide us over until the parents have been purged from our midst, but plans for Interhouse are progressing with urging by the Captain's wench.

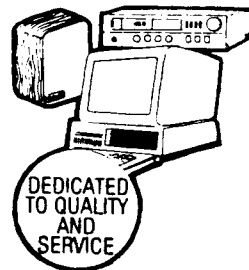
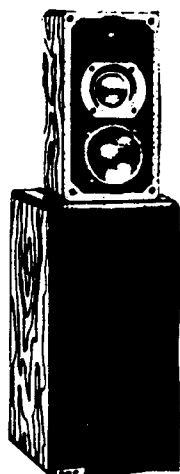
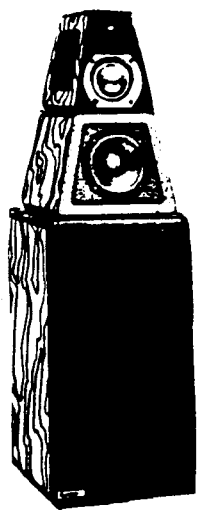
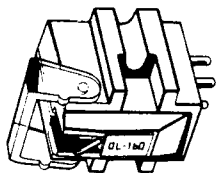
The Scurves ate 20, count 'em, pizzas, and the upperclassmen won at brakedrum, but by far the weirdest happenings have involved a spherical, inflatable, green (?) glowing thing. Rumor has it that said orb will trek to Texas. To check on this report, Triprod and Chuck have gone to Dallas. (I can call them that because they're not here to kill me.)

Bizarre word for the week: *Spodumene*.

Bizarre Japanese phrase for the week: *Jagaimo o tabemasu* (for Saxy).

—Shithead #1 and Giggles

GNP SHOWCASE



HELLO AGAIN...

IS EVERYONE HAPPY MID-TERMING? I THOUGHT SO! NOW CLASS, THIS WEEK WE'RE GOING TO TALK ABOUT THE ANALOG FORMAT OF MUSICAL REPRODUCTION. THE BIGGEST PROBLEM WITH VINYL DISCS IS THAT THEY WEAR OUT. I THINK WE ALL KNOW THE OBVIOUS REASONS WHY. HOWEVER, ONE THING THAT YOU MAY NOT KNOW IS THAT MISTRACKING OF THE STYLUS ON YOUR RECORDS CAN WEAR OUT A DISC FASTER THAN ANYTHING (NOT TO MENTION THE WEAR THIS CAUSES YOUR STYLUS). AS YOUR STYLUS WEARS, IT BECOMES PITTED WHICH CAUSES THE STYLUS TO SCRATCH THE GROOVE WALLS CAUSING PERMANENT DAMAGE. THIS CAN ALSO CONTRIBUTE TO THE RAPID DEGRADATION OF SONIC QUALITY. SIMPLE ALIGNMENT OF THE CARTRIDGE IN THE HEADSHELL (WITH A PROPER ALIGNMENT TOOL) CAN PROTECT AND PROLONG YOUR RECORD LIBRARY. IF YOUR STYLUS IS WORN, OR YOU'RE JUST NOT GETTING THE SAME SOUND THAT YOU USED TO, THEN IT'S PROBABLY THAT TIME! THIS WEEK, ALL GRADO CARTRIDGES ARE ON SALE FOR 30% OFF! GRADO CARTRIDGES HAVE BEEN RATED AS THE BEST BUDGET CARTRIDGES AVAILABLE. IF YOU SHOULD POSSIBLY NEED A NEW TURNTABLE IN WHICH TO MOUNT YOUR NEW CARTRIDGE, THE DENON DP-23 TURNTABLE IS ON SALE FOR ONLY \$199 OR THE DP-35 IS ONLY \$249. DENON USES A VERY SOPHISTICATED CIRCUIT IN THEIR TONEARMS WHICH THEY CALL THE "DYNAMIC SERVO TRACER". SIMPLY STATED, INSIDE THE TONEARM IS A MICROPROCESSOR WHICH MONITORS IT'S MOTION AND APPLIES TRACKING FORCE INDEPENDENT OF GRAVITY. THIS MEANS THAT FOR THOSE RARE OCCASIONS WHEN YOU MIGHT BE PLAYING ONE OF THOSE LESS THAN FLAT RECORDS, THE TURNTABLE WILL PLAY THROUGH THE PHENOMENA MORE COMMONLY KNOWN AS WARPS! ALSO, ALL DENON TURNTABLES HAVE A QUARTZ LOCKED DIRECT-DRIVE MECHANISM TO GUARANTEE ACCURATE SPEED. TO TOP IT OFF, THEY HAVE A 4 YEAR PARTS AND LABOR WARRANTY! OUR REGULAR DISCOUNT APPLIES TO ALL OTHER PRODUCTS BUT AS AN ADDED INCENTIVE, BUY ANY TURNTABLE AT THE REGULAR PRICE, AND THE \$37.50 GRADO CARTRIDGE IS YOURS, FREE! WE WILL INSTALL AND ALIGN ANY CARTRIDGE PURCHASED FROM GNP AT NO CHARGE. WE CAN ALSO CHECK THE ALIGNMENT OF ANY TURNTABLE, REGARDLESS OF WHERE IT WAS PURCHASED. ALL RECORD CARE ACCESSORIES ARE ALSO 20% OFF THIS WEEK ONLY!

SO UNTIL NEXT WEEK...

Biology

from page 1

Dr. Simon has studied how the production of a key link in this system, a series of proteins called transducins, is regulated.

In addition to this work, Dr. Simon and his colleagues are studying how gene rearrangement in disease-causing bacteria endow them with resistance to the immune system of the host.

More Outside World

from page 4

The Task Of a Civilian President

by Hasok Chang

Leftist guerrillas in Guatemala sent an open letter to President Vinicio Cerezo Arevalo expressing their willingness to negotiate with the government. They wished to have talks in Guatemala City, under the auspices of the Spanish or the Mexican embassy, and Spain has showed an interest in facilitating them.

Cerezo took office in January 1986 as the first civilian president of the country since 1954, when a U.S.-backed coup placed the coun-

try under a harsh military rule. The guerrillas have been battling the government since 1960; at present, there are four groups loosely connected into a coalition called Guatemalan National Revolutionary Unity. They maintain friendly ties with Cuba and Nicaragua. Cerezo had often criticized the army's counterinsurgency tactics, and the rebels seem to consider his presidency a chance for a peaceful settlement that must not be missed.

«SOURCE: THE NEW YORK TIMES»

Nuclear Bombs and a Missing Technician

by Hasok Chang

Mordechai Vanunu, a former Israeli nuclear technician who has sold secret information about the Israeli nuclear weapons project, has been missing since September 30th. There is a strong yet unconfirmed suspicion that the Israeli government has abducted him.

Vanunu, 32, had worked in the

top-secret Dimona nuclear reactor complex since 1976. He was dismissed last winter as a part of a general cutback in personnel; however, he had pro-Palestinian sympathies and was probably thought to be expendable. According to his former girlfriend and the Israeli press, which had not been allowed to print any stories

about him until very recently, he was a pro-Arab activist and a candidate member of the Israeli Communist Party, though he grew up in an orthodox Jewish family and served in the army engineering corps.

When he left Israel in the summer "to start a new life", he smuggled out undeveloped film containing more than 60 photographs of the Dimona complex. He sold them to the Sunday Times of London, along with the informa-

tion that Israel has been manufacturing nuclear weapons for 20 years and possesses about 100 bombs in stockpile. The Israeli government has given no substantial comment on Vanunu or the weapons. Some have suspected that the whole affair was an attempt by the Israeli government to lend credence to reports that Israel has a nuclear capability to deter any possible Arab attack.

«SOURCE: LOS ANGELES TIMES»

New Mozambican Leader: A Pragmatic Marxist

by Kevin Nelson

On Monday, Joaquim A. Chissano was named the new President of Mozambique. He succeeds the previous President, Samora Machel, who was killed two weeks before in a plane crash just inside South Africa near the South Africa-Mozambique border. Chissano is generally considered likely to continue the relatively moderate and pragmatic policies that Machel had followed in the past few years, but under him Mozambique will almost certainly remain a one-party state in which all political movements outside Frelimo, the Marxist ruling party,

are prohibited.

Ever since it gained independence from Portugal in 1975, Mozambique, which is in southeastern Africa and has around 14 million people, has had to deal with extremely severe problems. There is a right-wing rebellion, known as Renamo, against the government, which accuses Renamo of lacking popular support and of receiving aid from South Africa. This aid would be in violation of a 1984 agreement between the two countries. The economy, already badly damaged by the protracted rebellion against the Portuguese, has declined even further

since independence, and several years ago a drought caused a terrible famine that is still continuing in some areas. Despite Frelimo's establishment of a one-party state, it has made an effort to improve the life of the people. Though it first tried a radical Marxist economic policy, its lack of success has caused it to become more pragmatic. Now the government encourages the private sector to some extent. Also, Frelimo has given the people some voice in their local government, though they must remain within the limits of the official ideology. Frelimo's supporters claim that the people have enough voice that Mozambique is a full democracy, but even they admit that it is not the same sort of multi-party democracy found in the West. Hopefully, if the new Chissano government is successful in improving the economy, there may ultimately be political reform and the toleration of opposition groups that is necessary for true democracy.

«MAIN SOURCES: L.A. TIMES, NEW YORK TIMES, A LUTA CONTINUA: THE TRANSITION TO A NEW SOCIETY IN MOZAMBIQUE BY ALLEN ISAACSON»

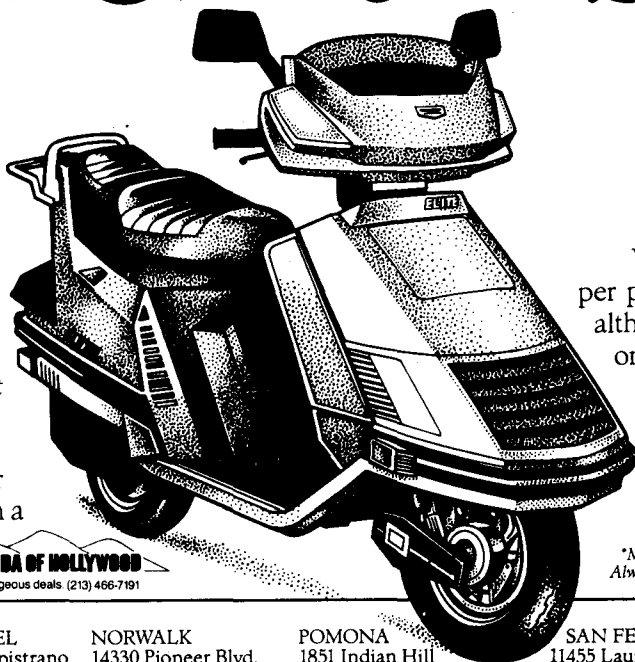
If you know your buns, you could put them on this baby.

Win a Honda Elite™ 150 Deluxe Scooter from In-N-Out Burger.

Introducing the absolute easiest quiz you'll take all year. And the only one that gives you a chance to win a totally cool, red Honda Elite 150 Deluxe Scooter for getting the right answer.

So, think hard. *How many sesame seeds on an In-N-Out Double-Double bun?*

If you don't know, feel free to cheat. (Cramming is allowed at any In-N-Out Burger location.) Just put your answer on the entry form below (or print all the info on a plain piece of paper) and drop it off at any In-N-Out Burger before midnight, November 17.



You can enter as often as you like but there's just one prize per person. And you don't even have to buy anything, although your stomach will be very happy if you do. Then, on Friday, November 21, we'll draw 6 winning entries from among all the entries with the right answer to our question. And those 6 incredibly lucky college types will be cruising through the In-N-Out Drive-Thru on their very own red Honda Elite 150 Deluxe Scooter. Outrageousness!

*Maximum load capacity 330 lbs. Always wear a helmet and eye protection.

ENTER AT THESE LOCATIONS:

ANAHEIM
600 S. Brookhurst
At Orange

ARCADIA
420 N. Santa Anita Ave.
At Colorado Blvd.

AZUSA
324 S. Azusa Ave.
South of 210 Frwy.

BALDWIN PARK
13766 Francisquito
At San Bernardino Frwy.

BUENA PARK
7926 Valley View
At LaPalma

CAMARILLO
1316 Ventura Blvd.
At The Carmen Offramp

CORONA
114 Serfas Club Dr.
Off 91 Frwy.

COSTA MESA
594 W. 19th St.
At Anaheim St.

COVINA
1371 Grand Ave.
At Arrow Hwy.

DIAMOND BAR
21133 Golden Springs Rd.
Pomona Frwy. & Brea Canyon Cutoff

FONTANA
9855 Sierra Ave.
Off San Bernardino Frwy.

GARDEN GROVE
9032 Trask Ave.
Garden Grove Frwy. & Magnolia

HACIENDA HEIGHTS
14620 E. Gale
Pomona Frwy. & 7th St.

HESPERIA
13704 Main Street
Off 15 Frwy.

LAGUNA NIGUEL
28782 Camino Capistrano
At Avery Parkway

LA HABRA
2030 E. Lambert Rd.
Corner of Palm

LAKEWOOD
5820 N. Bellflower
At South Street

LA PUENTE
15259 E. Amar Rd.
1 blk. W. of Hacienda

LA VERNE
2098 Foothill Blvd.
Corner of "D" St.

NORTH HOLLYWOOD
5864 Lankershim
Btwn. Oxnard & Burbank

NORTHRIDGE
9858 Balboa Blvd.
At Lassen

NORWALK
14330 Pioneer Blvd.
South of Rosecrans

ONTARIO
1891 E. "G" St.
Vineyard at 10 Frwy.

ONTARIO
2235 Mountain Ave.
Off Pomona Frwy.

PANORAMA CITY
13651 Roscoe Blvd.
East of Woodman

PASADENA
2114 E. Foothill Blvd.
West of Craig

PEDLEY
6634 Clay St.
At Van Buren

PLACENTIA
825 W. Chapman
At Placentia Blvd.

POMONA
1851 Indian Hill
At San Bernardino Frwy.

POMONA
2505 S. Gary Ave.
Next to Corona Expressway

RANCHO CUCAMONGA
8955 Foothill Blvd.
At Vineyard

ROSEMEAD
4242 N. Rosemead Blvd.
At Mission

SAN BERNARDINO
1944 S. Tippecanoe
Off San Bernardino Frwy.

SAN BERNARDINO
190 "H" Street
At 2nd Street & 215 Frwy.

SANTA ANA
815 North Bristol
North of Civic Center Dr.

SAN FERNANDO
11455 Laurel Canyon Blvd.
Golden St. Frwy. & San Fernando Mission Rd.

TEMPLE CITY
10601 E. Lower Azusa Rd.
Btwn. Santa Anita & Baldwin

TORRANCE
730 W. Carson
Carson Offramp

TUJUNGA
6225 Foothill Blvd.
At Lowell St.

WEST COVINA
15610 San Bernardino Rd.
At Orange

WESTMINSTER
6292 Westminster Blvd.
At Willow

WOODLAND HILLS
19920 Ventura Blvd.
East of Winnetka

IN-N-OUT BURGER

Win your very own red Honda Elite™ 150 Deluxe Scooter!

There are _____ sesame seeds on an In-N-Out Double-Double® bun.

Name _____ (please print)
Address _____
City _____ State _____
Zip _____ Phone _____
Must be a licensed driver over 18 to win. Decision of the judges is final.

1520

ENTRY

SPORTS

Athletic Funding Problems

by Steven Schneider

When I was an undergraduate (Class of '81) my friends and I sometimes grumbled about the maintenance of the gym and the general level of support given Caltech athletics.

The men's locker room, for example, had not been painted since the gym was built, and the team uniforms sometimes left much to be desired. The gym lighting was reduced to half strength at the moment of the buzzer at the end of a basketball game. This miserly situation was generally attributed to the depression era upbringing of the Athletic Director, Warren Emery.

When I returned to the campus in 1983 I became a graduate student member of the Athletics and

'The people who run the institute ... aren't aware of everything that goes on.'

Physical Education Committee, to which the Athletic Director reports annually. Therefore, it was with great surprise that I read in sections such as the following in the report from last spring (which is representative of the one from the previous year, being only less detailed).

The following text is taken verbatim from the *Athletic Directors*

Report 1985-86 as distributed to members of the Athletics and Physical Education Committee in the Summer of 1986:

Facilities Improvements:

COMPLETED - During the past year some upgrading of existing facilities has been completed:

- ① Tennis Courts 5 and 6 have been resurfaced.
- ② The lighting at tennis courts 5 and 6 has been improved.
- ③ The gym floor has been resurfaced.

[Note: The expansion of the training room and the recent resurfacing of the track (through a special donation) can add to this list.]

NEEDED - The list of needed projects is too long to print here. Some of the most urgently needed are listed below:

- ① The lighting on the south field should be upgraded to a competitive level.
- ② The area west of the new building should be rehabilitated to provide for outdoor volleyball and basketball. This would take some of the overflow from the gym during late afternoon and early evening hours.
- ③ A laundry should be installed in the area now occupied by the drying room. We now spend \$19,700 on laundry of uniforms and towels each year. The experience of every small school in our area indicates

we could save a considerable amount of that.

- ④ The seats of the bleachers on the south field should be resurfaced.
- ⑤ A permanent backstop should be installed at the southeast corner of the north field.

Mr. Emery also submits an annual list of maintenance requests to Physical Plant director Mike McCallan. Projects such as the painting of the gym have been requested for many years running without being done.

It becomes apparent when looking at such reports that the responsibility for the threadbare condition of athletic equipment does not lie solely with the Athletic Director; the administration is also responsible. To get a better understanding of the situation I spent a few hours this last week talking to Mr. Emery and Dr. Morgan; the following presents a brief summary.

There are basically two budgets through which day to day operations of the Athletics facilities are funded. Projects involving the maintenance and repair of physical facilities such as the showers and

the gym floor and walls are either done by or contracted out through Physical Plant.

Mr. Emery submits a list of such projects to Mike McCallan (I have a copy of the latest list, for those interested). Some of these projects are actually done, depending on the amount of money budgeted for campus maintenance, and on the priority given to Mr. Emery's requests. These compete with all other requests on the campus.

The manner in which the choices have been made is unclear to Emery, Morgan, and myself, although it is clear that priority choices have been made by Physical Plant alone. I hope to interview Mr. McCallan sometime soon. Starting with this year, Dr. Morgan has been involving himself in this process in an effort to make sure that more money will be found for such projects.

The other main way in which Athletics Department operations are funded is through Dr. Morgan's student affairs budget. This budget funds such things as uniforms, equipment, and travel. Guidelines are handed down for the allowable size of the budgets that Dr. Morgan and Mr. Emery may submit.

This part of operations seems to be better funded, primarily because of the active interest of Dr. Morgan, and the clout Student Af-

fairs has with the administration. But difficult decisions have to be made here as well because of the limited nature of available funding.

The lighting in the gym, and energy use in general, are paid for through a general Institute fund. Individual departments do not have individual budgets. Mr. Emery determines appropriate levels through a compromise between requirements of particular activities and a general attempt to conserve energy.

What we can do:

The people who run the Institute are generally reasonable, but they aren't aware of everything that goes on and they don't always know the students' feelings. Projects that are actively supported have an advantage in the competition for funds.

If you think something is important and ought to be improved, let me, Morgan, or Emery know in a brief tactful note or phone call. I will keep track of the issues that seem important by this measure, and I will bring the influence of your concern to bear on the appropriate person. Student opinion can be an important force on our campus.

I can be reached at x4763 or x4554, or more easily by mail at 205-45. My office is in 309 Guggenheim.

WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport	Opponent	Location
Sat.	11-8	10:00 AM	Water Polo	SCIAC Western Division	Caltech
Sat.	11-8	11:00 AM	Soccer	Christ College	Christ College
Sat.	11-8	1:00 PM	Fencing	San Diego State	UCLA
Sat.	11-8	1:30 PM	Football	San Fernando Valley Lancers	Antelope Valley Col.
Wed.	11-12	9:45 PM	Ice Hockey	U. C. Irvine	Costa Mesa Ice Cap.
Sat.	11-15	8:30 AM	Water Polo	SCIAC Championships	Claremont-Mudd
Sat.	11-15	9:30 AM	Cross Country	NCAA Div. 3 West Regional	U.C. San Diego
Sat.	11-15	1:00 PM	Fencing	Cal State Fullerton	U. C. Santa Barbara
Sat.	11-15	1:30 PM	Football	Cal Poly Pomona	Caltech
Sat.	11-15	2 & 4 PM	Basketball	Alumni	Caltech
Sun.	11-16	12 noon	Water Polo	SCIAC Championships	Claremont-Mudd

Polo Stops Redlands

by Skip Shot

Okay, so you haven't heard from good ol' Skip Shot for a while. Well, we didn't have much good news. I guess it comes to this: you only hear from us when we win once in a while.

Last Saturday morning, the Beavers traveled to Whittier. There was a costume party the night before, and all the polo players dressed as Clint Dodd. Of course, they all left early to get some sleep before the game.

Unfortunately, they might as well have partied 'til dawn: the Beavers fell 9-17. And once again, the Golden Choke made an appearance by missing a shot at an open goal.

Undaunted by their 0-4 conference record, and with their

minds at ease that they had won the Oingo Boingo concert, the Beavers welcomed Redlands to their home Beaver-pond. Caltech quickly took the lead and kept it for the entire game.

The usually benign Beavers showed what dirty players they can be. Even Babyface Brown was kicked out twice and is now known as Randall the Vandal.

Bruisin' Bruno, after working hard to be ejected from the game, was finally tossed out on his ear with only two seconds left. Final score: 18-11.

Conference championships open on Beaver home turf this Saturday. If you've missed Beaver polo this year, this is your last chance.

Hockey Skates by CSN

by Jason

In the season opener the Caltech Beavers hockey team easily defeated their Division II opponent, Cal State Northridge.

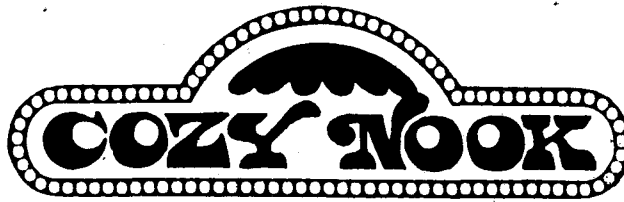
In the first two periods Tech totally outplayed Northridge. Linemates Jim Bower and Mike Freeman each had two goals and an assist. Martin Brouillette also had a goal. Assists were credited to Phil Askenazy, Dwight Berg, Jim Toth, and even goalie Peter Dowd. Only some lucky saves by the Northridge goalie kept the score down to 5-0.

In the third period Caltech

relaxed. The defense momentarily eased, allowing Northridge to get a 2 on 0 breakaway, which led to Northridge's only goal. Dowd was otherwise perfect in the net, stopping 27 shots. Caltech went on to win 5-1.

Thanks to the fans who showed up, and for those who didn't—get a clue! The *Los Angeles Times* had a photographer at the game, so you know this is a happening sport!

The hockey team's next game is at 9:45PM next Wednesday at UC Irvine. The following week they play a home game against Cal State Fullerton. Be there!



PIZZA PARTY SPECIAL

BUY ANY LARGE 16" PIZZA AND RECEIVE SAME TYPE 12" PIZZA FREE

This Offer Good Until 11/30/86

* FREE DELIVERY *

* 584-5700 *

SATURDAY / SUNDAY SPECIAL

ALL U CAN EAT PIZZA \$3.99

ALL U CAN EAT SPAGHETTI \$3.19

1443 E. Colorado, across from PCC

SPORTS

Cross Country

Runners Compete in SCIAC Meet

by Speed Demon

La Mirada Park was the site of the SCIAC Championship meet last weekend. The times might have suffered somewhat because it was hot (85°) and dry with the Santa Ana winds blowing.

Also, course rules restricted the competitors from running on the street or sidewalks. They were instructed to traverse entirely on grass. This factor should also have slowed the times further since traction and stability are greater on asphalt.

However, none of this information registered in the minds of this year's cross country squads. Every member of the men's top seven ran from ten seconds to three minutes faster than last year on the same course under similar conditions.

While the men were able to reduce their overall score by 22 points from last year, their placing remained the same within the conference.

John Gehring led the team to a fifth place finish by running a superb effort of 27:30 and placing

12th overall. For this high placing Gehring claimed second team All-Conference honors. Running 1:55 faster than in 1985, he picked up 13 places. Gehring's improvement this season is attributable to his dedication to a disciplined training schedule over the summer.

The next Caltech harriers to complete the 5-mile course were Mike Jensen in 25th place and Chuck Lee in 28th. Jensen ran 28:58 (more than three minutes faster than 1985), while Chuck crossed the line in 29:23, shaving 1:38 from his '85 performance.

Both Jensen and Lee are only now beginning to approach the fitness level they need to start moving up closer to John Gehring.

Coach Jim O'Brien feels there will be a much tighter group when Regionals roll around in two weeks, with Alex Athanasopoulos making his presence felt. After running 29:55 for 31st place, Athanasopoulos was spotted swinging from tree to tree in La Mirada Park.

Without insinuating that he

resembles an ape-man, it will be suggested here that Athanasopoulos undoubtedly is a distant relative of Tarzan. He ran 2:04 faster than 1985 and, according to the coach, should have run even faster. O'Brien stated, "Alex needs to get more aggressive throughout the race and run with as tough a mental attitude as he does when running on the track over 800 meters. I'm expecting a strong performance from Alex at Regionals in San Diego."

The Closers

Closing out the top seven were John Beck (30:29), Ray Hu (30:51), and Jeff Willis (31:28), one finishing right after the other. Beck managed to run ten seconds faster than last year but still came up 13 seconds short of catching his little brother, who runs for Claremont. With Beck making steady progress throughout the season after a dormant summer, he ought to be able to put his brother back in his place by Regionals.

Hu and Willis ran most of the

race together, but a killer hill at four miles separated them. Despite the hill, Jeff ran almost a minute faster than his 1985 time.

Congratulations are in order to the men for a fine effort. Additional accolades go to Darin Acosta (30:08) and Will Evans (31:22), who both cracked our top seven declared runners. Acosta's efforts earned him a trip to San Diego for the Regional meet at UCSD.

Just in case anyone is interested, Occidental was once again crowned league champ with a fine performance and a low score of 33 points.

The Kangaroos

Our Beaverettes (or the Kangaroos as they humorously term themselves) went the men one better this time around. Each member of the top five ran her personal best of the season.

This isn't your normal performance; we are talking top of the line quality team effort here. The women have to be pleased with their individual improvement throughout the course of the year.

Clea Bures moved up to 17th place overall with a time of 21:39. Despite an injury this season she improved on her 1985 performance. Bures ran a cautious and in-

telligent race by going out at a relaxed pace at the start and finishing up stronger than usual. She joins Gehring on the SCIAC All-Conference Second Team.

Jarita Holbrook (23:25), Vicki Lane (23:26), and Margi Pollack (24:03) ran together throughout the 3.1 mile course, and only the surge toward the finish line separated Holbrook and Lane. Holbrook is Caltech's #1 sprinter during track season, so it is not a big surprise that she outsprinted Lane to the tape.

The surprise came in Holbrook's running almost two minutes faster than she had run all season. Lane was no slug out there either, as she improved her best time by 34 seconds.

Margi Pollack, who seems to get better with each race, also improved by 35 seconds and displayed her tenacity throughout the race by hanging on to Holbrook and Lane. The coach feels that Pollack will be right there with them at the end in two weeks in San Diego.

Christina Garden closed out the scoring, streaking the course in 25:00. The heat seemed to bother Garden more than the other women. That is little wonder, as their race didn't start until 11:30 AM with the sun blazing down and the temperatures rising.

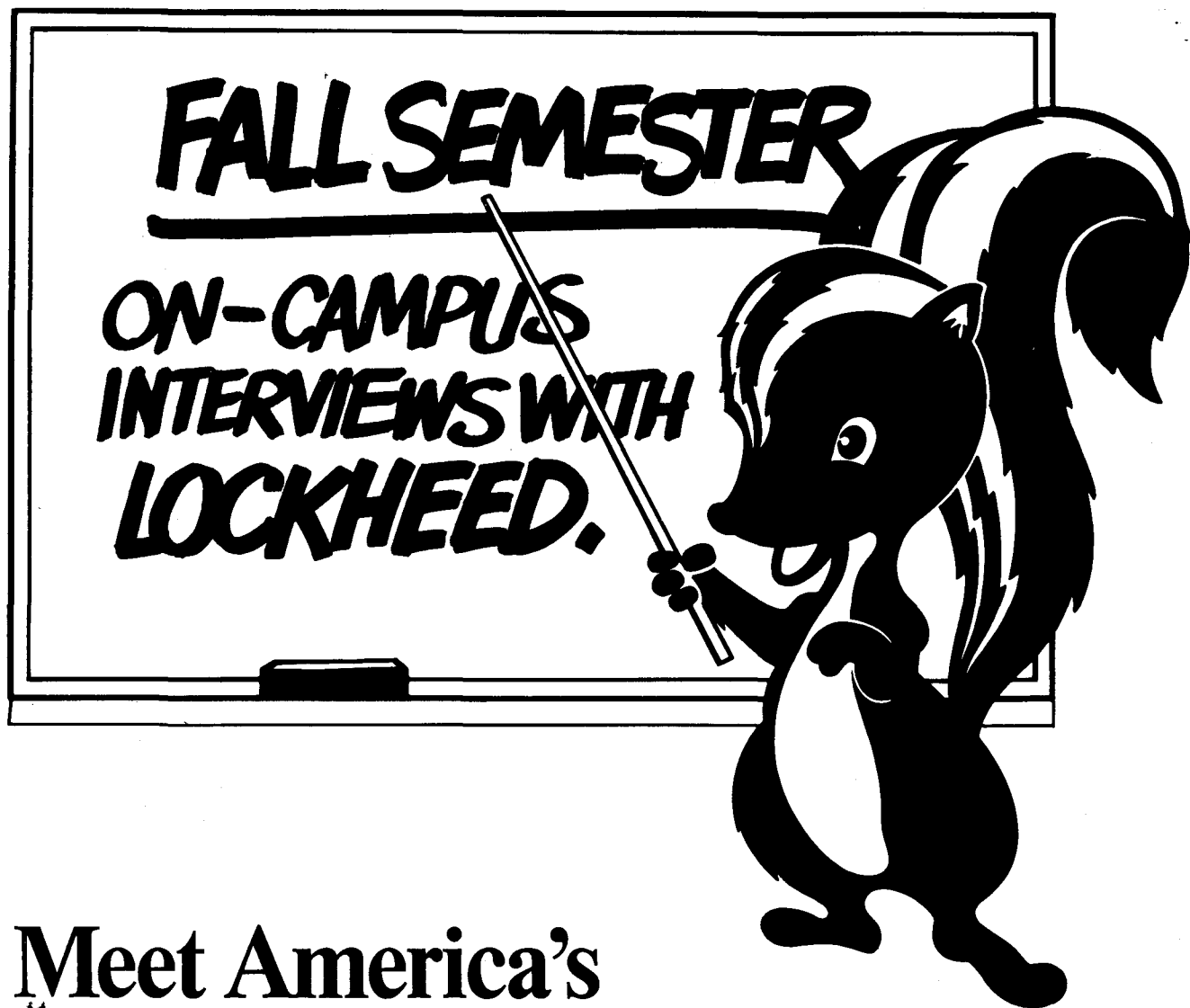
Carmen Shepard handled the heat this year considerably better than in 1985 and finished in 25:53 — almost five minutes quicker than last year. All of the water the coach force-fed the team at the pizza parlor the night before the race must have made the difference for Shepard. It seemed to aid everyone's performance.

Training Continues

The top nine runners on each team now continue to train while looking forward to the final race of the season at the UCSD campus in La Jolla. The top seven runners will travel on 14 November to an oceanfront hotel and run on Saturday, 15 November.

The men's race begins at 11:00 AM, and the women start at noon. At this NCAA Division III Western Regional meet, the best runners from 17 different schools on the west coast will be competing. All are vying for berths at the National Cross Country Championships at Fredonia State University in New York.

Only the top team and the top two individuals not on the winning team will be eligible. Go for it, Tech!



Meet America's Top-rated Aerospace Employer.

Talk with our representatives about why in 1985 *The Almanac of American Employers* rated Lockheed second overall among America's largest, successful companies. Tops among aerospace firms. And talk about career opportunities at Lockheed. And about our famed "Skunk Works" facility where we developed the SR-71 Blackbird, an aircraft so advanced, it's still the world's fastest, highest flying airplane in sustained flight.

Just sign up in your placement office and mark this date on your calendar:

Interviews — November 21

You'll see why we're a company with a remarkable history. And a future as promising as your own.

Lockheed is an equal opportunity, affirmative action employer. U.S. citizenship is required.

Lockheed-California Company
Innovation
 Giving shape to imagination.

SKUNK WORKS and the skunk design are registered service marks of the Lockheed Corporation. © 1986 Lockheed Corporation

Soccer Falls

by Joe Pele

The Caltech soccer team lost all three of their matches this week, dropping two of their games to conference opponents.

Last Friday the Beavers played the Pomona Sagehens. The Caltech booters were staging a second-half comeback from a 3-0 deficit, but a penalty kick erroneously awarded to the Sagehens put the game out of reach. Pomona won 4-2.

The next day Caltech travelled to Valencia to play the Masters College. The Beavers dropped this match 4-1.

Wednesday the Beavers played their final home game of the season when Whittier College visited. Caltech lost this match 2-1. Doug Roberts scored the only Caltech goal of the match.

The Booting Beavers close their season tomorrow when they travel to Christ College Irvine for a 10:00AM match.

WHAT GOES ON

Announcements for *What Goes On* must be submitted on an announcement form (available outside 107 Winnett) or on a plain piece of paper. Please indicate the date(s) you want the announcement to run. Send announcements to 107-51, or put them in the mail slot in the door of 107 Winnett. Announcements must be received by the Tuesday prior to publication.

New Announcement Forms

The above guidelines have been a lie, as many of you are aware—we were out of announcement forms for a while. But now there are new ones! With updated dates (i.e. for this school year!) On awesome purple paper, actually easier on the eyes than any other color but ecru! We can't guarantee that we won't stomp on and burn announcements not received on these forms, so why not play it safe?

Free Trip To St. Louis!

Even play your way to Amsterdam! If you play bridge, come and play in the North American Collegiate Bridge Championship. The first round of this is being held at Caltech starting at 6:45PM, Tuesday 18 November, in the Winnett Lounge. Our scores will be compared against three other schools in the Western Region; the winning team wins an all expenses paid trip to St. Louis to compete in the finals. And the winners there will represent North America at the World Junior Team Championships in Amsterdam! Turn up by yourself or with a partner, but come play bridge! For more info call Jeffrey (x4544, 793-0814).

Join the Space Program

The founding meeting of the Caltech chapter of the Students for the Exploration and Development of Space (SEDS) will be held on Wednesday, 12 November at 7PM in 114 E. Bridge. For more info contact I. Horowitz at x4051.

ACADEMY
BARBER SHOP

27 No. Catalina, Pasadena
Open Tues.-Sat., 8 A.M.-5 P.M.
449-1681

Sam Custom Tailor

49 NORTH ALTADENA DRIVE
PASADENA
(818) 793-2582

ALTERATIONS
RETYLING
TAILORING
INVISIBLE REWEAVING

Special rates for Caltech/JPL community

CLASSIFIED

REAL ESTATE—

FIRST TIME BUYERS, STUDENTS, INVESTORS Spacious, bright, very private 1 BR condominium, beautifully decorated in TODAY'S colors. \$74,500. Also available, spacious studio with large balcony allowing indoor-outdoor living. Beautiful muted beige decor. \$51,900. Both conveniently near South Lake Ave., shops, Caltech, and freeways. Favorable, easy financing available. The William Wilson Company. Rob Weise. (818) 794-7114. Residence (818) 797-0060. 1340 East Altadena Drive, Altadena, California 91001.

SERVICES—

INSURANCE WAR! We'll beat anyone's prices or don't want your business. Sports cars, multiple tickets, good-driver discounts. Request "Caltech Plan." (818) 992-6966 or (213) 873-3303.

CALTECH BOOKSTORE—

STEPHEN DONALDSON'S LATEST AT 30% OFF RETAIL. "The Mirror of Her Dreams." Donaldson's latest full length novel at a bargain price. Only at the Caltech Bookstore.

RATES \$2.50 for first 25 words;
. . . . 10¢ for each additional word.
Send written ad with payment to 107-51.
No charge for on-campus lost & found.

Attention Writers!

The Literature Faculty is proud to announce the 41st Annual McKinney Competition. The Mary A. Earl McKinney Prize is awarded each year for excellence in writing. Only full-time students officially registered at Caltech as undergraduates are eligible to enter the competition. This year three prizes will be given in three categories: poetry, prose fiction, and non-fiction essays. All submissions must be typewritten and double-spaced. In the poetry category, entrants may submit up to three poems. Submissions of prose fiction should not exceed 12,000 words. Essays may be ones prepared for a humanities class or any good piece of original writing on a topic relevant to the humanities. The prize in each category will be \$300.

Each student is entitled to only one entry in each category. All contestants must submit their work to Professor Jeniyo La Belle, Division of the Humanities and Social Sciences, by no later than April 30, 1987. No entries will be returned. Each category will be judged by a three person committee from the Literature faculty. Essays will be judged on the quality of thought and the effectiveness of the writing. Winners will be announced the last week of May. The names of the winners will appear in the commencement program. There will be an Awards Banquet on May 28. The Committee may divide the award in each category in case of more than one outstanding essay. Previous winners in any one category are not eligible for the competition in that category.

If you have any questions, contact Dr. La Belle, x3606, or Betty Hyland, x3609.

Off Yo Butts! SPAM ACID

Last week's Noon Concert is almost impossible to top—almost. Luckily for the entire Caltech community—especially you—the Y succeeded! Dance to the beat of SpAM Acid this Friday Noon. Their fantastic blend of funk and punk is sure to get even the most nerdy Techer (the one standing next to you now) off his rear and into a fast-paced dance rhythm. So remember: for the great dance extravaganza of the term—it's SpAM Acid, today at noon on the quad. And hey! Don't forget your lunch this time!

Time Warp Talk

Never let it be said that there are only 24 hours in a day. Learn how to use new, promising *Time Warp Technology* to your advantage—now! Attend "Time Warp: A New Simulation Technology For Parallel Processing," this Wednesday's Noon Update by JPL's Dr. Fred Wieland. Dr. Wieland, Caltech class of '83, presently works on Project Hypercube. Don't be caught without. . . Bring your lunch to this once-in-a-lifetime event!

Indian Movies Saturdays

Video movies from countries in the Indian Subcontinent will be shown in the Y Lounge (second floor of Winnett Center) every other Saturday starting November 8, 1986. The movies will start at 8:00PM. Some movies may have English subtitles. The movies are open to everyone and are free. Questions to Deven Kalra, x6790.

MacValley Meeting

The MacValley Users Group announces that its November general meeting will be held Tuesday, 18 November 1986, at 7:30PM in the cafeteria of Burbank High School at Burbank Blvd. and Third St. in Burbank.

Allyson Johnson from Living Videotext will demonstrate the outlining and time management program, More.

For more information please contact Ruth Stever, (818)848-1277, or write MacValley Users Group, Box 4297, Burbank CA 91503.

AT&T Pizza Party

AT&T will be on campus recruiting for BS/MS in CS, EE and ME. They will be having a Pizza Party on Monday, 1 December 1986 from 4-7PM. You are cordially invited to come and learn more about their job opportunities and about the company.

Cooking Class

Tired of spending your hard-earned money going out to eat? Learn to cook for yourself! On Wednesday, November 19 at 7:00PM in Winnett, Pat Robb will be giving a cooking lesson and demonstration on "weekend survival cooking." Samples of food will be provided. There will be a \$1.00 charge to cover food costs. Sign up in the Y or call Peter Capofreddi at 356-9387 for more info.

New copier!

The new copier is located in the ASCIT office in the basement of Winnett, which is on South master. The price is set at 5¢ a copy. Until copy cards are available, you'll have to put money into a container when copies are made. If you have any questions ask Clea or Bibi.

Drive My Car, But . . .

Those who use the ASCIT van are responsible, under the Honor System, for reporting any damages, however minor, that occur while they are using it. Also, there is a \$2.50 minimum charge. Try to give Eric Scharin advance notice of when you need the van.

Foreign Film Series

A Foreign Films Series is scheduled for presentation at California State University, Northridge in the University Student Union, Northridge Theatre. The schedule is as follows:

Nov. 12: *A Room With a View* (Britain)
Nov. 19: *Three Men and a Cradle* (France)

Nov. 26: *Salvador* (U.S.A.)

Admission is \$2.00 for non-students. Tickets are available at the door.

IBM Information Day

Next Wednesday, 12 November, from 11:00AM to 5:00PM in Winnett Lounge. Representatives will discuss plans concerning employment opportunities. Students majoring in EE, CS, ME, Chem. Eng., or Physics are invited to join us. Please bring three copies of your resume/transcript if you are interested in summer and full-time employment.

SF & Fantasy Art Show

The 12th Annual Science Fiction and Fantasy Art Show and Competition will be held 6-9 November at the City Shopping Center, West Orange, beginning at noon. The fine arts exhibit is sponsored by the West Coast Comics Club (WCCC). A highlight of the event will be the awards night, scheduled Saturday, 8 Nov., at 5PM. Forrest J. Ackerman, author, agent, editor and science fiction collector, will be presenting the awards in the amateurs, masters, professional and sequential art categories. Ackerman will also present the Forrest J. Ackerman Award to the best amateur artist.

Judges for the event include nationally known astronomical artist Don Dixon; Rick Sternbach, SF illustrator, Hugo winner and designer of Disney's "Black Hole"; and Rick Hoberg, animation director at Marvel Productions. Hoberg is creator of Eternity Smith and has handled artwork for Batman and All Star Squadron.

The exhibit is open to the public. For further information about entries, please call (714) 639-0089.

More Russian Tours

For those too anxious to wait for the spring break Russian tour, there is a winter tour being offered by the Society for Cultural Relations/USA-USSR. The 30-day tour, including intensive practice and individual attention in the Russian language, hotel accommodations, meals, sightseeing in Moscow and Leningrad, three cultural performances, a gala New Years party, a troika ride and an excursion to Pushkin, costs \$2295 from New York. The tour is from December 19 to January 17. For more information, call the Society for Cultural Relations USA/USSR at (213) 937-4130.

Folk Volunteers?

The Caltech Folk Music Society is looking for volunteers to help set up for concerts, move chairs, transport equipment, etc. In return for your help, you will get free admission to our concerts. If interested, call Rex Mayreis at 793-8775 or write to the Folk Music Society at 138-78.

Swedish Scholarships

Scholarships for \$500-\$1000 are available for 1986 from the Swedish Club of Los Angeles. Qualified applicants must be full-time university students living in Southern California, of verifiable Swedish descent, strong academic qualifications, economic need, and be U.S. citizens or permanent residents. To apply, send your resumé to:

R. W. Jackson
1250 E. Walnut St., Suite 210
Pasadena, CA 91106
Deadline is November 14, 1986.

College Fiction Contest

Playboy magazine is now accepting entries to its annual College Fiction Contest, open to all registered college undergraduate and graduate students. The writing competition offers a cash prize of \$3,000 and publication of the winning short story in the October, 1987 issue of *Playboy* magazine. Entry deadline is January 1, 1987, and full rules are available in the October issue of *Playboy*, and may also have been sent to the Humanities office (there is some doubt at this writing).

Truman Scholarship

Sophomores interested in a career in government are eligible to apply for the 1987 Harry S Truman Scholarship. Each scholarship covers eligible expenses of tuition, fees, books, and room and board, to a maximum of \$6,500 annually. To qualify you must be nominated. To apply for nomination you must be a full-time student, have at least a B average and be in the upper ¼ of your class, be a U.S. citizen or U.S. national, and have selected a major related to public service.

Applications are available in the Financial Aid Office, 515 S. Wilson, and must be returned to the office no later than November 14, 1986.

Chicano Scholarships

The National Chicano Council for Higher Education is offering 20 fellowships to juniors who are interested in pursuing a doctorate and academic career in a science-related field. Each fellow is sponsored for 3 years. Sponsorship amounts vary. Applicants must be Hispanic citizens of the U.S. for further information call (714) 856-6463 or write: Dr. Eloy Rodriguez, Director, NCCHE Science Fellowship Program, International Chicano Studies Program, School of Biological Sciences, TR56, University of California, Irvine, CA 92717. Application Deadline is a week from today, November 15, 1986.

GEM Fellowships

The National Consortium for Graduate Degrees for Minorities in Engineering, Inc. (GEM) is accepting applications for its fellowship program which will provide 125 fellowships to minority students in engineering for 1987. Application is open to those falling into the groupings of American Indian, Black American, Mexican American or Puerto Rican, who are U.S. citizens. At the time of application, the minimum academic requirement for the student is enrollment in the junior year of undergraduate study in one of the engineering disciplines. Those presently in their senior year or recently graduated are also encouraged to apply.

Each fellowship participant must work as an intern for a member employer in the program and must complete the academic work for the master's degree at one of the member universities. There are 50 member employers and 50 member universities in the program at this time. The fellowship includes a stipend of \$5,000 per academic year plus a salary for summer internship as well as free tuition.

Applications must be received by December 1, 1986. Awards will be announced by February 1, 1987. Information and applications may be obtained from: GEM, P.O. Box 537, Notre Dame, IN 46556.

Putnam Prep

There will be a prep session for the Putnam on November 17, 7:30PM in the math lounge (3rd floor Sloan). Barry Simon and Gary Lorden will go over problems on recent Putnam tests. The session is open to all. For more information, contact Laura Anderson, 578-9346, or Richard Wilson, x4362

continued on page 8

PASADENA SCIENTIFIC
& TECHNICAL BOOKS

We Stock Scholarly & Professional Books in:

ENGINEERING · HANDBOOKS · SCIENCES · MATH
AEROSPACE · COMPUTERS · BUSINESS · CODES
NURSING · PSYCHOLOGY · ARCHITECTURE · DESIGN

— We Specialize in:

FAST DELIVERY · SPECIAL ORDERS
PHONE ORDERS

M-Thur. 9-6 Fri. 9-5
Saturday 10-4



794-4499

1388 E. WASHINGTON BL. - PASADENA

THE HAIR CUTTERS

HIS AND HERS
OPEN EVENINGS

449-6967 449-1022

\$3.00 discount for Caltech students with this ad

1009 E. COLORADO • PASADENA

PARKING IN REAR



PARIAN TRAVEL

Caltech Officially Approved

Most courteous, economical and efficient service
for your official and personal travel needs.

Free service to you.

For an introductory offer a complimentary \$50.00
worth of fine dining checks will be offered with the
purchase of min. \$100.00 travel tickets (one per family).

(818) 577-8200

468 S. Sierra Madre Boulevard, Pasadena

CALTECH

PASADENA, CA 91125